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A POPULAR DICTIONARY

OF

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BROUGHT DOWN TO THE PRESENT TIME;

INCLUDING

A COPIOUS COLLECTION OF ORIGINAL ARTICLES

IN

AMERICAN BIOGRAPHY;

ON

THE BASIS OF THE SEVENTH EDITION OF THE GERMAN

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EASTERN DISTRICT OF PENNSYLVANIA, to wit:

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D. CALDWELL,

Clerk of the Eastern District of Pennsylvania.
BATTLE-AXE; a weapon much used in the early part of the middle ages, particularly by the people who fought on foot. It was not uncommon, however, among the knights, who used also the mace, a species of iron club or hammer. Both are to be seen in the different collections of old arms in Europe. Both these weapons, and another kind, called, in German, Morgenstern (morning star), consisting of a staff, having an iron ball at the end, with cross iron spikes, served to give stunning blows, whose force was felt through the iron armor of the knights. Knights used chiefly the Morgenstern and the mace. The Greeks and Romans did not employ the battle-axe, though it was found among contemporary nations. In fact, the axe is one of the earliest weapons, its use, as an instrument of domestic industry, naturally suggesting its application for purposes of offence; but, at the same time, it will always be abandoned as soon as the art of fencing, attacking and guarding is the least cultivated; because the heavier the blow given with this instrument, the more will it expose the fighter. It is a weapon which affords hardly any guard, and it never would have remained so long in use in the middle ages, had it not been for the iron armor, which protected the body from every thing but heavy blows. In England, Ireland and Scotland, the battle-axe was much employed. At the battle of Bannockburn, king Robert Bruce clave an English champion down to the chin with one blow of his axe. A blow of equal force was given by a Saxon knight, in the Levant, in presence of the German emperor. The Lochaber axe remained a formidable implement of destruction in the hands of the Highlanders nearly to the present period, and is still used, by the city-guard of Edinburgh, in quelling riots, &c.

BATTLE-PIECE; a painting which represents a battle, exhibiting large masses of men in action. The armor of the ancients, and the whole array and action of their battles, afford subjects much more favorable to the artist than the straight lines, or condensed columns, and the fire-arms of the moderns. A painter of battle-pieces ought to have an accurate knowledge of the appearance of horses and men, and, if possible, to have seen a battle, as few persons are able to form from hearsay an accurate idea of such a scene. Some of the greatest pieces of this kind are, the battle of Constantine, of which the cartoons were drawn by Raphael, and which was executed by Giulio Romano; Lebrun's battles of Alexander, and the battles of the Amazons, by Rubens. From these may be distinguished the skirmishes, surprises, &c., which are represented with so much skill by Antonio Tempesta, John Stalnix, Jos. van der Velde, John Asselyn, Peter Sneyers, Robert von Hoek, Fulcone, called oracolo delle battaglie, James Coutois, Francis van der Meulen, Philip Wouvermann, Charles Breydel, Henry Verschuuring and George Philip Ruggendas.

BATTOGES, BATTACKS; two thin sticks, with which criminals in Russia were formerly beaten upon their naked backs. The criminal was laid upon the ground, and one of the executioners sat upon his head, another upon his feet. By the code of Catherine II, this punishment was abolished.
BATTUECAS—BAUTZEN.

Battuecas, Las; two valleys, enclosed by high mountains, in the Spanish kingdom of Leon, 50 miles from Salamanca, about a Spanish mile long, and so inaccessible that the inhabitants are said to have been unknown to the Spaniards for several centuries. However, a convent of Carmelites was built in the Battuecas valleys as early as 1559. They are so low, that, in the longest days, the sun only shines there for four hours. The common account, that these valleys were discovered in the 16th century, by two lovers, who fled there to escape the pursuit of their families, has been declared by Father Feyjoo to be unfounded. Madame de Genlis has founded upon this story her romance "Las Battuecas" (Paris, 1816, 2 vols.); but she labors under a mistake when she asserts that M. de Bourgoing, in his Travels through Spain, has quoted, as a historical fact, what she relates of the Battuecas.

Baucis; a Phrygian woman; the wife of Philemon. They received Jupiter and Mercury hospitably, after these gods had been denied hospitality in the whole country, while travelling in disguise. A deluge destroyed the remainder of the people, but Philemon and Baucis, with their cottage, were saved. They begged the gods to make their cottage a temple, in which they could officiate as priest and priestess, and that they might die together; which was granted. Philemon and Baucis are therefore names often used to indicate faithful and attached married people.

Bauman Islands; a cluster of islands in the South Pacific ocean, discovered, in 1722, by Bauman, in his voyage round the world with Bogggewat. All the inhabitants, says a writer, are white; some of them burned by the sun: they are numerous, and armed with bows and arrows, but represented as of a gentle and humane disposition, and friendly to strangers. The largest island is about 21 or 22 miles in circumference, with good anchorage. Lat. 17° 3' W.; lat. 12° S.

Baumann's Cavern (in German, Baumannshöhle); an interesting natural cavern in the Harz, in the principality of Blankenburg, on the left bank of the Bode, about five miles from Blankenburg, in a limestone mountain, consisting of six principal apartments, besides many smaller ones, every where covered with stalactites. The earthy ingredients of these petrifications are held in solution by the water, which penetrates the rock, and deposits a calcarious stone. The name of this cavern is derived from a miner, who entered it, in 1672, with the view of finding ore, but lost his way, and wandered about for two days before he could find the entrance. He soon after died.

Baumgarten, Alexander Gottlieb, born, in 1714, at Berlin, an acute and clear thinker, of the school of Wolf, studied at Halle, and was, for a time, professor extraordinary there. In 1740, he was made professor of philosophy at Frankfurt on the Oder, and died there in 1762. He is the founder of aesthetics as a science, and the inventor of this name. He derived the rules of art from the works of art and their effects. Hereby he distinguished himself advantageously from the theorists of his time. (See "Esthetics.") His ideas of this science he first developed in his academical discussion, De Nonnullis et Poematis pertinentibus (Halle, 1735, 4to). George Fr. Moier's Principles of all Liberal Sciences (3 vols., Halle, 1748-56) originated from his suggestions. Eight years later, B. published his "Esthetics" (Frankfort on the Oder, 1750-58, 2 vols.), a work which death prevented him from completing.

Bause, John Frederic, a distinguished German engraver, born at Halle, in 1728, died at Weimar, 1814. He resided chiefly at Leipsic, where he executed many highly esteemed engravings. He was a member of several academies of fine arts.

Bautzen, or Budezin; capital of Upper Lusatia, in the part belonging to the king of Saxony, upon a height defended by steep rocks, the foot of which is watered by the Spree. Among the 11,500 inhabitants, who are principally Lutherans, there are a great number of Wendes, or descendants of the Vandals, who worship in a Catholic church, in their own language. The German part of the population, both Catholic and Protestant, worship together in the cathedral; the former are in possession of the third part of it, including the high altar, sufficiently large for the small Catholic congregation; the nave serves the Lutheran community as their parish church, and the mutual spirit of toleration in both parties has, in recent times, prevented trouble from such an arrangement.—Here was fought, on the 20th and 21st of May, 1813, the second great battle in the campaign of the Prussians and Russians against the French. The allies had been compelled, after the battle of Lützen (May 2, 1813), to retreat to the right bank of the Elbe, and prepared themselves, near Bautzen on the Spree, for a new engagement. Although
the army of Napoleon was far superior in number, being strengthened by reinforcements from France, Italy and the troops of the confederation of the Rhine, so as to amount to about 145,000 men, yet the allies determined to risk a battle, that Prussia might gain time for its levies in Silesia, and Napoleon be checked in his advance as much as possible. It was also desirable that the waverers of Austria should be convinced that the army was able to make a stand against the enemy, and that the courage of the new Prussian recruits should not be dampened by continual retreat, but, on the contrary, their wish for battle gratified. On the morning of May 20, Napoleon disclosed his plan of attack. In the evening, the French had gained the city of Bautzen. On the 21st, the fight continued until 4 o'clock in the afternoon, when the allies resolved on a retreat, which was performed in such order, that Napoleon was not able to gain any immediate advantage from his victory. The field of battle was covered with the dead, and was lighted by 30 burning villages. The French loss was about 8000 men killed, and 18,000 wounded; that of the allies, between 8 and 12,000. Napoleon, to encourage his troops, assigned 25,000,000 francs for the erection of a monument upon mount Cevis, as a token of his gratitude towards the French and Italian troops. The rear of the allies repulsed two serious attacks, and, contrary to the expectations of Napoleon, they marched to the intrenched camp of Pülzen, but retreated to occupied Breslau. The position of the allies, threatening the right wing of the French army, the great loss which the French had suffered, and the detached corps, which cut off Napoleon's communication with Saxony, induced him to accede to a suspension of arms on the 4th of June, near the city of Jauer. (See War of 1812—1815.)

BAYER. At the time of the general migration of the barbarians, the regions formerly inhabited by the Boii, the Celts of the Danube, were taken possession of by some German tribes. This country, in the time of Caesar, had been a waste, and, in the time of Augustus, a Roman province (Vindelicia and Noricum). At the end of the fifth century, these tribes—the Heruli, the Rugians, the Turcingians and the Skyres—formed a confederacy, like those of the Franks and the Marcomanni, under the name Baiariorum. They spread from Noricum westward to the Lecht. Rathbon was their chief seat. This country was then called Noricum, and, according to Mannert, was never subjected to the Ostrogoths. When the Franks took possession of Rhaetia, the Baiariorum became subject to them. The people, however, still retained the liberty of choosing their own rulers. After the division of the empire of Clovis, this region was disturbed, like the rest of Europe, by the conflicting claims of rival dukedoms, till the time of Otto the Great, count palatine of Wittelsbach. Otto, the ancestor of the present dynasty, died in 1183. His successor, Louis I, enlarged the Bavarian territory, and acquired the palatinate of the Rhine. He was murdered in 1231, probably at the instigation of Henry, whose rebellion against his father, the emperor Frederick II, the duke had censured. He was succeeded by his son Otho, the illustrious palatine of the Rhine. Under his reign, the bishops made themselves independent. His dominions, however, were considerably increased. His attachment to the emperor involved him in the excommunication pronounced against that prince. He died in 1253. His sons, Louis and Henry, reigned for two years in conjunction. In 1255, they divided the territories, Louis receiving Upper and Henry Lower Bavaria. The line of the latter became extinct a few years afterwards. The inheritance of the unhappy Conradin of Hohenstaufen fell into the hands of these princes. One of the two sons of Louis was raised to the imperial dignity, in 1314, under the title of Louis IV (q.v.), called the Bavarian. He entered into an agreement with the sons of his brother (Pavia, 1329) for the division of the dominions of the family. In consequence of this agreement, king Maximilian Joseph united all the dominions of the Wittelsbach dynasty in 1709. After the extinction of the Lower Bavarian line, the emperor Louis, by the desire of his states, united Lower with Upper Bavaria. The emperor introduced a new code of laws for Upper Bavaria, a new organization of the courts for Lower Bavaria, conferred the privileges of a city on Munich, and reduced to order the internal administration. He died Oct. 11, 1347, leaving six sons by two marriages. His dominions included Bavaria, Brandenburg, the provinces of Holland and Zealand, Tyrol, &c. These provinces were soon lost by the divisions and dissensions of the different lines. Most of the lines founded by the six brothers early became extinct. In 1500, a diet of the states of Upper and Lower Bavaria was assembled by duke...
Albert II, who, with the consent of his brother Wolfgang, and of the estates, published a pragmatic sanction, introducing the law of primogeniture, and fixing the allowance of the younger sons. Albert died in 1508. Of his three sons, William IV, Louis and Ernest, William ought, accordingly, to have been his sole heir. The authority was, however, divided, after much contest, between William IV and Louis, until the death of the latter, in 1534. These princes were both opposed to the reformation. Luther’s most violent opponent, John Eck, lived at Ingolstadt, under their protection, which they also extended to the Jesuits. William died in 1550; his son Albert V, the Generous, succeeded him. He also favored the Jesuits, but was a liberal patron of the arts and sciences. The states received from him great privileges. He died in 1575. Of three sons, the eldest, William V, the Pious, succeeded him, and, in 1579, resigned the government to his eldest son, Maximilian I, and retired to a monastery. Maximilian, a prince of distinguished abilities, was the soul of the league formed against the Protestant union. In the course of the 30 years’ war, which had just broken out, Maximilian was invested, by the emperor Ferdinand II (1623), with the dignity of elector palatine. The peace of Westphalia confirmed Maximilian in the electoral dignity and the possession of the upper palatinate, in return for the renunciation of Upper Austria, which had been pledged to him for 13,000,000 florins, expenses of war; and, on the other hand, a new electorate, the eighth, was established for the palatinate line, and its successor to the title and territory of the original electorate was settled, in case of the failure of the line of William. Maximilian died Sept. 22, 1651, after a reign of 55 years. He was succeeded by his son Ferdinand Maria, who was succeeded, in 1679, by his eldest son, Maximilian Emanuel. In the war of the Spanish succession, the elector declared for France. After the unfortunate battle of Blenheim, Bavaria was treated by the emperor as a conquered country. The elector was put under the ban of the empire in 1706, and was not reinstated in his government till the peace of Baden (1714). After his death, in 1726, Charles Albert succeeded him in the electoral dignity. Although he had signed the pragmatic sanction of the emperor Charles VI, yet, after the death of the emperor, and the beginning of the first Silesian war, so fortunate for the king of Prussia, he claimed the whole Austrian territory, subjected all Upper Austria, assumed the title of archduke of Austria, after the capture of Prague in the same year received homage as king of Bohemia, and was elected emperor of Germany, at Frankfurt, 1742, under the title of Charles VII. But here his fortune began to decline. As he laid the homage of Austria and Bohemia, so, after the sudden change in the fortune of the war (1743), Maria Theresa obliged the states of Bavaria and of the upper palatinate, to swear allegiance to her. Notwithstanding his alliance with the landgrave of Hesse-Cassel and Frederic II (1744), and the progress of the Prussian arms, Charles was compelled, by the superior talent of the Austrians, to expose Bavaria. He did not live to see the end of the war, but died Jan. 20, 1745. His son and successor, Maximilian Joseph III, who also assumed, at first, the title of archduke of Austria, made peace with Austria soon after, at Fussen (April 22, 1745), became one of the guarantees of the pragmatic sanction, promised the archduke Francis his vote in the election of emperor, and received, in return, all the Bavarian territories which had been conquered by Austria. Maximilian Joseph devoted himself entirely to the good of his country. He encouraged agriculture, manufactures, mining; regulated the judicial establishments, the police, the finances, and institutions for instruction; the sciences were promoted by the foundation of the academy of sciences at Munich, in 1759, and the fine arts found in him a liberal protector. He, himself without children, confirmed all the contracts relating to the inheritance, which had been made with the electoral line of the palatinate since the treaty of Pavia (1725). In compliance with the treaties of the house of Wittelsbach, as well as with the terms of the peace of Westphalia, the right of succession in Bavaria reverted, undeniably, to the elector of the palatinate, since the Wittelsbach-Bavarian line became extinct on the death of Maximilian Joseph, 30th of Dec., 1777. Austria then laid claim to Lower Bavaria, and attempted to support her demands by arms, without any previous declaration of war. Charles Theodore, being without children, was persuaded to sign a treaty (Jan. 3 and 14, 1778), formally renouncing the Bavarian succession. But the duke of Deux-Ponts, uncle of the reigning king, the nearest
agnate and presumptive heir, encouraged by Frederic II, refused to acknowledge that renunciation. This was the origin of the war of the Bavarian succession, which was terminated, without bloodshed (owing chiefly to the Russian declaration of war against Austria), by the peace of Teschen, May 13, 1779. The possession of Bavaria, from which Austria obtained only the Innviertel, with Braunau (860 square miles), was secured to the elector palatine of Bavaria, according to the family compacts. By this union of the Bavarian dominions, the eighth electorate became extinct, according to the terms of the Peace of Westphalia. In 1784, however, the possession of Bavaria again became an object of desire at Vienna, and an exchange was proposed, which had been already a subject of negotiation in the beginning of the century. The emperor Joseph II proposed to the elector to exchange Bavaria for the Austrian Netherlands (excluding Luxembourg and Namen), and the sum of 3,000,000 florins for himself and the duke of Deux-Ponts, with the title of king of Bavaria. This project, though favored by Russia, was disappointed by the firmness of the duke of Deux-Ponts, who, encouraged by the protection of Prussia, declared "that he would never consent to barter away the inheritance of his ancestors." The zeal with which Frederic II adopted the cause of Bavaria, induced the cabinet of Vienna to relinquish the plan, and to declare, at the same time, "that there never had been and never would be any intention of a forced exchange." The reign of Charles Theodore was remarkable for the rise of the Illuminati (q. v.) in Bavaria, for the processes against them, and the revival of Jesuitism. During these troubles, the liberty of the press was constantly more and more restrained, and a period of intellectual darkness appeared to be about to commence. In the war of the French revolution, the elector sent his contingent to the army of the empire. The palatinate suffered much, and, in 1796, Bavaria itself became the theatre of war. At this crisis (Feb. 10, 1799), Charles Theodore died without issue, and the Dutch branch of the line of the palatinate became extinct with him. The duke Maximilian Joseph of Deux-Ponts came into possession of all the Bavarian territories. The peace of Lunéville (Feb. 9, 1801) put an end to the renewed war, and its most important article—the cession of the left bank of the Rhine to France—essentially affected Bavaria. Whilst it lost all its possessions on the left bank of the Rhine, and also the lands of the palatinate on the right bank, it obtained, on the other hand, by an imperial edict, an indemnification, by which it gained in addition to the amount lost, a surplus of 2160 square miles, and 216,000 inhabitants. The political importance of Bavaria, with respect to Austria as well as to France, was more fully displayed in the war of 1805. When Austria resumed hostilities against France, she required the elector of Bavaria to unite his troops with the Austrian army, and refused to allow him to remain neutral, "which (as the emperor) Bavaria wrote to the elector, Sept. 3, 1804) France herself would only suffer as long as she should find it expedient." Bavaria, however, did not find it accordant with its own interests to place itself entirely in the power of Austria. At the beginning of the war, the elector joined the French with about 30,000 troops, and the peace of Presburg annexed to his dominions 10,593 square miles, and 1,000,000 inhabitants, and conferred on him the dignity of king; in return for which, he ceded Würzburg, which was encroached upon, to Prussia. The king of Bavaria, like the rulers of Württemberg and Baden, now assumed sovereignty over the lands of the nobility of the empire within his borders. The political connexion recently formed with France was confirmed by the marriage of the princess Augusta, daughter of the king, with Eugene Napoleon, viceroy of Italy, son-in-law of the French emperor. An immediate consequence of this alliance was the exchange of Berg, which Bavaria surrendered to Napoleon, for Anspach, which Prussia had given up to France in exchange for Hanover, and finally, what was most important, the signing of the confederation of the Rhine (July 12, 1806), in which Bavaria promised to bring into the field 30,000 troops, and to fortify Augsburg and Lindau. Thereupon, the king of Bavaria was obliged to take part in the war against Prussia, in 1806, and in the war against Austria, in 1809, one of the consequences of which was the revolution of Tyrol. After its termination, Bavaria received important additions, partly at the expense of Austria, partly by treaties of exchange with Württemberg and Würzburg. When, in 1812, the war between France and Russia broke out, Bavaria sent anew its whole proportion of troops to the French army. Insignificant re-
mains only of the 30,000 Bavarians returned in the spring of 1813. Maximilian Joseph, notwithstanding this sacrifice, placed fresh troops under the command of Napoleon as the protector of the confederation of the Rhine, when the new campaign was opened, near the close of April. This army also suffered great losses, but distinguished itself with its wonted bravery, under the command of Marshal Oudinot. It suffered particularly in the battles of Luckau and Grossherrn (1813). At this time, the whole political system of Bavaria was suddenly changed. Whilst the French army of observation was formed at Würzburg, under Augereau, a Bavarian corps of observation was placed on the Inn, over against a division of the Austrian army. For a long time, both corps remained inactive. The departure of the corps of Augereau, by which Bavaria was exposed in its most vulnerable point, accelerated the resolution of its king. The Bavarian general Wrede concluded an armistice with the Austrian general Frimont, October 8, at Ried, which was followed by a proclamation, October 15, by which the king of Bavaria abandoned the confederation of the Rhine, and turned his forces against France. In this convention, his present territories, with full sovereignty, were assured to the king, and a sufficient indemnification for those lands which should be made over to Austria. At the same time, Wrede, as commander-in-chief, united the Austrian corps with his own, and turned the Bavarian arms against the French, in the battle of Hafau. In 1813, at the breaking out of the new war, the present king, then crown-prince, took the command of the national army. Meanwhile, the congress of Vienna, and, more particularly, the preparation of the statutes of the German diet (as well as the different interests originating from the new European, and especially the new German system of states), had given sufficient opportunity to the Bavarian government for the development of its system of diplomacy. Bavaria has jealously maintained its station as an independent sovereign state. Since 1823, Bavaria has been under the government of Louis I, the most liberal of the German princes. He has hitherto acted with much energy.—Bavaria was erected into a kingdom in 1805, and is now one of the most considerable of the secondary states of Europe. It is composed of the greater part of the circles of Bavaria and Franconia, part of Suabia, and, on the west side of the Rhine, embraces the greater part of that portion of the circle of Upper Rhine included in the late French department of Mont Tommerre. Exclusive of the part west of the Rhine, it is bounded N. by Hesse-Darmstadt, Hesse-Cassel, and the Saxon principalities of Meiningen, Hildburghausen, Coburg and Reuss, and the kingdom of Saxony; E. and S. by Austria, and W. by Württemberg, Baden and Hesse-Darmstadt. — The kingdom of Bavaria is divided into the following circles:—Iser, Upper Main, Lower Main, Rezat, Regen, Upper Danube, Lower Danube, Rhine. The last is on the west side of the river Rhine. — This kingdom contains 32,000 square miles and 3,800,000 inhabitants. Its army is 33,000 strong, of whom 35,800 form the seventh corps d'armée of the German confederation. Its public debt amounted, in Sept., 1824, to 103,157,820 florins; the income was, at the same time, 29,192,200 florins. The present king, Louis, endeavors, with much zeal, to introduce economy into the expenses of the government; he has diminished the standing army, and discharged many officers from the civil government.—The various inhabitants of this country differ very much in their character, the Bavarians, from the highlands near Tyrol, and the Franconian, in the north part of the kingdom, being as unlike as any two Germans probably can be; and the different parts of this young kingdom have been so recently united, that it is not possible to speak of any character as common to its inhabitants. The native of Upper Bavaria is hardy, laborious, short in stature. Many portions of the population are distinguished by mechanical talent. The excellence of Fraunhofer's telescopes and Bader's rail-road is generally known. Munich and Nuremberg have, in recent times, produced more philosophical instruments than any other two cities of Germany. (See Munich.) The manufactures of Bavaria include linen, woollen and cotton cloths, iron, fire-arms, and other articles, designed chiefly for the supply of domestic wants. Glass, paper, clocks and hardware are also made in several of the principal towns. The common language of Bavaria, of course, is German; but the dialects vary much, from the strong Franconian spoken in Würzburg to the broad Swiss dialect in Lindau. At the head of each of the circles, into which the kingdom is divided, stands a general commissioner (Generall Kommissarius) with great power, chiefly of an executive character. All
the lower courts, municipal magistrates, village officers, &c., are under his control. The judiciary consists of a high court of appeal (Ober Appellations Gericht) at Munich; also a court of appeal for each circle, and the inferior courts. The Codex juris Bavariai has been in force since Jan. 1, 1811. The penal code is now under revision. A complete code is also in preparation. (See Feuerbach.) The executive consists of a privy council, called Geheime Rath, composed of 4 ministers of state, the 4 crown-officers, and from 12 to 10 other members, who deliberate in 3 sections on the affairs of the kingdom. The affairs of the Catholics in the kingdom are regulated by the concordat concluded with Pius VII. Jan. 5, 1817, which, in 1821, was promulgated as the law of the land. Those of the Protestants are under the direction of a general consistory. The two sects live without contention. The circumstance that the queen of the late king was a Protestant (as is also the present queen, if we are not greatly mistaken) had a most beneficial influence. In the smaller council of the German diet, Bavaria has the third place, and in the plenum has four votes. (See German Confederacy.) Education made much progress under the government of the late Maximilian Joseph, and it is to be expected that the present king, who has manifested liberal views, on many occasions, more openly than any prince of the continent now living, will continue to give it the aid of the government. Many seminaries for the training of instructors have been erected, and the academy of sciences at Munich, with the three universities at Munich, Wurzburg and Erlangen, produce the best results. (See Munich, Wurzburg, Erlangen.) The first of these universities contains nearly 2000 students, whilst the medical department of Wurzburg is considered one of the first in Europe. Agriculture and industry in general have received, since the reign of Maximilian, much attention. Several institutions for promoting them have been established, including agricultural seminaries, in which those young men who prepare themselves for village school-masters learn gardening, &c. A festival was instituted by Maximilian, generally called the October festival, at which prizes are assigned, by order of the king, for the best specimens of agricultural produce, the best cattle, &c. There are also races connected with this celebration. The present king, when crown-prince, was a liberal patron of the fine arts, and still affords them much encouragement. As Bavaria is entirely an inland country, and has no great river crossing it, its commercial resources could be fully developed only in case of a perfectly free intercourse between all the German states; to obtain which, efforts have several times been made, but, unfortunately, in vain. A great canal, near Nuremberg, has been sometimes spoken of, to unite, by means of small rivers, the Rhine and Danube, a work begun by Charlemagne; the traces of his work, still remaining, are called fossa Carolina; but the expense would be great for so small a kingdom, and it is very doubtful whether the commerce carried on in this way would be considerable, depending, as it would, upon so many governments, from the Turkish to that of the Netherlands.—According to Rudhart, Bavaria contains 1564 noble families. Agriculture is the chief branch of industry. Bavarian beer is excellent.

Bavaria, constitution of. Like most of the states of the middle ages, Bavaria had its constitution. No other state of Germany has so complete a collection of works relating to its ancient form of government. The estates consisted, as usual, of the three classes—the prelates, among whom the university had the first rank; the nobility, and the burgesses. Their privileges were great, but early lost by dissension among themselves. The last diet was held in 1693. A committee of the estates arrogated the privileges belonging to the whole body; the secularization of the ecclesiastical establishments, in 1803, made the old constitution still more inefficient, and, in 1808, the system of the estates was abolished; but an order was issued, May 1 of the same year, instituting a new constitution. The king of Bavaria was the first among the sovereigns of Germany to fulfill the promise contained in the thirteenth article of the ordinances of the German confederation, which assures the people that they shall receive constitutional forms of government. The king promulgated the new representative constitution May 20, 1818. The system of the two chambers has been adopted. The chamber of peers, or, as they are called in Bavaria, Reichs Râthe (counsellors of the realm), consists of the princes, the crown-officers, 2 archbishops, the 16 senators of the families which were formerly members of the German empire, 1 bishop, appointed by the king, the president of the Protestant
BAVARIA—BAXTER.

consistory, besides 15 hereditary peers, and 12 who hold their stations for life, chosen by the king. The lower chamber consists of 14 representatives of the lower nobility, 1 representative of each of the three universities of the kingdom, 9 representatives of the Catholic, and 5 of the Protestant clergy, 2 of Munich, 1 of Augsburg, 1 of Nuremberg, 21 of all the other cities and market-places, and 56 of the land-owners (not noblemen). The elections in the cities are badly conducted, as they are in the hands of the city councils, the mayors, &c. Another great fault is, that the amount of property required in a representative is so great, that whole districts are excluded from representation. The rights which the representatives have are not altogether insignificant; yet there are many other things wanted, as a perfectly free press, and many real guarantees of freedom, before we can speak of it as actually existing in Bavaria. The ministers are responsible, and yet their power is unconstitutionally great. It would not be very difficult for the Bavarian government to do anything they pleased, without encountering many constitutional obstacles. The first meeting of the representatives was held Feb. 4, 1819. There is 1 representative for about 35,000 souls. The constitution is a granted one, viz., given by the king, not a compact between two parties, the people and the ruler. It promises liberty and equal rights to all religions, and also freedom of the press, which, however, no American or Englishman would call truly free. Bond-service is abolished. The king appoints the president of the representatives.

BAXTER, Andrew; an ingenious philosopher and metaphysician. He was a native of Aberdeen, and was educated at King's college in that city; after which he was employed as a private tutor. About 1730, he published an Enquiry into the Nature of the Human Soul; wherein the Immateriality of the Soul is evinced from the Principles of Reason and Philosophy. This work was applauded by Warburton, and obtained for the author a high reputation; though his arguments, which are founded on the vis inertie of matter, have since been controverted by Hume and Colin Maclaurin. In 1741, he went abroad with one of his pupils, and remained for some years at Utrecht, where he contracted an acquaintance with some of the Dutch literati. He returned to Scotland in 1747, and resided at Whittingham, in East Lothian, where he died in 1795, aged 63. He was the author of a Latin tractate, entitled Mathesis Cosmostoica puellis Dialogus, which he afterwards translated into English, and published in 2 vols. 12mo.

BAXTER, Richard, the most eminently of the English nonconforming divines of the 17th century, was born in the village of Rowton in 1615. The example of his father, who was accused of Puritanism, gave him a serious turn very early in life. After receiving his education, he was sent to London, under the patronage of sir Henry Herbert, master of the revels; but he returned into the country with a view to study divinity, and, in 1635, received ordination in the church of England. The imposition of the oath of universal approbation of the doctrine and discipline of the church of England, usually termed the et cetera oath, detached him and many others from the establishment. When the civil war broke out, he sided with the parliament, and, after the battle of Naseby, accepted the appointment of chaplain to colonel Whalley's regiment. He is said to have been, the whole of this time, a friend to the establishment, according to his own notions, and to have repressed sectaries as much as he was able. In 1647, he retired, in consequence of ill-health, from his military chapelship, and, when he recovered, opposed the measures of those in power, and preached urgently against the covenant. He even endeavored to persuade the soldiery not to encounter the Scottish troops who came...
into the kingdom with Charles II, and
hesitated not to express an open dislike
to the usurpation of Cromwell, whom he
told, in a conference very characteristic
of both parties, that the people of Eng­
lund deemed the ancient monarchy a blessing.
The fact is, that B., with many more
zealous religious partisans, held civil li­
brary to be of secondary consequence to
what he esteemed true religion, and ap­
ppears, from the tenor of a sermon which
he preached before Cromwell, to have
deemed the toleration of separatists and
sectaries the grand evil of his government.
After the restoration, he was made one
of the king's chaplains, and a commis­
sioner of the Savoy conference, to draw
up the reformed liturgy. The active
persecution of the Nonconformists soon
followed; and, upon the passing of the
act against conventicles, he retired, and
preached more or less openly, as the act
was more or less rigidly enforced. After
the accession of James II, in 1685, he
was arrested for some passages in his
Commentary on the New Testament, sup­
poved hostile to Episcopacy, and was
tried for sedition. The violence of Jef­
feries, who would neither hear the ac­
cused nor his counsel, produced a verdict
of guilty on the most frivolous grounds.
He was sentenced to two years' impris­
ionment and a heavy penalty, which, after
a short confinement, the king remitted,
shortly before his death, in 1691. His wife
cheerfully shared all his sufferings on the
score of conscience, both in and out of
prison. The character of B. was formed
by his age; his failing was subtle and
magnanimous. The family of Ter­
rail, to which he belonged, was one of the
most spotless characters of the middle
ages. He was simple and modest; a true
friend and tender lover; pious, humane
and magnanimous. The family of Ter­
rail, to which he belonged, was one of the
most ancient in Dauphine, and was
famously known for nobility and valor. Young B.,
educated under the eyes of his uncle
George of Terrail, bishop of Grenoble,
died him afterwards. At the age of 13, he
was received among the pages of the
duke of Savoy, the ally of France.
Charles VIII, who saw him at Lyons, in
the suite of this prince, was struck with
the dexterity with which the youth man­
ged his horse; he begged him to stay in the
duke, and submitted him to the care of

Bayard, Pierre du Terrail, chevalier
de, called the knight without fear and with­
out reproach, born in 1476, in the castle of
Bayard, near Grenoble, was one of the
most spotless characters of the middle
ages. He was simple and modest; a true
friend and tender lover; pious, humane
and magnanimous. The family of Ter­
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ged his horse; he begged him to stay in the
duke, and submitted him to the care of
Paul of Luxemburg, count de Ligny.

The tournaments were his first field of glory. At the age of 18, he accompanied Charles VIII to Italy, and distinguished himself greatly in the battle at Verona, where he took a standard. At the beginning of the reign of Louis XII, in a battle near Milan, he pursued the fugitives with such eagerness, that he entered the city with them, and was taken prisoner. Luciano Sforza returned him his arms and his horse, and dismissed him without ransom. Whilst the French were in Apulia, B. defeated a Spanish corps, and made their leader, don Alonso de Sotomayor, prisoner. He treated him with generosity. Sotomayor, however, not only violated his parole by flight, but calumniated B., who, according to the custom of that time, challenged him, and killed him. Afterwards, like Horatius Cocles, he defended a bridge over the Garigliano singly against the Spaniards, and saved the French army by checking the advance of the victorious enemy. For this exploit, he received as a coat of arms a porcupine, with the motto Vires aminis unus habet.

He distinguished himself equally against the Genoese and the Venetians. When Julius II declared himself against France, B. went to the assistance of the duke of Ferrara. He did not succeed in his plan of taking the pope prisoner; but he refused, with indignation, an offer made to betray him. Being severely wounded at the assault of Brescia, he was carried into the house of a nobleman, who had fled, and left his wife and two daughters exposed to the insolence of the soldiers. B. protected the family; refused the reward of 2500 ducats, which they offered to him, and returned, as soon as he was cured, into the camp of Gaston de Foix, before Ravenna. In an engagement, which shortly after ensued, he took two standards from the Spaniards, and pursued the fugitives. Gaston, the hope of France, persisted through his neglect of the advice of B. In the retreat from Pavia, B. was again wounded. He was carried to Grenoble; his life was in danger. “I grieve not for death,” he said, “but to die on my bed, like a woman.” In the war commenced by Ferdinand the Catholic, he displayed beyond the Pyrenees the same talents, the same heroism, which had distinguished him beyond the Alps. The fatal reverses which befell him after the last years of Louis XII only added a brighter splendor to the personal glory of B.

Henry VIII of England, in alliance with Ferdinand and Maximilian, threatened Picardy in 1513, and besieged Terouanne. The French army disgracefully took to flight. B., with his accustomed intrepidity, made an ineffectual resistance to the enemy; overpowered by superior numbers, his troop was on the point of laying down their arms, when B., perceiving an English officer at some distance from him, immediately galloped towards him, presented his sword to his breast, and cried, “Yield, or die!” The Englishman surrendered his sword: B. immediately gave him his own, saying, “I am Bayard, and your captive, as you are mine.” The boldness and ingenuity of this exploit pleased the emperor and the king of England, who decided that B. needed no ransom, and that both captives were released from their parole. When Francis I ascended the throne, he sent B. into Dauphine, to open for his army a passage over the Alps, and through Piedmont. Prosper Colonna lay in wait for him on his march, expecting to surprise him, but B. made him prisoner. This brilliant exploit was the prelude to the battle of Marignano, in which B., at the side of the king, performed wonders of bravery, and decided the victory. After this glorious day, Francis was knighted with the sword of B.

When Charles V invaded Champagne, with a large army, and threatened to penetrate into the heart of France, B. defended the weakly-fortified town of Mezières against every assault, until the dissensions of the hostile leaders compelled them to retreat. B. was saluted in Paris as the savior of his country: the king bestowed on him the order of St. Michael, and a company of 100 men, which he was to command in his own name—an honor which, till then, had only been conferred on princes of the blood. Soon afterwards, Genoa revolted from France: B’s presence reduced it to obedience. But, after the surrender of Lodi, fortune changed, and the French troops were expelled from their conquests. Bonsor was obliged to retreat through the valley of Aosta; his rear was beaten, and himself severely wounded, when the safety of the army was committed to B. It was necessary to pass the Sesia in the presence of a superior enemy, and B., always the last in retreat, vigorously attacked the Spaniards, when a stone, from a blunderbuss, struck his right side, and shattered his back-bone. The hero fell, exclaiming, “Jesus, my God, I am a dead man!” They hastened towards him, “Place me under yon tree” he said, “that I may see the enemy.” For want of a crucifix, he kissed the cross of his
eral party in congress at the epoch of the election of Mr. Jefferson to the office of chief and a very brilliant part in the discussion of the constitutional questions induced him to decline.

Jefferson and colonel Burr, he finally that the peace of the country and the stability of the constitution might be endangered by continuing the struggle. In no debate of the house did Mr. B. display his genius more than in that which preceded the repeal, in March, 1802, of the judiciary bill. A volume of the speeches which were delivered in this famous controversy has been published. It was almost universally conceded that he was the ablest advocate of the system or organization which was destroyed. He continued in the house of representatives after the change of administration, always conspicuous for his sound principles, constant acuteness, extensive knowledge, and manly, copious eloquence. Elected to the senate of the U. States by the legislature of Delaware, he displayed, for several years, in that assembly, the same talents and patriotism. In 1815, he strenuously opposed the declaration of war with Great Britain. President Madison selected him as one of the commissioners to treat for peace under the proffered mediation of the emperor Alexander of Russia. He embarked on this important mission, which had not been sought nor expected by himself or his friends for him, from the port of Philadelphia, May 8, 1813, and arrived at St. Petersburg in July of that year. The absence of the emperor prevented the transaction of any business, and, when all hope of advancing the main object seemed idle, Mr. B. proceeded (January, 1814) by land to Holland. There he learned the willingness of the British court to treat directly with the American envoys. Previously to the arrival of his colleagues, who, in consequence of this announcement, were despatched by the American government, he visited England. At the proper period, he repaired to Ghent, which was ultimately chosen as the scene of the negotiations which terminated in the treaty that bears the name of that place. His share in the oral discussions and the written correspondence with the British plenipotentiaries was such as might have been expected from his peculiar fitness for the task of negotiation. On the conclusion of this business, he made a journey to Paris, where he remained until he heard of the ratification of the treaty, and of his appointment as envoy to the court of St. Petersburg. This he promptly declined. It was his intention, however, to go to England, in order to co-operate in the formation of a commercial treaty with the British cabinet, as he was included in the commission sent for that purpose; but an alarming illness put an end to every plan, except that of reaching his home as early as possible. He embarked at Havre in May, 1815, in a state of the most painful debility, suffered unfortunate delays in the voyage, and arrived in the U. States only to die in the arms of his family.—
Mr. B. was a logician of the first order, possessed a rich and ready eloquence, and command ed attention as well by his fine countenance and manly person as by his cogent reasoning and comprehensive views. He acquired a reputation, both as a lawyer and political orator, scarcely inferior to that of any one of his American contemporaries.

Bayle, Pierre, born at Carlat, in the county of Foix (Languedoc), in 1647, received his first instruction from his father, a Calvinistic preacher. He gave early proofs of an astonishing memory, and of a singular vivacity of mind. At the age of 19 years, he entered the college of Puy-Lauren s, to finish his studies. The ardor with which he devoted himself to them weakened his constitution. All books were eagerly devoured by him; his taste for logic led him particularly to study religious controversies, but Anjou's Pintarch and Montaigne were his favorite works. The latter encouraged, without doubt, his inclination to scepticism; perhaps both contributed to give to his style that vivacity, that boldness of expression and antique coloring, so observable in it.

In Toulouse, he studied philosophy with the Jesuits. The arguments of his professor, and, still more, his friendly discourses with a Catholic priest, who dwelt near him, confirmed his doubts of the orthodoxy of Protestantism, so that he resolved to change his religion. His conversion was a triumph to the Catholics. His family, however, tried all means to regain him, and, after 17 months, he returned to his old faith. In order to escape from the punishment of perpetual excommunication, which the Catholic church then pronounced against apostates, he went to Geneva, and thence to Copet, where count Dohna intrusted him with the education of his sons, and where he studied the philosophy of Des Cartes. But, after some years, he returned to France, and settled in Rouen, where he was employed in teaching. From thence he went to Paris, where the society of learned men indemnified him for the fatigues of an occupation to which he was obliged to submit for a third time. In 1675, he obtained the philosophical chair at Sedan, where he taught with distinction until the suppression of this academy in 1681. He was afterwards invited to discharge the same duties at Rotterdam. The appearance of a comet, in 1680, which occasioned an almost universal alarm, induced him to publish, in 1682, his *Pensées diverses sur la Comète*, a work full of learning, in which he discussed various subjects of metaphysics, morals, theology, history, and politics. It was followed by his *Critique générale de l'Histoire du Calvinisme de Maimbourg*. This work, received with equal approbation by the Catholics and Protestants, and esteemed by Maimbourg himself, excited the jealousy of his colleague, the theologian Jurieu, whose *Refutation du P. Maimbourg* had not succeeded, and involved B. in many disputes. He afterward undertook a periodical work, *Nouvelles de la République des Lettres*, in 1684. A letter from Rome, published in this work, excited the displeasure of the queen Christina of Sweden, who caused two violent letters to be sent to him. B. apologized, and his excuses so perfectly satisfied the queen, that from that time she kept up a literary correspondence with him.

The death of his father and of his two brothers, together with the religious persecutions in France, induced him to undertake his *Commentaire philosophique sur ces Pardes de l'Evangile; Contraintes d'entrer*; which, in regard to style and tone, is not worthy of him. B. himself was unwilling to acknowledge it; but Jurieu, who probably recognised its author by the zeal with which toleration is defended in this work, attacked it with violence. His hatred only waited for a pretext to break out against B.; he found it in the *Avis aux Réfugiés*, a work in which the Protestants are treated with little ceremony. Jurieu not only accused B. of being the author of this work (which certainly is not his), but also of being the soul of a party devoted to France, in opposition to the Protestants and allied powers. B. repelled these charges in two publications; but the calumny prevailed. In 1683, the magistrates of Rotterdam removed him from his office, and forbade him to give private instruction. He now devoted all his attention to the composition of his *Dictionnaire historique et critique*, which he first published in 1686, in 2 vols. fol. This was the first work which appeared under his name. Jurieu opposed him anew, and caused the consistory, in which he had the greatest influence, to make a severe attack upon him. B. promised to remove every thing which the consistory deemed offensive; but, finding the public had other views, and preferring rather the satisfaction of his readers than that of his judges, he left the work, with the exception of a few trifles, unaltered. He found two new enemies in Jacquelot and Le Clerc, who both at-
Bayle attacked his religion; others persecuted him as the enemy of his sect and his new country. These contests increased his bodily infirmities. His lungs became inflamed; but he was unwilling to use any medical applications against a disorder which he considered as hereditary and incurable. He died, so to speak, with the pen in his hand, in 1706, at the age of 59 years. "Bayle," says Voltaire, "is the first of logicians and sceptics. His greatest enemies must confess that there is not a line in his works which contains an open aspersion of Christianity; but his warmest apologists must acknowledge, that there is not a page in his controversial writings which does not lead the reader to doubt, and often to scepticism." He compares himself to Homer's cloud-compelling Jupiter. "My talent," he says, "consists in raising doubts; but they are only doubts." The confidence of most theologians induced him to undertake to prove that several points are not so certain and so evident as they imagined. But he gradually passed these limits: his penetration caused him to doubt even the most universally acknowledged facts. Yet he never attacked the great principles of morality. Though an admirable logician, he was so little acquainted with physics, that even the discoveries of Newton were unknown to him. His style is natural and clear, but often prolix, careless and incorrect. He himself calls his Dictionnaire "une compilation informe des passages cousus à la queue les uns des autres."

Without assenting implicitly to this modest judgment, we must confess that the articles, in themselves, are of little value, and that they serve only as a pretext for the notes, in which the author displays, at the same time, his learning, and the power of his logic. The character of Bayle is gentle, amiable, disinterested, highly modest and peaceable: he devoted himself entirely to literature. The most esteemed edition of his Dictionnaire historique is that of 1740, in 4 vols. fol. (an edition was also printed at Bâle the same year). At the Hague appeared the Œuvres diverses de P. Bayle (also 4 vols. fol.) An edition of his Dict. histor., in 16 vols., printed with great typographical beauty, was published, in 1820, by Desoer, in Paris: it contains notes, and the life of the author. In the Disc. préliminaire, the editor, Beuchot, reviews the 11 former editions. Gottsched has translated the Dict. into German (Leipsic, 1741-44, 4 vols. fol.) An English translation, with considerable additions, by Th. Birch, Lockman and others, was published, 1734-41, 10 vols. fol.

Baylen, capitulation of general Dupont at; an event which, in July, 1808, raised the courage of Spain, and hastened a general insurrection. Joseph Bonaparte had entered Madrid as king: the provinces Leon, Valencia, Valladolid, Zamora and Salamanca had been subjugated and disarmned. In the south alone, on the Guadalquivir, in the naturally fortified Andalusia, in Cordova, Grenada, Jaen, the spirit of insurrection still prevailed, and was excited as much as possible by the junta of Seville. Thither general Dupont directed his march, at the end of May, with three divisions. Cordova and Jaen were taken by assault, after the most terrible resistance. The monks promised the joys of heaven, without purgatory, to every one who should kill three Frenchmen. The corps of Castaños soon increased to 30,000 men. The able manoeuvres of this general, together with famine and sickness in the French army, augmented by the total want of hospitals, prepared the way for the overthrow of general Dupont. 3000 Spaniards had possession of the Sierra Morena, in the rear of his army. In order to re-establish his communication with the capital, he occupied the cities of B. and Carolina with detachments, while he himself took a position near Andujar, on the Guadalquivir. But, on the 14th of July, 12,000 men, with some pieces of heavy artillery, marched against the front of the French position near Andujar; while 3000 men came through the defiles of the Sierra Morena upon the rear, and 6000 men attacked Dupont's left wing. He defended himself, for three days, with skill and courage; but the 18th of July decided the contest. The Spanish generals Reding and Compigny attacked B. Peires and Jones overawed the main body, under Dupont. He was compelled to evacuate Andujar, after B. had been taken by the Spaniards. The action continued nine hours, when Dupont requested a suspension of arms, but was told that he must surrender at discretion. Meanwhile the division of Vellel, not acquainted with the proceedings of Dupont, had attacked the Spaniards anew, and taken the regiment of Cordova prisoners, together with two pieces of artillery, but were finally overpowered by superior numbers. On the 23d of July, the whole French army, 17,000 men strong, being surrounded, was obliged to capitulate, having lost 3000 men on the field of battle. The di-
visions of Dupont and Vedel were made prisoners of war: the latter was to be permitted to embark at Cadiz for Rochefort; the same terms were afterwards promised to the division of Dupont, but not fulfilled. General Dupont returned, with his staff, to France, and was arrested at Toulon, and subjected to trial. But, before a decision, he was delivered by the capture of Paris, March 30, 1814. He was afterwards appointed, by Louis XVIII, minister of war; but was superseded by Soult, in December, 1814.

BAYLEY, Richard, M. D., was born at Fairfield, Connecticut, in the year 1745. Having completed his medical studies, he went to London, to attend the lectures and hospitals. After little more than a year's residence in that city, he returned to New York, and commenced practice there in 1772. At this period, his attention was first drawn to the then prevalent and fatal croup, which had been treated as the putrid sore throat. Observing how fatal was the use of stimulants and antiseptics, he examined the nature of the disease, and became convinced that it was of an inflammatory character. He accordingly treated it as such, with decided success, and, soon after the publication of his View of the Croup, his opinions and treatment of it were universally adopted. In the autumn of 1775, B revisited London, where he spent a winter, and, in the following spring, returned to New York, in the capacity of surgeon in the English army under Howe. He resigned this post in 1777, and, during the rest of his life, continued the practice of his profession in the same city. In 1787, he lectured on surgery. In 1788, he lost his valuable collection in morbid anatomy, and some delicate preparations, by the violence of the famous "doctors' mob," who broke into his house, and carried off and burned his cabinet. The next morning, on going to the hospital, he found that both crew and passengers and crew of an Irish emigrant ship, affected with the ship fever, to go on shore to the rooms and tents appointed for them, leaving their luggage behind. The next morning, on going to the hospital, he found that both crew and passengers, well, sick and dying, were huddled together in one apartment, where they had passed the night. He inconsiderately entered into this room before it had been properly ventilated, but remained scarcely a moment, being obliged to retire by a violent pain in the head, with which he was suddenly seized. He returned home, and retired to his bed, from which he never rose. In the afternoon of the seventh day following, he expired.

BAROXY. This is the name of the iron blade, formed like a dagger, and placed upon the muzzle of the musket, which is thus transformed into a thrusting
weapon. It was probably invented, about 1640, in Bayonne, and was used in the Netherlands, in 1647, but was not universally introduced until after the pike was wholly laid aside, in the beginning of the 18th century. Since the general war in Europe, some officers have adopted the idea of former military writers (for instance, Guilbert), of increasing the efficiency of the bayonet by a more regular exercise of the infantry in its use. A Saxon captain, von Schmitz, has the merit of having first developed this idea in a systematic treatise. (See The Art of Fighting with the Bayonet, by E. von Schmitz, Dresden, 1823, with copperplates.) As cavalry are often counted by horses, infantry are sometimes counted by bayonets.

Bayonne; a well-built, rich, commercial city, the largest in the French department of the Lower Pyrenees, formerly capital of the district Labour, in Gascony (lon. 1° 24' W.; lat. 43° 28' N.), at the confluence of the Nive and the Adour, about two miles from the Bay of Biscay. It has 13,600 inhabitants, 6000 of whom live in the suburbs. The Nive and the Adour (the former of which is navigable about 30, and the latter 70 miles) form a harbor capable of admitting men of war from 40 to 50 guns, but it has a difficult access. These two rivers serve to convey timber, tar and iron from the Pyrenees to B. A citadel, built by Vauban, on the summit of an eminence in the suburb, commands the harbor and the city. The bishop of B. is under the archbishop of Toulouse, and exercises spiritual jurisdiction over three departments. The cathedral is an old ancient building. B. has considerable commerce with Spain; French and foreign goods being exchanged for iron, fruit, gold and silver. B. is much engaged in the coal and whale fisheries, in which, before the revolution, 30-40 vessels of 250 tons burden were employed. Mast and other timber for ship-building, from the Pyrenees, are exported to Brest and other ports of France. The hams of B. are famous. Its wine and chocolate are shipped to the north of Europe. Among the lower class, the ancient Biscayan or Basque language is spoken. Catherine of Medici had an important interview with the duke of Alba in B. June 1505. The meeting of Napoleon with the king of Spain, Charles IV, and the prince of the Asturias, also took place here in May, 1808, in consequence of which the two last signed (5th and 10th May) an agreement, by which they, and all the children of the king, transferred their rights to the Spanish territories, in Europe and India, to the French emperor. Napoleon convened a Spanish general junta at B., June 15th, to draw up a constitution. This constitution was published July 6, and Joseph departed, on the 9th, from B. for Madrid. The convention of B., between the Poles and France, was signed on the 10th May, 1808. (See Scholl's Traites de Paix, vol. 9, page 28.) The transactions at B. are some of the most important in Napoleon's life, and disclose the wretched character of the royal family of Spain.

Bazaar, Bazaar, or Basar; a marketplace in the East. The word is Arabic, and originally denotes sale or exchange. Some are open, some covered with lofty ceilings, or domes. At the bazars, or in the neighborhood of them, are the coffee-houses, so much frequented in Turkey, Persia, &c.; and, as the Oriental lives almost entirely out of doors, the bazars of populous cities, besides their mercantile importance, are of consequence as places of social intercourse. The bazar of Isphahen is one of the finest places in Persia. That of Tauris is the largest known. At Constantinople are two bazars—the old and new one. In the Oriental tales—for instance, in the Arabian Nights—the bazars occupy a very conspicuous place. Since the system of credit is almost entirely unknown in Eastern trade, and all commercial transactions take place in merchandise and money, the places where this merchandise is brought and changed from one owner to another are, of course, very much frequented. The word bazar has been used, in recent times, also, in Europe. Thus there is the well-known bazar in Sloho square, in London.

Bear. (See Sigualda, and Lighthouse.)

Bear. (Ursus, L.) a genus of carnivorous, or, more accurately, frugi-carnivorous, mammiferous quadrupeds, belonging to the family plantigrada, which tread on the entire soles of the [hind] feet. The genus is characterized by a heavy body, covered with a thick, woollen coat, a large head, terminating in a prolonged snout, with very extensible lips. The ears are of moderate size, and rather pointed, and the tongue smooth. The limbs are large and heavy, and all the feet are five-tored, and furnished with
very strong, hooked claws, well suited for burrowing.—Five species at present belong to this genus. The Linnaean genus comprised the raccoon, badger, &c., now, properly, separated from it. These species are, the brown bear of Europe (U. arctos); the white or polar bear (U. maritimus); the American or black bear (U. americanus); the grizzly bear (U. horribilis), also of America; and the Malay or Asiatic bear (U. labiatus).—The brown bear is chiefly an inhabitant of cold and elevated situations, and feeds on a great variety of animal and vegetable substances. During winter, this species, like some others, remains torpid in caves, whether it retires, in the autumn, very fat, and comes out, in the spring, extremely emaciated. The brown bear is remarkable for its sagacity, as well as the ferocity of its disposition, and it becomes especially sanguinary as it advances in age.

Besides the differences of color and size which distinguish this bear from those belonging to the old continent, it differs from the American bears, by having a convexity of front above the eyes, which renders its physiognomy strikingly dissimilar to theirs. Other distinctions, sufficiently obvious, present themselves when the species are compared.—The polar, or northern latitudes, bear, is only found in high northern latitudes, along the borders of the Icy ocean and northern coasts of America in the vicinity of Hudson's bay. It does not descend to the eastern coast of Siberia nor Kamtschatka; neither is it found in the islands lying between Siberia and America. It is uniformly white, attains a large size, is very powerful, ferocious and daring. It is an excellent diver and swimmer, being apparently as much at home in the ocean as on land. An individual of this species was seen, by the late northern explorers, in the middle of Melville sound, swimming across, where the shores were at least 30 miles apart. The polar bear is the most exclusively carnivorous of the genus, though equally capable of living on vegetable food with the rest. He preys upon seals, the cubs of the whale, morses, &c., or the carcasses of whales left by whalers after removing the blubber. Individuals of this species are sometimes, though rarely, seen in caravans of wild animals in the U. States. A large and beautiful one was exhibited in New York, in the spring of 1836, and, notwithstanding the coldness of the weather, it appeared to suffer extremely from heat, as it bathed itself frequently in water provided for the purpose. When ice was placed in the cage, it rolled upon it with great satisfaction, and showed every sign of being gratified.

—The black bear of America is distinguished by its color and a peculiarly convex facial outline. It is found very generally in mountainous and forest lands, and subsists, in a great degree, on berries and vegetable substances, though it preys upon small animals, and insects, which it searches for industriously, by turning over large logs of decayed timber. It is rarely, if ever, known to attack man, unless in self-defense. It is very fond of young corn and honey, which, being an expert climber, like the brown European bear, it obtains by plundering the wild beehives.

The grizzly bear inhabits the country adjacent to the Rocky mountains, and is, of all the race, the most dreadful for size, strength and terrible ferocity of nature.*—The Malay, Asiatic or long-lipped bear, is a native of the mountainous parts of India, and feeds on white ants, rice, honey, the fruit of the palm, &c. The species is inoffensive and timid, burrows in the ground, and lives in pairs, together with the young, which, when alarmed, seek safety by mounting on the backs of the parents.

BEARD; the hair round the chin, on the cheeks and the upper lip, which is a distinction of the male sex. It differs from the hair on the head by its greater hardness and its form. The beard begins to grow at the time of puberty. The connexion between the beard and puberty is evident from this, among other circumstances, that it never grows in the case of eunuchs who have been such from childhood; but the castration of adults does not cause the loss of the beard. According to Cesar, the German thought, and perhaps justly, the late growth of the beard favorable to the development of all the powers. But there are cases in which this circumstance is an indication of feebleness. It frequently takes place in men of tender constitution, whose pale color indicates little power. The beards of different nations afford an interesting study. Some have hardly any, others a great profusion. The latter generally consider it as a great ornament; the former pluck it out; as, for instance, the American Indians. The character of the beard differs with that of the individual; and, in the case of nations, varies

* For the detailed history of this and the two preceding species, too extensive to be introduced into this work, see the first volume of the American Natural History, by the writer of this article.
BEARD—BEATIFICATION.

with the climate, food, &c. Thus the beard is generally dark, dry, hard and thin in irritable persons of full age; the same is the case with the inhabitants of hot and dry countries, as the Arabsians, Ethiopians, East Indians, Italians, Spaniards. But persons of a very mild disposition have a light-colored, thick and slightly curling beard: the same is the case with inhabitants of cold and humid countries, as Holland, England, Sweden. The difference of circumstances causes all shades of variety. The nature of the nourishment, likewise, causes a great variety in the beard. Wholesome, nutritious and digestible food makes the beard soft; but poor, dry and indigestible food renders it hard and bristly. In general, the beard has been considered, with all nations, as an ornament, and often as a mark of the sage and the priest. Moses forbade the Jews to shave their beards. With the ancient Germans, the cutting off another's beard was a high offence; with the East Indians, it is severely punished. Even now, the beard is regarded as a mark of great dignity among many nations in the East, as the Turks. The custom of shaving is said to have come into use during the reigns of Louis XIII and XIV of France, both of whom ascended the throne without a beard. Courtiers and inhabitants of cities then began to shave, in order to look like the king, and, as France soon took the lead in all matters of fashion on the continent of Europe, shaving became general; but it is only since the beginning of the last century that shaving of the whole beard has become common. Till then, fashion had given divers forms to mustachios and beards. Much could be said, and has been said, in a medical point of view, on shaving the beard. Such a discussion would lead us, however, here too far. It is not to be denied, that the mouth, one of the most expressive parts of the countenance, is shown to much greater disadvantage, the beard concealing the loss of the teeth. Moreover, the eye gains much in expression by a full beard. Every one knows the trouble of shaving; and who does not remember Byron's computation of the amount of this trouble in Don Juan? Seume, a German author, says, in his journal, "To-day I threw my powder apparatus out of the window: when will come the blessed day, that I shall send the shaving apparatus after it?"

—Shaving, among many ancient nations, was the mark of mourning; with others, it was the contrary. Plutarch says that Alexander introduced shaving among the Greeks, by ordering his soldiers to cut off their beards; but it appears that this custom had prevailed before among the Macedonians. The Romans began to shave about 454 A. U., 296 B. C, when a certain Titinius Menas, a barber from Sicily, introduced this fashion. Scipio Africanus was the first who shaved every day. The day that a young man first shaved was celebrated, and the first hair cut off was sacrificed to a deity. Adrian, in order to cover some large warts on his chin, renewed the fashion of long beards; but it did not last long. In mourning, the Romans wore a long beard sometimes for years. They used scissors, razors, tweezers, &c, to remove the beard. The public barber shops (tonstrinæ), where the lower classes went, were much resorted to; rich people kept a shaver (ton­ sor) among their slaves.

BEARD; before the revolution, a province of France, at the foot of the Pyrenees, with the title of a principality; about 42 miles long and 30 broad; bounded E. by Bigorre, N. by Armagnac, Tursan and Chalosse, W. by Dax, a part of Soule, and the Lower Navarre, and S. by the Pyrenees. It belonged, with Navarre, to Henry IV, when he obtained the crown. The plain country is very fertile, and the mountains are covered with fir-trees, while within are mines of copper, lead and iron; and the little hills are planted with vines, which yield good wine. It is now included in the department of Lower Pyrenees. Pau was the capital town. Pop. about 220,000.

BEATIFICATION, in the Roman Catholic church; an act by which the pope declares a person beatified or blessed after his death. It is the first step to canonization, i.e. the raising one to the honor and dignity of a saint. No person can be beatified till 50 years after his or her death. All certificates or attestations of virtues and miracles, the necessary qualifications for sainthood, are examined by the congregation of rites. This examination often continues for several years; after which his holiness decrees the beatification. The corpse and relics of the future saint are from thenceforth exposed to the veneration of all good Christians; his image is crowned with rays, and a particular office is set apart for him; but his body and relics are not carried in procession. Indulgences, likewise, and remissions of
sins, are granted on the day of his beatification, which, though not so pompous as that of canonization, is, however, very splendid. Beatification differs from canonization in this, that the pope does not act as a judge in determining the state of the beatified, but only grants a privilege to certain persons to honor him by a particular religious worship, without incurring the penalty of superstitious worshipers; but, in canonization, the pope speaks as a judge, and determines, ex cathedra, upon the state of the canonized. Beatification was introduced when it was thought proper to delay the canonization of saints, for the greater assurance of the truth of the steps taken in the procedure. Beatification was introduced when it was thought proper to delay the canonization of saints, for the greater assurance of the truth of the steps taken in the procedure. Some particular orders of monks have assumed to themselves the power of beatification. Thus Octavia Melchiorica was beatified by the Dominicans. (See Canonization.)

Beaton, David, archbishop of St. Andrews, and cardinal, was born in 1494. Pope Paul III raised him to the rank of cardinal in December, 1538; and, being employed by James V in negotiating his marriage at the court of France, he was there consecrated bishop of Mirepoix. Soon after his installation as archbishop, he promoted a furious persecution of the reformers in Scotland; but the king's death put a stop, for a time, to his arbitrary proceedings, he being then excluded from affairs of government, and confined. He raised, however, so strong a party, that, upon the coronation of the young queen Mary, he was admitted into the council, made chancellor, and received a commission as legate a latere from Rome. He now began to renew his persecution of heretics, and, among the rest, of the famous Protestant preacher George Wishart, whose sufferings at the stake he viewed from his window, with apparent exultation. He was murdered in his chamber, May 29, 1530. He united with great talents equally great vices, and left several children, the fruit of open concubinage.

Beattie, James, LL. D., a pleasing poet and miscellaneous writer, was born at Laurencekirk, in the county of Kincardine, in 1735. He lost his father when he was only seven years of age, but was placed early at the only school his birthplace afforded, whence he was removed to Marischal college, Aberdeen. He there studied Greek, under the principal, Thomas Blackwell, and made a general proficiency in every branch of education, except mathematics. In 1733, he obtained the degree of A. M., and accepted the office of school-master and parish clerk to the parish of Fordoun, looking forward to the church of Scotland as his principal prospect, for which reason he still attended, during winter, the divinity lectures at Marischal college. In June, 1738, these views were somewhat changed, by the attainment of the situation of one of the masters of the grammar-school of Aberdeen. In 1761, he published a volume of poems, which were received favorably, but which he subsequently thought very little of, and endeavor to buy up. They nevertheless procured him some powerful friends, whose patronage obtained him the appointment of professor of moral philosophy and logic at Marischal college. In 1765, he published a poem, the Judgment of Paris, (4to.), which proved a failure, although it was afterwards added to a new edition of his poems, in 1766. The work which procured him the greatest fame was his Essay on Truth, which first appeared in 1770. It was so popular, that, in four years, five large editions were sold; and it was translated into several foreign languages. Among other marks of respect, the university of Oxford conferred on the author the degree of LL. D.; and George III honored him, on his visit to London, with a private conference and a pension. He was also solicited to enter the church of England by flattering proposals from the archbishop of York and the bishop of London; which proposals he declined, lest his opponents should attribute the change to self-interest. The popularity of this celebrated essay, which was written in opposition to the prevalent skepticism of Hume and others, was principally owing to its business of style, and to a mode of treating the subject, calculated for the merit of slight scholarship and medium intellect. This is often a great source of immediate celebrity; but, thus produced, it is usually as transitory as spontaneous, which has proved the case in the present instance. A few months after the appearance of the Essay on Truth, B. published the first book of the Minstrel (4to.), and, in 1774, the second; which pleasing poem is, indisputably, the work by which he will be the longest remembered. To a splendid edition of this Essay on Truth, published, by subscription, in 1776, he added some miscellaneous dissertations on Poetry and Music, Laughter and Ludicrous Composition, &c. In 1783, he published Dissertations, Moral and Critical (4to.); and
in 1786, appeared his Evidences of the Christian Religion (2 vols., 12mo.) In 1790, he published the first volume of his Elements of Moral Science, the second of which followed in 1793; and to the latter was appended a dissertation against the slave-trade. His last publication was an Account of the Life, Character and Writings of his eldest son, James Henry Beattie, an amiable and promising young man, who died at the age of 22, in 1790. This great affliction was followed, in 1791, by the equally premature death of his youngest and only surviving son, in his 18th year; which losses, added to the melancholy loss of reason by his wife, wholly subdued his constitution; and, after two paralytic strokes, he died at Aberdeen, in August, 1803. B. was a religious and an amiable man, but constitutionally more calculated for a poet than a philosopher, and for a pleader than a controversialist. He was, however, a respectable, if not a strong writer, and might have been thought more of at present, had he been thought less of heretofore.

Beaucaire; a small, well-built, commercial city of France, with 8000 inhabitants (lon. 4° 43' E.; lat. 43° 48' N.), in Lower Languedoc, now in the department of the Gard, on the right bank of the Rhone, opposite Tarascon, with which it communicates by a bridge of boats. It has a commodious harbor for vessels which ascend the river from the Mediterranean, 7 leagues distant, and is famous for its great fair (founded in 1217, by Raymond II, count of Toulouse), held yearly, from the 22d July, during 10 days. In former times, this fair was frequented by merchants and manufacturers from all countries of Europe, the Levant, and Persia and Armenia, so that many thousand booths were erected for foreigners in the adjoining valley. Before 1692, the fair of B. was exempt from all taxes, and the annual sale amounted to several million dollars. Since that time, B. has gradually declined, and its trade, the articles of which are the productions of the vicinity, was valued, in 1616, at 23,000,000 francs.

Beaufort; a seaport and post-town in a district of the same name, in South Carolina, on Port Royal island, at the mouth of the Coosawatchie; 60 miles N. E. Savannah, 72 S. W. Charleston; lon. 80° 23' W.; lat. 32° 31' N.; population about 1000. It is a very pleasant and healthy town, with an excellent harbor, though but little commerce. It contains 3 churches and a seminary, which was incorporated as a college, endowed with funds amounting to $60 or $70,000, having a handsome edifice, and a library of 700 volumes, but it has hitherto assumed only the form of an academy.

Beaufort, Henry, legitimate brother of Henry IV, king of England, was made bishop of Lincoln, whence he was translated to Winchester. He was also nominated chancellor of the kingdom, and sent ambassador to France. In 1426, he received a cardinal's hat, and was appointed legate in Germany. In 1431, he crowned Henry VI in the great church of Paris. He died at Winchester, 1447. He was a haughty, turbulent prelate, and Shakespeare is considered as giving a true portrait of him, when he describes his last scene.

Beauharnais, Alexander, viscount; born in 1760, in Martinique; served with distinction, as major, in the French forces under Rochambeau, which aided the United States in their revolutionary war; married Josephine Tascher de la Pagerie, who was afterwards the wife of Napoleon. At the breaking out of the French revolution, he was chosen a member of the national assembly, of which he was, for some time, president, and which he opened, after the king's departure, with the following words:—Messieurs, le roi est parti cette nuit : passons à l'ordre du jour. In 1792, he was general of the army of the Rhine, and, in 1793, was appointed minister of war. In consequence of the decree removing men of noble birth from the army, he retired to his country-seat. He was falsely accused of having promoted the surrender of Mentz, and was sentenced to death, July 23, 1794, when 34 years old. (For information respecting his daughter Josephine Tascher de la Pagerie, who was afterwards the wife of Napoleon, see the next article.)

Beauharnais, Francois, marquis de; born at La Rochelle, Aug. 12, 1756; voted with the right side in the national assembly. He violently opposed the motion of his younger brother, the viscount Alexander, to take from the king the chief command of the army, and would not listen to any of the amendments proposed, saying, Il n'y a point d'amendement avec l'honneur. He was called, in consequence of this, le fœt Beauharnais sans amendement. In 1792, with the count d'Hervilly, the Baron de Viennemil and others, he formed the project of a new
flight of the royal family; but the arrest of his companion, the baron Chambon, prevented the execution of the plan. He was appointed major-general in the army of the prince of Condé, and wrote, in 1793, to the president of the national assembly, protesting against their unlawful treatment of the king, and offering to appear himself among his defenders. When Bonaparte became first consul, the marquis sent him a letter, in which he exhorted him, by the glory which he would gain by such a course, to restore the sceptre to the house of Bourbon. The empress Josephine married her niece, the daughter of the marquis, to the emperor's aid, Lavalleet (q. v.), and effected the recall of the marquis. Appointed senator, and ambassador to the court of Spain, he united, in 1807, with the prince of the Asturias (now Ferdinand VII) against the prince of peace, and fell into disgrace with Napoleon, who banished him. After the restoration, he returned to Paris, where he died, Jan. 10, 1819.

Beaumarchais, Pierre Augustin Caron de; born at Paris, 1732; son of a watchmaker, who destined him for his trade. He early gave striking proofs of his mechanical and also of his musical talents. He was afterwards the teacher of the harp of the daughters of Louis XV, and was admitted into their society. By a rich marriage, he laid the foundation of his immense wealth. He now aspired to literary reputation. His Eugénie appeared in 1767; Les deux Jouris in 1770. The first still holds its place on the stage. He showed all his talent in his lawsuit against Goesman and La Blache, when he wrote against the former (who belonged to the parlement Maupuy, so called, which was engaged in a dispute with the ministry) his celebrated Mémoires (Paris, 1774), which excited all France. Had he remained more quiet, he probably would have gained his process. The fame of his Mémoires alarmed even Voltaire, who was jealous of every kind of glory. The Barber of Seville and the Marriage of Figaro have given him a permanent reputation. Shortly before the revolution, he was involved in the process against the banker Kormann. In 1792, he wrote La Mère coupable, but never regained his former fame. He was once more in his true element in his memoir Mes six Épouses. He relates, in that work, the dangers to which he was exposed, in a revolution, where a celebrated name, talent and riches, were sufficient causes of proscription. He still possessed, at the age of more than sixty, all the vigor of his youth, and had lost nothing but his gayety. His contract to supply the U. States with military stores, during their revolutionary war, had increased his fortune, of which he always made a noble use; but he lost about a million livres by his famous edition of the works of Voltaire, the very imperfect execution of which was not answerable to the immense cost. He lost still more, at the end of 1792, by his attempt to provide the French army with 60,000 muskets. Discontented with the present, despairing of the future, weary of struggling against the revolution and his creditors for the ruins of his wealth, he died, at the age of 69 years, without any particular disease, in May, 1794. His biography appeared in 1795; and, in 1809, an edition of his works, in 7 vols.—B. was a singular instance of versatility of talent, being at once an artist, politician, projector, merchant and dramatist. He was passionately attached to celebrity. His Marriage of Figaro excited one of those extraordinary sensations, for which Paris has always been remarkable. The English modifications and versions of this comedy convey but a slight notion of the malicious subtlety and deep spirit of intrigue in the original. B. left to his heirs a claim against the U. States of a million of francs for supplies furnished during the war, which has been repeatedly presented to congress, but always rejected on the ground that B. acted only as the agent of the French government, from whom he received funds to that amount.

Beaumont, Francis, and Fletcher, John; two dramatic writers. The former was born in 1585, studied at Oxford, and died in 1616; the latter was born at London in 1576, and died there, in 1633, of the plague. Animated by the same inclination, they both devoted themselves to poetry. Their plays, about 50, appeared under their joint names (London, 1670, and lately, 1812, in 14 vols.), and it is impossible now to determine their respective shares in these productions. According to the testimony of some of their contemporaries, Fletcher was the inventing genius, while Beaumont, though the younger, was more distinguished for maturity and correctness of judgment. Shakespeare was their model, and, like him, they intermix pathetic and low comic scenes; but their attempts to surpass their model sometimes lead them into extravagances. The desire, also, of
pleasing the public at times induces them to deviate from a correct standard of taste. They succeed best in comic scenes. Their contemporaries preferred them even to Shakespeare, affirming that the English drama reached its perfection in them. Impartial posterity has reversed this decision, and adjudged the palm to Shakespeare. They are said to have frequented taverns and alehouses, to study the human character, and to have been arrested, while disputing in such a place respecting the conclusion of a play. One wished to have the king in the piece assassinated, the other opposed it; and, being overheard, they were apprehended on suspicion of conspiring the death of their sovereign.

BEAUMONT, madame Leprince de; born at Rouen, 1711; died at Amécy, in Savoy, 1780; lived partly in France, partly in England, where she devoted her talents to the instruction of youth. A simple and easy style, a pleasing moral, well chosen historical passages, and a happy imagination, render her writings agreeable, although much is too artificial, and the theological views are no longer of value. She has written a great many romances and works for children. Her *Magazin des Enfants* was formerly the manual of all goverantes and French boarding-schools.

BEAUTY. (See *BEAVER*.)

BEAVER (*castor, L.*); a genus of claviculated, mammiferous quadrupeds, of the order gnawers, or gnawers. —Having drawn up, with great care, the natural history of this species in another work (American Natural History, vol. ii., p. 21), we shall avail ourselves of some of the most interesting statements, and refer the reader thereto for more ample details, as well as for the fabulous history of the animal.—It is only in a state of nature that the beaver displays any of those singular modes of acting, which have so long rendered the species celebrated. These may be summed up in a statement of the manner in which they secure a depth of water that cannot be frozen to the bottom, and their mode of constructing the huts in which they pass the winter. They are not particular as to the site which they select for the establishment of their dwellings, but if it is in a lake or pond, where a dam is not required, they are careful to build where the water is sufficiently deep. In standing waters, however, they have not the advantage afforded by a current for the transportation of their supplies of wood, which, when they build on a running stream, is always cut higher up than the place of their residence, and floated down. The materials used for the construction of their dams are the trunks and branches of small birch, mulberry, willow and popular trees, &c. They begin to cut down their timber for building early in the summer, but their edifices are not commenced until about the middle or latter part of August, and are not completed until the beginning of the cold season. The strength of their teeth, and their perseverance in this work, may be fairly estimated by the size of the trees they cut down. Doctor Best informs us, that he has seen a mulberry tree, eight inches in diameter, which had been gnawed down by the beaver. We were shown, while on the banks of the Little Miami river, several stumps of trees, which had evidently been felled by these animals, of at least five or six inches in diameter. The trees are cut in such a way as to fall into the water, and then floated towards the site of the dam or dwellings. Small shrubs, &c., cut at a distance, they drag with their teeth to the stream, and then launch and tow them to the place of deposit. At a short distance above a beaver dam, the number of trees which have been cut down appears truly surprising, and the regularity of the stumps might lead persons, unacquainted with the habits of the animal, to believe that the clearing was the result of human industry. —The figure of the dam varies according to circumstances. Should the current be very gentle, the dam is carried nearly straight across; but when the stream is swift, it is uniformly made with a considerable curve, having the convex part opposed to the current. Along with the trunks, and branches of trees they intermingle mud and stones, to give greater security; and, when dams have been long undisturbed and frequently repaired, they acquire great solidity, and their power of resisting the pressure of water, ice, &c., is greatly increased by the willow and birch, occasionally taking root, and eventually growing up into something like a regular hedge. The materials used in constructing the dams are secured solely by the resting of the branches, &c., against the bottom, and the subsequent accumulation of mud and stones by the force of the stream, or by the industry of the beavers.

—The dwellings of the beavers are formed of the same materials as their dams, are very rude, and adapted in size to the number of their inhabitants; seldom more
than four old, or six or eight young ones, are found in one of the lodges, though double that number have been sometimes seen. In building their houses, they place most of the wood crosswise, and nearly horizontally, observing no other order than that of leaving a cavity in the middle. Branches projecting inwards are cut off with their teeth, and thrown among the rest. The houses are not of sticks, and then plastered, but of all the materials used in the dams—sticks, mud and stones, if the latter can be procured. This composition is employed from the foundation to the summit. The mud is obtained from the adjacent banks or bottom of the stream or pond near the door of the hut. The beaver always carries mud or stones by holding them between his fore paws and throat. Their work is all performed at night, and with much expedition. When straw or grass is mingled with the mud used in building, it is an accident owing to the nature of the spot whence the mud is obtained. As soon as any portion of the materials is placed, they turn round, and give it a smart blow with the tail. The same sort of blow is struck by them on the surface of the water when they are in the act of diving. The outside of the hut is covered or plastered with mud, both in the morning, and after frost has begun to appear. By freezing, it soon becomes almost as hard as stone, effectually excluding their great enemy, the wolves, during the winter. Their habit of walking over the work frequently, has led to the absurd idea of their using the tail as a trowel. The houses are generally from four to six feet thick at the apex of the cone; some have been found as much as eight feet thick at top. The door or entrance is always on the side farthest from land, and is near the foundation, or a considerable depth under water; this is the only opening into the hut. The large houses are sometimes found to have projections of the main building thrown out, for the better support of the roof; and this circumstance has led to all the stories of the different apartments in beaver huts. These larger edifices, so far from having several apartments, are double or treble houses, the parts having no communication except by water. It is a fact, that the muskrat is sometimes found to have taken lodgings in the huts of the beaver. The other, also, occasionally intrudes; he, however, is a dangerous guest, for, should provisions grow scarce, it is not uncommon for him to devour his host. All the beavers of a community do not co-operate in fabricating houses for the common use of the whole. The only affair in which they have a joint interest, and upon which they labor in concert, is the dam. Beavers also make excavations in the adjacent banks, at regular distances from each other, which have been called washes. These are so enlarged within, that the beaver can raise his head above water to breathe without being seen, and, when disturbed at their huts, they immediately swim under water to these washes for greater security, where they are easily taken by the hunters. —The food of the beaver consists chiefly of the bark of the aspen, willow, birch, poplar, and, occasionally, elder; to the pine it rarely resorts, unless from severe necessity. They provide a stock of wood from the trees first mentioned, during summer, and place it in the water, opposite the entrance into their houses. —The beaver produces from two to five at a litter. It is a cleanly animal, and always performs its evacuations in the water, at a distance from the hut: hence no accumulation of filth is found near their dwellings. —The beaver is about two feet in length; its body thick and heavy; the head compressed, and somewhat arched at the front, the upper part rather narrow; the snout much so. The eyes are placed rather high on the head, and the pupils are rounded; the ears are short, elliptical, and almost concealed by the fur. The skin is covered by two sorts of hair, of which one is long, rather stiff, elastic, and of a gray color for two thirds of its length next the base, and terminated by shining, reddish-brown points; the other is short, thick, tufled and soft, being of different shades of silver-gray or light lead color. The hair is shortest on the head and feet. The hind legs are longer than the fore, and are completely webbed. The tail is 10 or 11 inches long, and, except the third nearest the body, is covered with hexagonal scales. The third next the body is covered with hair like that on the back. (See Godman's Am. Nat. Hist., vol. ii. p. 10, et seq.)

**BECCARIA.** Cesare Bonesana, marchese di, born at Milan, 1735, was early excited by Montesquieu's *Lettres Persanes*, to the cultivation of his philosophical talents, and afterwards favorably known as a philosophical writer by his memorable work, full of a noble philanthropy, *Delitti e delle Pene* (On Crimes and Punishments), Naples, 1764, and several others. With the eloquence of true feeling, and a lively
imagination, he opposes capital punishments and the torture. This work led to the establishment of more settled and more correct principles of penal law, and contributed to excite a general horror against inhuman punishments. B. was a true friend, a good son, a tender husband and a real philanthropist. He is also known, in Italy, as the author of a philosophical grammar and theory of style, *Ricerche intorno alla Natura dello Stilo* (Milan, 1770), and of several good treatises on style, on rhetorical ornament, &c., contained in the journal *Il Caffè*, edited by him, in conjunction with his friends Visconti, Verri and others. A fit of apoplexy put an end to his useful life in November, 1780.

**BECCARIA,** Giovanni Battista; born, 1716, at Mondovi; went to Rome in 1732, where he studied, and afterwards taught grammar and rhetoric; at the same time, he applied himself with success to mathematics. He was appointed professor of philosophy at Palermo, and afterwards at Rome. Charles Emanuel, king of Sardinia, invited him to Turin, in 1748, to fill the professorship of natural philosophy at the university there. Electricity had, at that time, through the experiments of Franklin and others, become an object of universal interest. He therefore published his *Dell' Elettricismo naturale ed artificiale* (Turin, 4to). The experiments which this work contains on atmospheric electricity are so numerous and various, that Priestley affirmed, in his History of Electricity, that Beccaria's labors far surpass all that had been done, before and after him, on this subject. The academicians in London and Bologna elected him a member. He wrote many other valuable works on this subject. The most important, *Dell' Elettricismo artificiale* (1772), contains all that was then known of electricity. Franklin, who esteemed the works of B., had them translated into English. In 1759, the king employed him to measure a degree of the meridian in Piedmont. He began the measurement in 1769, together with the abbot Canonica, and published the result in 1774. The doubts expressed by Cassini of the exactness of this measurement, drew from him his *Lettere d'un Italiano ad un Parigino*, in which he showed the influence of the proximity of the Alps on the deviation of the pendulum. As his thoughts were entirely absorbed by his studies, he often neglected the nicer rules of good-breeding, without losing, however, the general esteem. He died April 27, 1781.

**BECHER, John Joachim;** author of the first theory of chemistry; born at Spire, in 1735. He finished his restless life at London, in 1765, after having resided in many parts of Germany. He had many enemies, and has been accused, not entirely without justice, of charlatanism; yet his influence on the science of chemistry gives him still a claim to remembrance. He brought it into a nearer connexion with physics, and sought for the causes of all the phenomena of the inorganic universe in these two departments of science. This is the object of his principal work, *Physica subterranea*. At the same time, he began to form a theory of chemistry; and conceived the idea of a primitive acid, of which all the others were only modifications. He also made researches into the process of combustion. He maintained that every metal consists of a common earthly matter, of a common combustible principle, and of a peculiar mercurial substance. If we heat a metal so that it changes its form, we disengage the mercurial substance, and nothing remains but the metallic calx. This was the first germ of the phlogistic theory, which was further developed by Stahl, and prevailed until the time of Lavoisier. The numerous works of B. are, even now, not without interest.

**BECK, Christian Daniel;** one of the most active living philologists and historians, born in Leipzig, Jan. 22, 1757. He is professor at the university in that city, and has rendered himself famous by a great number of excellent works. His editions of the classics are in high esteem. Between 1787 and 1806 appeared the 4 volumes of his work, *Introduction to a Knowledge of the General History of the World and of Nations*, until the discovery of America. He also translated Goldsmith's History of Greece, and Ferguson's History of the Roman Republic. Of his theological works, we may mention his *Commentarii historici Decretorum Religionis Christianae, et Formulae Lutheri* (Leipsic, 1800). He has also edited a learned periodical work.

**BECKET, Thomas, the most celebrated Roman Catholic prelate in the English nation,** was born in London, 1119. He was the son of Gilbert, a London merchant. His mother is said to have been a Saracen lady, to whose father Gilbert was prisoner, in Jerusalem, being taken captive in one of the crusades. The lady is said to have fallen in love with the prisoner, and to have followed him to London, where he married her. After studying at Oxford...
and Paris, B. was sent, by the favor of Theobald, archbishop of Canterbury, to study civil law at Bononia, in Italy, and, on his return, was made archdeacon of Canterbury and provost of Beverley. His claim to the good opinion of Theobald was founded on his skill in negotiation shown in a matter of the highest importance to England—the soliciting from the pope the prohibitory letters against the crowning of Eustace, the son of Stephen, by which that design was defeated. This service not only raised Becket in the esteem of the archbishop, but in that of king Henry II, and was the foundation of his high fortune. In 1158, he was appointed high chancellor and preceptor to prince Henry, and at this time was a complete courtier, conforming, in every respect, to the humor of the king. He was, in fact, his prime companion, had the same hours of eating and going to bed, held splendid levees, and courted popular applause. In 1163, he made a campaign with the king in Toulouse, having in his own pay 700 knights and 1200 horsemen; and it is said he advised Henry to seize the person of Louis, king of France, shut up in Toulouse without an army. This counsel, however, so indicative of the future martyr, being too bold for the lay counsellors of one of the boldest monarchs of the age, was declined. In the next year, he visited Paris, to treat of an alliance between the eldest daughter of the king of France and prince Henry, and returned with the young princess to England. He had not enjoyed the chancellorship more than four years, when his patron Theobald died, and King Henry was so far mistaken as to raise his favorite to the primacy, on the presumption that he would aid him in those political views, in respect to church power, which all the sovereigns of the Norman line embraced, and which, in fact, caused a continual struggle, until its termination by Henry VIII. It has been asserted, that B. told the king what he was to expect from him; but, independent of the appointment itself, there is evidence to prove his eagerness to obtain the dignity, and the disgust entertained by Henry at the first symptoms of the real temper of the man whom he had been so anxious to promote. B. was consecrated archbishop in 1162, and immediately affected an austerity of character which formed a very natural prologue to the part which he meant to play. Pope Alexander III held a general council at Tours, in 1163, at which B. attended, and made a formal complaint of the infringing by the laity on the rights and immunities of the church. On his return to England, he began to act in the spirit of this representation, and to prosecute several of the nobility and others, holding church possessions, whom he also proceeded to excommunicate. Henry, an able and politic monarch, was anxious to recall certain privileges of the clergy, which withdrew them from the jurisdiction of the civil courts; and it was not without a violent struggle, and the mediation of the pope, that B. finally acquiesced. The king soon after summoned a convocation or parliament at Clarendon, to the celebrated constitution of which, although the archbishop avowed that he would never assent, he at length subscribed it, and, alleging something like force for his excuse, by way of penance, suspended himself from his archiepiscopal functions until the pope's absolution could arrive. Finding himself the object of the king's displeasure, he soon after attempted to escape to France; but, being intercepted, Henry, in a parliament at Northampton, charged him with a violation of his allegiance, and all his goods were confiscated. A suit was also commenced against him for money lent him during his chancellorship, and for the proceeds of the benefices which he had held vacant while in that capacity. In this desperate situation, he, with great difficulty and danger, made his escape to Florence, and, proceeding to the pope at Sens, humbly resigned his archiepiscopal, which was, however, restored. He then took up his abode at the abbey of Pontigny, in Normandy, whence he issued excommunicatory letters to the king and bishops of England, in which he excommunicated all violators of the prerogatives of the church, and included in the censure the principal officers of the crown. Henry was so exasperated, that he banished all his relations, and obliged the Cistercians to send him away from the abbey of Pontigny; from which he removed, on the recommendation of the king of France, to the abbey of Columba, and spent four years there in exile. After much negotiation, a sort of reconciliation took place in 1170, on the whole to the advantage of B., who, being restored to his see, with all its former privileges, behaved, on the occasion, with excessive haughtiness. After a triumphant entry into Canterbury, the young king Henry, crowned during the life-time of his father, transmitted him an order to restore the suspended and excommunicated prelates, which he refused to do, on the pretense that the pope
alone could grant the favor, although the latter had lodged the instruments of censure in his hands. The prelates immediately appealed to Henry in Normandy, who, in a state of extreme exasperation, exclaimed, "What an unhappy prince am I, who have not about me one man of spirit enough to rid me of a single insolent prelate, the perpetual trouble of my life!" These rash and too significant words induced four attendant barons, Reginald Fitz-Urse, William de Tracy, Hugh de Morville and Richard Brevo, to resolve to wipe out the king's reproach. Having laid their plans, they forthwith proceeded to Canterbury, and, having formally required the archbishop to restore the suspended prelates, they returned in the evening of the same day (Dec. 29, 1170), and, placing soldiers in the court-yard, rushed, with their swords drawn, into the cathedral, where the archbishop was at vespers, and, advancing towards him, threatened him with death if he still disobeyed the orders of Henry. B., without the least token of fear, replied, that he was ready to die for the rights of the church; and unanimously added, "I charge you, in the name of the Almighty, not to hurt any other person here, for none of them have been concerned in the late transactions." The confederates then strove to drag him out of the church; but, not being able to do so, on account of his resolute deportment, they killed him on the spot with repeated wounds, all which he endured without a groan.—The conduct of Henry, and the consequences of this assassination, form a part of English history wherein the discerning student will perceive the subtle policy of the court of Rome, which eagerly availed itself of this opportunity to advance its general object, with a due regard to the power of Henry and his strength of character. The perpetrators of the deed, on taking a voyage to Rome, were admitted to penance, and allowed to expiate their enormity in the Holy Land.—Thus perished Thomas Becket, in his 52d year, a martyr to the cause which he espoused, and a man of unquestionable vigor of intellect. He was canonized two years after his death, and miracles abounded at his tomb. In the reign of Henry III, his body was taken up, and placed in a magnificent shrine, erected by archbishop Stephen Langton; and of the popularity of the pilgrimages to his tomb, the Canterbury Tales of Chaucer will prove an enduring testimony. 

BECKMANN, John, for almost 45 years professor of philosophy, economy, policy, finance and commerce in Gottingen, was born at Hoya in 1739. In 1763, he was appointed, on Bischoff's recommendation, professor of the Lutheran gymnasiurn in St. Petersburg. In 1760, he became professor in Göttingen, where he lectured with great success. R. died in 1811, being a member of most of the learned societies of the north of Europe. There are a number of text-books, in the different sciences above-mentioned, by him. Among his other works is a History of Inventions, Leipsic, 1789—1805, 5 vols.

Bede, or Beda, an eminent ecclesiastic of the eighth century, usually called the venerable Bede, was born in the year 672 or 673, in the neighborhood of Wearmouth, in the bishopric of Durham. From the age of 7 to that of 10, he pursued his studies in the monastery of St. Peter, at Wearmouth. Being then ordained deacon, he was employed in the task of educating the youth who resorted to the monastery for instruction, and pursued his own studies with unremitting ardor. In his thirtieth year, he was ordained priest; and, his fame for zeal and erudition reaching the ears of pope Sergius, he was invited to Rome, but, in consequence of the death of that pontiff, never went there. It is not even certain that he ever left Northumberland, which, of course, reduces the incidents of his life to his literary pursuits and domestic occupations, as he accepted no benefice, and never seems to have interfered in civil transactions. His church history was published in 731. His last literary labor was a translation of the Gospel of St. John into Saxo.

Becket—Bede.
thus nearly all the knowledge possessed of the early state of Christianity in his country is due to B. There have been several editions of the original Latin, which is easy, although not elegant. The latest and best is that of Dr. Smith, Cambridge, 1722. There is a translation into English by Thomas Stapleton, D. D., Antwerp, 1595, besides the Saxon version of Alfred. B. was also the author of many other works, a catalogue of which he subjoined to his history. Several of these were printed early; but the first general collection of his works was that of Paris, 1594, 3 vols. fol. Some of his treatises have been published by Mr. Whitaker, from MSS. in the library at Lambeth palace, London, 4to, 1693. While the number and variety of the writings of B. show the extent of his erudition, his probity, moderation and modesty insured him general respect; and his disinterestedness is proved by the fact, that he was never anything but an unbeneficed priest. A letter of advice, which he wrote, late in life, to Egbert, archbishop of York, proves, at once, the purity of his morals, the liberality of his sentiments, and the excellence of his discernment; his wish being to enlarge the number of monasteries, and to increase the efficacy and respectability of the secular clergy. Notwithstanding the veneration with which he was regarded, not a single miracle is recorded of him, and, as monks were the great miracle mongers, and his views of monastic reform such as we have mentioned, this is not surprising. The manner of the death of this virtuous ecclesiastic was striking and characteristic. He was dictating a translation of the gospel of St. John to an amanuensis. The young man who wrote for him said, "There is now, master, but one sentence wanting;" upon which he bade him write quickly; and, when the scribe said, "It is now done," the dying sage ejaculated, "It is now done," and a few minutes afterwards expired, in the act of prayer, on the floor of his cell, in the 63d year of his age, in the month of May, A. D. 735.

BEBDENS, Thomas; a physician and author; born, 1700, at Shifnal in Shropshire; died 1788. He was educated by his grandfather. He made great progress at school, in classical studies, and distinguished himself at Oxford by his knowledge of ancient and modern languages and literature. The great discoveries in physics, chemistry and physiology, irresistibly attracted him. He continued his studies with success in London and Edinburgh. In his 26th year, he took his doctor's degree, afterwards visited Paris, and formed an acquaintance with Lavosier. On his return, he was appointed professor of chemistry at Oxford. There he published some excellent chemical treatises, and Observations on the Calculus, Sea-Scurvy, Consumption, Cancer and Fever. But, dazzled by the splendid promises of the French revolution, he offended some of his former admirers, and excited such a clamor against him by the publication of his political opinions, that he determined to resign his professorship, and retired to the house of his friend Mr. Reynolds, in Shropshire. There he composed his observations on the nature of demonstrative evidence, in which he endeavors to prove, that mathematical reasoning proceeds on the evidence of the senses, and that geometry is founded on experiment. He also published the History of Isaac Jenkins, which was intended to impress useful moral lessons on the laboring classes in an attractive manner. Above 40,000 copies of this popular work were sold in a short time. After he had married, in 1794, he formed the plan of a pneumatic institution, for curing diseases, particularly consumption, by means of fictitious airs or gases. He succeeded, with the assistance of the celebrated Wedgewood, in opening this institution, in 1788. He engaged, as superintendent of the whole, a young man, Humphrey Davy, the foundation of whose future fame was laid here. The chief purpose of the institution, however, was never realized, and B.'s zeal gradually relaxed, so that he relinquished it one year before his death, after having published a number of valuable works upon the application of fictitious airs. In the last years of his life, he acquired the reputation of the best medical writer in Great Britain, particularly by his Hogg's, in 3 vols., a popular work, which contains passages of extraordinary eloquence. His political pamphlets, from 1755—97, are forgotten.

BROWN, John, duke of; one of the younger sons of Henry IV, king of England; famous as a statesman and a warrior. Shakespeare, who calls him prince of Lancaster, introduces him, in his plays of Henry IV, as distinguishing himself by his youthful courage in the battle of Shrewsbury, in 1403, and forming a kind of moral contrast to his more dissipated brother, the prince of Wales. During the reign of Henry V, he participated in the fame acquired by the conquest of
France; but his talents were fully displayed when, after the death of that king, he became regent of France, having been appointed to this post by Henry, in his will. At Verneuil, in 1424, he displayed his military talents; and the difficulties, which, from various causes, he experienced in endeavoring to maintain possession of the conquered provinces in France, afforded frequent occasion for the manifestation of his ability. The greatest blemish in his character is his cruel execution of the maid of Orleans, in 1431. He survived this event about four years, and dying, in 1435, at Rouen, was buried in the cathedral of that city. The duke deserves notice also for his patronage of the arts. A curious monument of his taste still exists—the Bedford Missal. Mr. Dibdin, in his Bibliomania, p. 253, gives an account of it. It was made for the duke and duchess, and contains 60 large, and more than 1000 small miniature paintings. In 1765, it was purchased, by Mr. Edwards, for 215 guineas, from the collection of the duchess of Portland; and, a few years after, 500 guineas were offered for it. In a historical point of view, it is interesting on account of several portraits of eminent persons; some of which have been engraved by Vertue, for his portraits to illustrate the history of England. For the antiquarian and the student of the fine arts, it is one of the most interesting monuments of that age. Gough, the antiquarian, published a work in 5vo, describing the Bedford Missal.

BEDFORD; a town in England, and capital of the county of Bedford, to which it gives name, situated on the Ouse; 21 miles S. E. of Northampton, 50 N. of London; lon. 0° 27 W.; lat. 52° 8' N.; pop. 4605. It contains 5 churches, 3 schools, 2 free grammar schools, 3 independent meeting-houses, and a free grammar school liberally endowed. The principal manufacture is lace. It is one of the most interesting monuments of that age. Gough, the antiquarian, published a work in 5vo, describing the Bedford Missal.

BEDFORD LEVEL; a large tract of land in England, in the counties of Cambridge, Norfolk, Suffolk, Huntingdon, Northampton and Lincoln, formerly full of fens and marshes, and, in rainy seasons, for the most part under water; but drained, at the expense of £400,000, by the noble family of Russell, earls and dukes of Bedford, and others; by which means 100,000 acres of good land have been brought into use.

BEDFORD, New, a seaport in Massachusetts. (See New Bedford.)

BEDOUINS, or BEDUWEYS (that is, inhabitants of the desert); a numerous Mohammedan race, which dwells in the deserts of Arabia, Egypt and Northern Africa. It is still doubtful whether they belong to the same race with the Arabs, or differ from them in their descent; as they do in their manner of living. The Beduins live at a distance from cities and villages, in families, under sheiks, or in tribes, under emirs. Their dwellings are tents, huts, caverns and ruins. With their herds and beasts of burden, which carry their little property, they wander in quest of fresh water and pasture. They are all good horsemen, and are generally fond of hunting. The peaceful tribes exchange horses (which they raise with great care) and fat cattle, for arms and cloth, with the neighboring nations. Other hordes are such open robbers, that it is dangerous to travel through their country without a guard or a passport, which the different clans sell. They not only plunder, but murder, even when the travellers offer no resistance. Notwithstanding this barbarous custom, the Bedouins hold the rights of hospitality sacred; and the most defenceless enemy is sure of their protection, if they have once allowed him shelter. But the Bedouin considers every one his enemy who is not his brother, kinsman or ally. Always
careful of his own safety, he attacks no
caravan or camp without being sure of
his superiority. To superior numbers, and
a bold resistance, he yields, and saves
himself by a speedy flight. A terror to
the neighboring nations, the rapacious
Bedouin lives in a state of continual
watchfulness; poor, ignorant, wild and
ruke, but free, and proud of his liberty.
This people is remarkable for temperance
in regard to food, amounting almost to
abstinence.

Honey-bee (apis mellifica, L.); a species of
hymenopterous insect, belonging to the
family aparia.—The honey-bee is uni
versally celebrated for its singular in­
istincts, and highly prized for the valuable pro­
ducts of its industry. A vast number of
interesting facts have consequently been
collected in relation to the economy of
the species, for the detail of whose history
a volume of considerable size would be
required. We shall therefore be able to
present nothing more than a sketch of
the most striking generalities, obtained
from the admirable works of Huber, Cu­
vier, &c., and to these authentic sources
revert for the reader desirous of more
ample information.—Three sorts of in­
dividuals are found to form a community
of honey-bees; the female, mother, or, as
she is commonly called, queen; the males,
or drones; and the working bees, improperly
termed neuters, as they are actually
females, though, in a peculiar respect,
perfect. A hive commonly consists of one mother, or queen, from 6 to 800
males, and from 15 to 20,000 working
bees. The last mentioned are the smallest,
leave 12 joints to their antennae, and
6 abdominal rings: the first joint or
square portion of the posterior tarsi is
enlarged at the posterior angle of its base,
and shaped like a pointed uricle, having
its internal surface covered with a fine,
short, close, silky down. They are pro­
vided with stings. The mandibles are
spear-shaped, and not dentated. There is
on the outside of the hind legs, a smooth
hollow, edged with hairs, called the bas­
ket: the silky brush of the first joint of
the posterior tarsi has 7 or 8 transverse
striae. The mother, or queen, has the
same characteristics, but is of larger size,
especially in the abdomen; she has a
shorter sucker or trunk, and the mandi­
bles grooved and velvety beneath the
tip. The males, or drones, differ from
both the preceding by having 13 joints to
the antennae; a rounded head, with larger
eyes, elongated and united at the summit;
smaller and more velvety mandibles, and
shorter anterior feet, the two first of
which are arched. They have no auric­
ular dilatation nor silky brush on the
square part of the posterior tarsi, and are
destitute of stings. The genitals consist
of two horn-shaped bodies of a reddish­
yellow color, with a broad-ended penis.—

When we examine the internal structure
of this insect, we find at the superior base
of the trunk or sucker, below the labrum,
a considerable aperture, shut by a small,
triangular piece, which has been called
tongue, epipharynx, &c. This opening
receives the food, which is thence con­
voyed by a delicate esophagus, through
the corselet, to the anterior stomach,
which contains the honey; the second
stomach receives the pollen of flowers,
and has, on its internal surface, a number
of transverse and annular wrinkles. The
abdominal cavity of the queen and work­
ing bees also contains the little bag of
poison communicating with the sting. In
the queen, there are, moreover, two large
ovaries, consisting of a great number of
small cavities, each containing 16 or 17
eggs. These ovaries open near the anus,
previous to which they dilate into pouches,
where the egg is delayed to receive a
viscous coating from an adjacent gland.

The inferior half-circles, except the first
and last, on the abdomen of working
bees, have each on their inner surface
two cavities, where the wax is formed in
hives, and comes out from between the
abdominal rings. Below these cavities
is a particular membrane, formed of a
very small, hexagonally-meshed network,
which is connected with the membrane
lining the walls of the abdominal cavity.

—Wax, of which the combs are formed,
is elaborated from honey. The pollen
collected from flowers, mixed with a
small quantity of wax, constitutes the
food of bees and their larvae; and this
food appears to be modified in its com­
position, according to the sort of in­
dividuals it is intended for. Another sub­
stance collected by bees from the opening
buds of poplar and other trees, and used
by them for lining their hives, stopping
holes, &c., is called propolis.—Besides
the distinctions remarked in the female,
male and working bees, Huber regards
the working bees as of two sorts; one
devoted to the collection of provisions,
and all the materials necessary to the
comb, as well as to its construction; these
he calls cireilles. The others are more
delicate, small and feeble, and employed
exclusively within the hive, in feeding
and taking care of the young.—The re—
semblance existing between the working and female bees first led to the idea that they were of the same sex, and the ingenious experiments and accurate observations of Huber enabled him to establish this fact in the most satisfactory manner. Having deprived a hive of the mother or queen, he found that the working bees immediately began to prepare a larve of their own class to occupy this important station. This was effected by enlarging the cell to the dimensions of a maternal or royal chamber, and feeding the selected individual on food exclusively destined for the nourishment of the royal larvae. If merely fed upon this food, without an accompanying enlargement of the cell, the maternal faculties were but imperfectly acquired, as the female did not attain the proper size, and was incapable of laying any eggs but those which produced males.—The cells of the comb compose two opposite ranges of horizontal hexagons, with pyramidal bases: each layer of the comb is perpendicular, and attached by the summit, and separated from the rest by a space sufficient for the bees to pass in and out. The comb is always built from above downward. The cells, with the exception of those for the female larvae and nymphs, are nearly of equal size, some containing the progeny, and others the honey and pollen of flowers. Some honey cells are left open, others are closed for future use by a flat or slightly convex covering of wax. The maternal or royal cells, which, when increased beyond a certain degree, leave the parent hive to found a new colony elsewhere. Three or four swarms sometimes leave a hive in a season. A good swarm is said to weigh at least six or eight pounds. The life of the bee, like that of all the other insects of its class, does not continue long after the great business of providing for the continuance of the species is completed.—The history of the bee, as already stated, is too extensive to allow us to attempt more than this brief sketch. But to such as have leisure, and are desirous of instructive amusement, we know of no study which promises a greater degree of satisfaction; and there is no book better adapted for this purpose, than the excellent treatise of Huber, which may almost be regarded as the nec plus ultra of its kind. A beautiful little poem, called The Bee, written by the Florentine Giovanni Rucellai, appeared in 1539.

The Bee (fagus sylvatica), one of our handsomest forest-trees, is known by its waved and somewhat oval leaves, and its triangular fruit, consisting of three cells, and enclosed, by pairs, in a husk, which is covered with simple prickles.—Beech woods are very common in almost all the New England and Middle States, in the states of Maine, Pennsylvania, Ohio, &c. They are very luxuriant in their growth. These woods, it has been observed, are peculiarly dry, and pleasant to walk in, and, under their shade, afford to the botanist many interesting plants, such as the bird's nest (monograna), winter-green (pyrola), and some rare orchids. Beech-trees bear lopping well, and may be trained so as to form lofty hedges, which are valuable for shelter, since the leaves, though faded, remain through the winter, and the twisted branches may be formed into a very strong fence. The wood is hard and brittle, and, if exposed to the air, is...
liable soon to decay. It is, however, peculiarly useful to cabinet-makers and turners: carpenters' planes, &c. are made of it. When split into thin layers, it is used to make scabbards for swords. Chairs, bedsteads and other furniture are occasionally formed of beech. The fruit of this tree, which has the name of beech-mast, and falls in September, is very palatable, but, if eaten in great quantity, it occasions giddiness and headaches; when, however, it is dried and powdered, it may be made into a wholesome bread. The inhabitants of Scio, one of the Ionian islands, were once enabled to endure a memorable siege by the beech-mast which their island supplied. This fruit has occasionally been roasted, and used as a substitute for coffee. When subjected to pressure, it yields a sweet and palatable oil, which is equal in quality to the best olive-oil, and has the advantage of continuing longer than that without becoming rancid. Beech-oil is manufactured in several parts of France, and is used by the lower classes of Silesia instead of butter. The cakes which remain after the oil is extracted are wholesome food, and may be also advantageously employed for the fattening of swine, poultry and oxen. In some countries, the leaves which hang down are collected in the autumn, before they have been injured by the frost, and are used instead of feathers, for beds; and mattresses formed of them are said to be preferable to those of straw or chaff.

BEER. (See Biju-pur, a corruption of Vijaya-puri, the city of victory, the original name of the capital); a large province of Deccan, between the 15th and 18th degrees of N. lat.: bounded N. by Aurnunglad and Beder, S. by North Cazara and the river Toombudra, and W. by the sea; about 350 miles long, and 200 broad. It is watered by the Crona, Toombudra, Beemah and Gatpurba; and is traversed by the Ghaut mountains. The soil is generally fertile, and provisions plentiful. The chief cities are Beerpoor, Beemah (the capital of the Mahrattas), St. Kutunny and Nubely. Four fifths of the country are subject to the Mahrattas, the rest to the Nizam.

The population is estimated at 7,000,000; one twentieth Mohammedans, the rest Hindus. The province is divided into 15 territorial divisions. In the southern part of Concan, one of these divisions, Goa (Gowah, or, more properly, Goany), the capital of the Portuguese settlements in the East, is situated. (See Goa.) The productions of B. are, in general, similar to those of the rest of the Deccan. One part—-the neighborhood of the Beemah—is celebrated for its breed of horses, and supplies the best cavalry in the Mahratta armies.

Beerpoor; the former capital of the above province. (See Biju-pur.)

Beer, David, a portrait-painter of considerable merit, was born in 1621, at Arnheim, in Guelderland; became a pupil of Vandyck; resided, for some time, at the court of Sweden, and died in 1658. It is related of him, that, on a journey through Germany, he fell sick, and became, to appearance, dead; when one of his servants pouring a glass of wine into his throat, to amuse his companions, B. opened his eyes, and, after a while, recovered his health.

BEEF-HEEZE. (in Hebrew, the god of flies); an idol of the Moabites or Syrians. This term is applied, in the Scriptures, to the chief of the evil spirits. We must remember what a terrible torment insects often are in the East, in order to conceive how this name came to be given to one of the greatest of the imaginary spirits of evil. We find that almost all nations, who believe in evil spirits, represent them as the rulers of disgusting, tormenting or poisonous animals—flies, rats, mice, reptiles, &c. The Greeks worshipped several of their chief deities under the character of protectors against these animals; for instance, Apollo Echinos, the destroyer of rats. Every one knows, that Christ was charged by the Jews with driving out demons by the power of Beelzebub. (Matt. xii. 24.)

BEER. (See Ale and Brewing.) We have evidence of the use of this liquor for more than 3000 years. The Grecian poet and satirist Archiophon, who lived about 700 B. C., and the Grecian tragedians Aeschylus and Sophocles, who lived more than 400 B. C., call it wine of barley. Dio­dorus of Sicily, who lived about the time of Julius Cesar, about 50 B. C., mentions beer in his History (lib. i. chap. 30). Pliny also, about the middle of the first century after Christ, speaks of this beverage in several places of his Natural History. He says that it is prepared in different ways,
and that there is a species more intoxicating than wine. He says, further, that, in Spain, it is called cädis and cæris; but, in Gaul and in other provinces of the Roman empire, cerevisia; that it was in general use among the ancient Germans, who also called it cerevisia (from Ceres, the goddess of grain, and cæs, power.) The Egyptians, as the first promoters of agriculture, are said to have invented beer, and to have prepared a kind, in later times, at Pelusium, which was called by the name of that city, and was much celebrated. Beer was afterwards unknown in Egypt, until the French army introduced it anew, since which it is said that beer is still brewed there. We are ignorant how far the beer of the ancients resembled the modern article. The word beer may most naturally be derived from bibere, to drink.

BEER, Michael, sometimes called Michael Beer, a learned Jew in Paris, born at Nancy, in 1724, was the first of his religion who pursued the profession of an advocate in France. His success in this career was brilliant; but he soon gave himself up exclusively to literature, and received the honor, never before conferred on a Jew, of being admitted into the learned academies of France. He was elected a member of the royal society of antiquaries, of the philological society, of the academies of Nancy, Strasbourg, Nantes and Göttingen. Napoleon invited him, in 1807, to the assembly of Jews, who were to advise concerning the amelioration of the condition of that people, and the general sanhedrin for France and Italy chose him their secretary. At the erection of the kingdom of Westphalia, on account of his knowledge of the language of the country, he received an appointment in the ministry of the interior, and, afterwards, was appointed to a corresponding office in the French ministry: he also delivered a course of lectures on German literature in the atheneum of Paris. Among his numerous works is an Eloge de Charles Villers.

BEERING, Vitus, captain in the Russian navy, born at Horsens, in Jutland, being a skilful seaman, was employed by Peter the Great in the navy which he had newly established at Cronstadt. His talents, and the undaunted courage displayed by him in the naval wars against the Swedes, procured him the honor of being chosen to command a voyage of discovery in the sea of Kamtschatka. He set out from Petersburg, Feb. 9, 1725, for Siberia. In the year 1728, he examined the northerm coasts of Kamtschatka as far as lat. 67° 18' N., and proved that Asia is not united to America. It remained, however, to be determined whether the land opposite to Kamtschatka was, in reality, the coast of the American continent, or merely islands lying between Asia and America. June 4, 1741, he sailed, with two ships, from Ochotsk, and touched the north-western coast of America, between lat. 33° and 63° N. Tempests and sickness prevented him from pursuing his discoveries: he was cast on a desolate island, covered with snow and ice, where he grew dangerously sick, and died Dec. 8, 1741. The straits between Asia and America have received the name of Beering's straits (also called Jutian), and the island on which he died that of Beering's island. (See Müller's Voyages et Découvertes faites par les Russes, Amsterdam, 1766).

BEERING'S ISLAND; an island in N. Pacific ocean, about 90 miles long, and 25 to 30 wide; lon. 16° 12' to 16° 17' E.; lat. 54° 45' to 56° 10' N. Neither thunder nor the aurora borealis have ever been observed here. The island has springs of excellent water, and beautiful cataracts. No animals are found here but ice-foxes, seals, sea-bears, sea-lions, sea-cows, &c. No wood grows here, but several kinds of plants are seen. The island is uninhabited. It was discovered by Vitus Beering (q. v.) in 1741. It is sometimes classed with the Aleutian chain.

BEERING'S STRAITS; the narrow sea between the north-west coast of N. America and the north-east coast of Asia; 39 miles wide in the narrowest part; lon. 166° 15' to 166° 20' W.; lat. 65° 4° to 65° 52' N. There is a remarkable similarity in the portions of both continents north of the strait: both are without wood; the coasts are low, but, farther from the sea, they rise and form considerable mountains. The depth, in the middle of the straits, is from 29 to 30 fathoms; towards the land, the water on the Asiatic side is deeper. Captain Vancouver, who visited these shores in 1740, gave this name to the straits in honor of Vitus Beering (q. v.), because he thinks that he anchored there. Some have also called these straits Cook's straits.

BEET (Beta vulgaris) is a well-known valuable succulent root, which is cultivated in our kitchen gardens, and grows wild in several countries of the south of Europe. There are two principal varieties of beet, one of which is of a deep red or purple color, and the other is white, crossed with bands of red. Red beet is
supersede the use of common sugar unless - I
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like the sugar of the root, will probably
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ure mtre, proceeding, m all probability,
found t_o yield a co­side_rable quantity of
subsequent operation, produced 4 pounds
and in Prussia, have tended to prove, that
oration, afforded somewhat more than 41
pounds of brown sugar; and these, by a
subsequent experiments, both .in France
and in Prussia, have tended to prove, that
beet has been found perfectly
wholesome and palatable, and little inferi­
or to that prepared from malt.—From
the white beet the French, during the late
wars in Europe, endeavored to pre­
pare sugar, that article, as British colo­
nial produce, having been prohibited in
France. For this purpose, the roots were
boiled as soon as possible after they were
were sliced, and afterwards the juice was
pressed out, and evaporated to the con­
sistency of sirup. The sugar was obtain­
ed from this sirup by crystallization. 110
pounds weight of the roots yielded 415
pounds of juice, which, on further evap­
oration, afforded somewhat more than 43
pounds of brown sugar; and these, by a
subsequent operation, produced 4 pounds
of well-grained white powder sugar. The
residuum, together with the sirup or mo­
llasses which remained, produced, after
distillation, 34 quarts of rectified spirit,
somewhat similar to rum. But many
subsequent experiments, both in France
and in Prussia, have tended to prove, that
sugar can never be advantageously man­
ufactured from the beet upon a larffe
scale; it yielding, upon a fair average,
barely enough to defray the expenses of
making. The leaves of the beet, when
raised in mealy-manured soil, have been
found to yield a considerable quantity of
pure nitr, proceeding, in all probability,
from the decomposition of the animal
matter contained in the manure; but this,
like the sugar of the root, will probably
never pay the expenses of cultivation,
which will also increase rather than
diminish; so that it may be considered
valuable, at present, only as an esculent
plant. The French, however, and other
European nations, still persevere in manu­
facturing beet sugar, and make great
quantities of it, although it can never
supersede the use of common sugar, unless

BEETHOVEN, Louis von, born in Bonn,
1772, was the son of a man who had been
a tenor singer in that place (according to
another account, in Fairly's Dictionary
of Musicians, a natural son of Frederic
William II, king of Prussia). His great
talent for music was early cultivated. He
astonished, in his eighth year, all who
heard him, by his execution on the violin,
on which he was in the habit of perfor­
ing, with great diligence, in a little garret.
In his 11th year, he played Bach's Wohl
Temperirtes clavier, and, in his 13th,
composd some sonatas. These promis­
ing appearances of great talent induced
the then reigning elector of Cologne to
send him, in 1782, in the character of his
organist, and at his expense, to Vienna,
that he might accomplish himself there
in composition, under the instruction of
Haydn. Under Haydn and Albrechtsber­
ger he made rapid progress, and became,
likewise, a great player on the piano forte,
astonishing every one by his extempore
performances. In 1809, he was invited
to the new court of the king of Westphalia,
at which several men of distinction,
and among them his pupil in music the
archduke Rodolph, now bishop of Olmutz,
persuaded him to remain, by the promise
of a yearly salary. He composed his
principal works after 1801. A few years
before his death, a cold, which he had
caught by composing in the open air,
produced a deafness, which became, by
degrees, very great. He lived, afterwards,
very much retired, in the village of Möd­
ing, near Vienna. Instrumental music
has received from his compositions a new
character. Beethoven united the humor
of Haydn with the melancholy of Mozart,
and the character of his music most
reminds Cherubini's. His boldness is
remarkable. Reichhardt, in a comparison
of Beethoven with Haydn and Mozart,
says, "The Quartett of Haydn was the off­
spring of his amiable and original charac­
ter. In naivete and good humor he is
unrivalled. The more powerful nature
and richer imagination of Mozart embrac­
ed a wider field, and many of his com­
positions express the whole height and
depth of his character. He placed more
value also on enquisite finish. Beethoven,
early acquainted with Mozart's com­
positions, gave a still bolder cast to his ideas."
Besides his great symphonies and over­
tures, his quintettes, quartets, and trios
for stringed instruments, his numerous
sonatas, variations, and other pieces for
the piano forte, in which he shows the great richness of his imagination, he also composed vocal music, but with less success. To this department belongs his opera Leonore (in its altered state, called Fidélle), some masses, an oratorio (Christ on the Mount of Olives), and songs for the piano forte, among which the composition of Matthison's Adelaide, called, by the English, Rosalie, and some songs of Goethe are celebrated. B. died March 26th, 1827, near Vienna, in the greatest poverty.

Beetle (scarabæus, L.); a tribe of coleopterous insects, belonging to the family lamellicomus, C. The beetle tribe comprises a large number of insects, among which some are very remarkable for projections or horns growing from the head and corselet. The species found in warm climates are generally of large size and formidable appearance, though by no means noxious. They all are winged, flying with much rapidity and force; when on the ground, their movements are slow and heavy. The body of the perfect insect is oval, or nearly so, and the antennæ are composed of eight or ten pieces, inserted into a cavity under the border of the head. From the arrangement of the antennæ, which is peculiar to this family, its essential or distinctive character is formed. The extremities of the antennæ are club-shaped, and composed of plates or joints, either disposed like the leaves of a book, or arranged perpendicularly to the axis, like the teeth of a comb. The two first legs of beetles, and even the others, in some instances, are dentated externally, and suited for burrowing. The tracheæ are all vesicular. The larvae or young are soft, flexible, whitish, semi-cylindric worms, having the body divided into 12 rings, and having a scaly head, armed with strong jaws. They have nine stigmata, or breathing holes, on each side; and the feet, which are six, are scaly. The body is thicker at the posterior than at the anterior extremity, rounded, and almost uniformly curved downwards, so that the larve moves with difficulty over an even surface, and frequently tumbles down. The period during which the larvae remain in the state of destructive worms varies in different species; those of some kinds becoming nymphs at the end of several months, and of others, not sooner than in three or four years. During this period, they live in the earth, where they feed upon the roots of vegetables, animal matter in a state of decomposition, &c. It is in this stage of their existence that various species prove exceedingly injurious to farmers, from their great numbers and voracity. When about to undergo their change of form, they make an egg-shaped cover or cocoon from fragments gnawed off wood, &c., which are stuck together by a peculiar glutinous fluid furnished by their bodies. The larvae have a cylindric stomach, surrounded by three ranges of minute cæca, a very short, small intestine, an exceedingly large colon, and moderate-sized rectum. In the perfect insect, none of these inequalities exist, as there is but one long intestine, of equal size throughout. All of the beetle tribe are not destructive or injurious in their inception state, as many of them breed in the dung-heap, or feed upon the excrement of animals, which they serve to prepare more completely as manure. The tumble-bug, which is well known, forms a ball of dung, in the centre of which the egg is deposited, rolls it off to a distance, and buries it in the ground. Great numbers, uniting in this work, speedily clear away excrementitious matter, that might otherwise soon prove offensive. Among the ancient Egyptians, a species of beetle was held in great veneration, and Eusebius informs us (De Prep. Evang.) that it was regarded as the animated image of the sun. We find it generally embalmed with the Egyptian mummies, placed immediately upon the root of the nose. A number of models of these insects, in clay and stone, have been found in the places already explored in the ancient dominion of the Pharaohs. Linnæus bestowed the name of scarabæus sacer on this species, which is found in Africa and Europe.

Befana (Ital.; from Beфанія, which signifies Epiphany) is a figure, generally representing an old woman, which is exhibited, in Italy, on the day of Epiphany, by children, or in shops, &c., where things for children are sold. In Germany, presents are given to children on Christmas-eve, and in France, on new-year's evening, but in Italy, on the day of Epiphany, and it is said that the befana brings them to good children. Generally, a little bag is hung in the chimney, and, next morning, the children find the presents there.

Bey (prince, or lord); the title of certain Turkish officers, several of whom are subject to a beglerbeg. (See Bey)

Beggary. (See Pauperism.)

Beglerbeg (prince of princes, or lord of lords) is the title of a high officer among the Turks, the governor of a province, called a beglerbegic, who has under him
several sangiacs, beggs, egas, &c. The governors of Sophia, Kintah and Damascus, in particular, have this title.

Begards, or Beghards. (See Beguines.)

Beguines (begulte); females who, without having taken the monastic vows, or bound themselves to obey the rules of an order, unite for the purpose of devotion and charity, and form societies, living together in houses called beguinesges (which have been frequently enriched by donations), distinguishing themselves, above others of the clergy, by their industry, their retired life, and their attention to the education of children. These societies originated, towards the end of the 11th century, in Germany and the Netherlands, and were very flourishing in the 12th and 13th centuries. They still exist in considerable numbers in the Netherlands. In imitation of them, males formed similar societies, under the name of beghards. These societies, whose names signify suppliants, or beggars, underwent many persecutions from the jealousy of the clerical orders, and were sometimes confounded with the Lollards. (See Brotherhoods.) There are, in some places of Germany, beguinesges, which are, however, only eleemosynary institutions, where unmarried females, of the lower class of people, have a lodging free of expense, and enjoy some other advantages.

Behaim, Martin, born at Nuremberg, about 1430, is distinguished as one of the most learned mathematicians and astronomers of his age. He was engaged in commerce, and travelled, for the purpose of carrying on his business, from 1455 to 1479; but he also devoted himself to the study of the mathematical and nautical sciences, in which Regiomontanus is said to have been his master. He went from Antwerp to Lisbon, in 1480, where he was received with marks of distinction. He sailed in the fleet of Diego Can, on a voyage of discovery, and explored the islands on the coast of Africa as far as the river Zaire. He is also said to have discovered, or, at least, to have colonized, the island of Fayal, where he remained for several years, and assisted in the discovery of the other Azores. He was afterwards knighted, and returned to his native country, where he constructed a terrestrial globe, in 1492, which bears the marks of the imperfect acquaintance of that age with the true dimensions of the earth. He died, after many voyages, in Lisbon, 1505. Some ancient Spanish historians assert that he made many discoveries, and that he gave to his friend Columbus the idea of another hemisphere. Robertson (in his History of America) and others contradict this statement. It is also rejected by Irving.

Beheading; a capital punishment, wherein the head is severed from the body by the stroke of an axe, sword, or other cutting instrument. Decollatio, or beheading, was a military punishment among the Romans. In early times, it was performed with an axe, and afterwards with a sword. It is worth remarking, that, in all countries where beheading and hanging are used as capital punishments, the former is always considered less ignominious. Thus, in England, beheading is often the punishment of nobles, when commoners, for the same crime, are hanged. The crime of high treason is there punished with beheading. Commoners, however, are hanged before the head is cut off, and nobles also, unless the king remits that part of the punishment. In Prussia, formerly, a nobleman could not be hanged, and, if his crime was such that the law required this punishment, he was degraded before the execution. At present, hanging is not used in that country, and, since so many instances have occurred of extreme suffering, on the part of the criminal, caused by the unskilfulness of the executioner in beheading with the sword, this mode of execution has been abolished. Beheading, in Prussia, is now always performed with a heavy axe, the sufferer being previously tied to a block. In France, during the revolutionary government, beheading by means of a machine, the guillotine (q. v.), came into use, and still prevails there, to the exclusion of all other modes of capital punishment. A person who has murdered his father or mother, however, has his right arm cut off the moment before he is guillotined. In the middle ages, it was, in some states, the duty of the youngest magistrate to perform the executions with the sword. In China, it is well known that beheading is practised, sometimes accompanied with the most studied torments. In the U. States of America, beheading is unknown, the halter being the only instrument of capital punishment. Respecting the bad or good consequences of public beheading, the same remarks may be made, which are applicable to public executions in general. In many European countries, beheading with the sword still prevails.

Behn, Aphra, a lady of some celebrity as a writer of plays and novels, was de-
scended from a good family in Canterbury, of the name of Johnson, and was born in the reign of Charles I. Her father, through the interest of his relation, lord Willoughby, being appointed lieutenant-general of Surinam, embarked with his family for the West Indies, taking with him Aphara, who was then very young. The father died at sea; but his family arrived safely at Surinam, and remained there some years, during which time Aphara became acquainted with the American prince Oroonoko, whom she made the subject of a novel, subsequently dramatized by Southern. On her return to England, she married Mr. Behn, a merchant of London, of Dutch extraction; but she was probably a widow when selected for the good of her country; and it is said that, by means of one of her admirers, she obtained advice of the intention of the Dutch to sail up the Thames, which she transmitted to England. This intelligence, although true, but being disregarded, she gave up politics, returned to England, and devoted herself to intrigue and writing for support; and, as she had a good person and much conversational talent, she became fashionable among the men of wit and pleasure of the time. She published three volumes of poems, by Rochester, Etheredge, Crisp and others, with some poetry of her own; and wrote 17 plays, the heartless licentiousness of which was disgraceful both to her sex and to the age which tolerated the performance of them. She was also the author of a couple of volumes of novels, and of the celebrated love-letters between a nobleman and his sister-in-law Henrietta of Berkeley. Pope, in his character of women, alludes to Mrs. Behn, under her poetical name of Astrea:

\[ \text{The stage how loosely does Astrea tread,} \\
\text{Who fairly puts all characters to bed.} \]

She died in 1690, between 40 and 50 years of age, and was buried in the choirs of Westminster abbey.

BEHRING, BEHRING'S STRAITS, BEIRAM's ISLAND. (See Bear.)

BEIRA; a province of Portugal, bounded chiefly by the river Douro on the north, by Spain on the east, by the Tagus and Portuguese Estremadura on the south, and by the Atlantic on the west. Its extent is computed at 11,000 square miles, and the population at nearly 900,000, which is about 82 persons to a square mile, or rather less than the average number for the whole kingdom. B. contains 7 episcopal cities, and about 280 other towns: the chief one is Coimbra. (q. v.) It is mountainous and well watered. The produce of wine and olives is considerable. (See Portugal.)

BEIRAM. (See Beiram.)

BEKKER, Elizabeth; an ornament of Dutch literature in the department of the belles-lettres. Few female authors have united with so great talents so much dignity and purity of morals. The influence of her numerous works was much increased by her character, and several of them are considered classics in Dutch literature, particularly her romances Wil- len Leevend, in 8 vols.; Letters of A. Blankart to C. Wildschut, and the History of Sara Burenhart. She wrote her most important works in conjunction with her friend Agatha Deken (q. v.), and the share of each in the composition of them is unknown. Elizabeth was born at Flushing, in 1738, and died at the Hague, in 1804. Her inseparable friend in life followed her nine days later in death.

BENKER, Immanuel, member of the academy of sciences, and professor in the university of Berlin, is known for his learning in the ancient languages, particularly the Greek, displayed in many valuable works. He was born at Berlin, in 1755. He was a pupil of the famous philologist Wolf, at Halle, who declared him the person most capable of continuing his researches in philology. B. was appointed professor in the new academy of Berlin, and set out, May 1, 1810, for Paris, where he remained until Dec., 1812, and made use of the manuscripts of the library, principally collating those of Plato, and some rhetorical and grammatical writers. The academy of sciences of Berlin elected him a member in 1815, and sent him back to Paris to examine the papers of Fourmont, for the sake of a Corpus Inscriptionum Graecorum, which they intended to publish. He returned the same year. In 1817, he was sent to Italy, to examine, with his colleague Göschel, the institutions of Gaits at Verona, discovered by Niehr in a Codex rescriptus, and to prepare an edition of Aristotle, which the academy had in view. He spent two winters in Rome, particularly favored in the use of the libraries by means of his friend Niehr. In 1819, he went through Tuscia to Paris; spent the summer of 1820 in England, principally in Oxford, Cambridge and London; and returned through
Leyden and Heidelberg to Berlin. With what industry and talent he collected literary treasures, in all these places, can be but imperfectly conceived from anything he has yet published. It is sufficient to cite here the Accedola Graeca, 3 vols., a grammatical character, editions of Apollonius Dyscolus De Prinomine (never before printed) and De Sylvarum of Theognis (augmented with 150 verses); of Colinthus, Demosthenes, and other Attic orators; of the Bibliotheca of Philius; of the Scholium to the Iliad, &c.

Beal. (See Baal.)

Belém [properly, Belthelin]; a quarter of Lisbon, formerly a market-town, situated on the spot where, after Vasco da Gama's first return from India, in 1499, King Emanuel built a church in honor of the nativity of Christ, and founded the celebrated monastery belonging to the order of St. Jerome, whose walls enclose the magnificent burying-vault of the royal family, adorned with white marble. After the earthquake of 1755, the church, so called, was rebuilt in the Gothic style. But at that time, because the residence of the royal family; but after the palace there had been consumed by fire, they resided in the castle of Queios, two leagues distant, in a retired situation, until their departure for Rio Janeiro. The new royal palace in B. is not yet finished. It has a beautiful situation, with a view of the harbor and the sea. Many persons of distinction, and the greater part of the important officers of state, reside at B. Here is also the church of Nossa Senhora da Ajuda, in the neighborhood of which lies the botanical garden, with a chemical laboratory, and a cabinet of natural curiosities. The latter contains some curious specimens of native copper from Brazil, and a large piece of elastic sand-stone, interspersed with crystals of calcareous spar. In B., the royal garden (a quinta da regaleira), with a menagerie, and many aviaries for rare birds, must likewise be noticed, as well as the great royal park, and, above all, the old tower, Torre de Belém, which rises out of the river Tejo, and is provided with batteries. No ship is permitted to pass by it without being visited.

Bea; a royal borough and seaport in England, in Antrim, at the entrance of the river Lagan into Carrickfergus bay; 50 miles E. S. E. Londonderry, 76 N. Dublin. Lon. 5° 47 W.; lat. 54° 37 N. Population in 1821, including the suburbs, 35,884; houses, 5,734. It is commodiously situated for trade, in a populous and well-cultivated country, is connected with Lough Neagh by a canal, and is the principal seaport in the north of Ireland. The bay is a spacious estuary, affording safe anchorage. Vessels drawing 13 feet of water can come up to the wharves at full tide. It is well built, chiefly of brick; the streets are broad, straight, well paved and lighted. It contains 13 houses of public worship. Belonging to the port are above 50 vessels, amounting to more than 8330 tons. The principal exports are linen, butter, beef, pork and oatmeal:—total value, in 1810, £2,904,520. The duties have of late, amounted to £400,000 per annum. The manufact.,res consist chiefly, of linens and coton; the former employing 723 hands. It sends one member to parliament.

Belfast; a seaport and post-town in the county of Antrim, in Ireland, 12 miles N. W. Castine, 224 N. E. Boston. Lon. 63° V. W.; lat. 41° 39' N. Population in 1810, 1,974; in 1820, 2,096. It is delightfully situated on Belfast bay, at the mouth of a small river of the same name, and at the N. W. part of Portobello bay. It has a good harbor and great maritime advantages, and is a flourishing town.

Belgium; the name of that part of the Netherlands which formerly belonged to Austria, but now makes a part of the kingdom of the Netherlands—Belgium, a part of ancient Gaul, was originally the land of the Belgic and Atrebates, who lived in the neighborhood of the city of Amiens, and perhaps of Sens.

Belgrade (the ancient Alius Graecorum; in German, Grischck Weissenburg, which name, however, is seldom used); a Turkish commercial city and fortress in Servia, at the confluence of the Save and the Danube, with 30,000 inhabitants, consisting of four parts, the citadel in the centre,
which commands the Danube, is well fortified, is the residence of the pacha of Servia, and contains the chief mosque. The whole number of mosques in B. is 14. Between the citadel and the other 3 parts of the city there is an empty space, 400 yards wide. B. is badly built; the streets are not paved. At the mouth of the Save lies the island of the Gipsies. B., on account of its important situation, plays a conspicuous part in almost every war between Austria and Turkey. After having been, at different times, in the possession of the Greeks, Hungarians, Bulgarians, Bosnians, Servians and Austrians, it was, in 1442 and 1456, besieged by the Turks, and, in 1521, conquered by Solymans II. In 1688, the Austrians reconquered it, but lost it again in 1690. Prince Eugene took it in 1717, and the peace of Passarowitz, in 1718, left it in the hands of Austria, but it was again lost in 1739. The Porte retained it by the terms of the peace of Belgrade, in 1739, on condition that the fortifications which Austria had erected should be demolished—a work which required almost nine months. General Laudon took B. in 1799, but it was restored to the Porte at the peace of Sistowice, in 1791. In 1806, it was taken by the revolutionary Servians, but, with their suppression, it came again into the hands of the Turks. Formerly, a bishop resided here, but his seat is now in Semendria.

BELGRANO-BELISARIUS.

Belgran, Manuel, was born at Buenos Ayres, of wealthy parents, who emigrated from Italy. After completing his education at the university of Salamanca, he was appointed secretary of the constado at Buenos Ayres, and thus came in contact continually with the mercantile classes, the most enlightened and important portion of the population of that city. His polished and amiable manners, and his taste for letters and the fine arts, enabled him to improve the opportunity afforded him by his situation, so as to acquire extensive popularity. When the political troubles in America commenced, B. was at first disposed to favor the princess Carlota, sister of Ferdinand, and establish an independent monarchy in Buenos Ayres. But he soon adopted the plan of erecting a perfectly free government, and entered with zeal and ability into the measures which prepared and followed the deposition of the viceroy Cisneros, in May, 1810. In the new order of things, B. entered on a military career, and was speedily raised to the rank of general, in which capacity he commanded the expedition sent against Paraguay, which, after advancing into the heart of that province, was compelled, by the skill of Yedros and Francis, to return to Buenos Ayres, without an engagement, and leave the Paraguayans un molested. B.’s next enterprise was more successful. September 24, 1812, he gained a complete victory over the royalist general D. Pio Tristan, at Tucuman, and thus defeated the intended expedition of the latter against Buenos Ayres. On the 13th of February following, he obtained another signal victory over Tristan at Salta. But these brilliant advantages were soon followed by equally striking reverses. B. imprudently released Tristan and his troops upon their parole, which the Spaniards, with that prolific disregard of all conventions and engagements, which has characterized their policy in the contest with the South Americans, dishonorably violated. The consequence was, that general Pezuela, with the very same troops, added to others collected in Peru, attacked and defeated B. at Vilcapungio, Oct. 1, 1813, and again at Ayoma, Nov. 14, of the same year; and San Martin was appointed to succeed him in command. In 1816, B. was reappointed to the command of the troops in Tucuman, and was making the most judicious arrangements for acting against the Spaniards in Upper Peru, when the spirit of anarchy seized upon the army, and he was deposed, and the troops dispersed. B. was liberal, upright and disinterested to a degree not exceeded by any of his compatriots, and faithful and exact in the discharge of all his duties. He displayed considerable ardor as an officer, and applied himself closely to the study of tactics; but had neither the experience nor the military capacity necessary to constitute a great general. Regardless of his occasional reverses of fortune; and of the persecution which he underwent from some of the transitory factions of the day, he continued to labor unremittingly for the welfare of his country until his death, in 1820, which was very painful.

Belial was, with the Hebrews, what Pluto was with the Greeks—the ruler of the infernal regions. The word itself signifies the evil, the destructive.

Belisarius; one of the greatest generals of his time, to whom the emperor Justinian chiefly owed the splendor of his reign. Sprung from an obscure family in Thrace, B. first served in the body-
guard of the emperor, soon after obtained the chief command of an army of 23,000 men, stationed on the Persian frontiers, and, in the year 530, gained a complete victory over a Persian army of not less than 40,000 soldiers. The next year, however, he lost a battle against the same enemy, who had forced his way into Syria—the only battle which he lost during his whole career. He was recalled from the army, and soon became, at home, the support of his master. In the year 532, civil commotions, proceeding from two rival parties, called themselves the green and the blue, and who caused great disorders in Constantinople, brought the life and reign of Justinian in the utmost peril, and Hypatius was already chosen emperor, when B., with a small body of faithful adherents, restored order. Justinian, with a view of conquering the dominions of Gelimer, king of the Vandals, sent B., with an army of 15,000 men, to Africa. After two victories, he secured the person and treasures of the Vandal king. Gelimer was led in triumph through the streets of Constantinople, and Justinian ordered a medal to be struck, with the inscription Belisarius gloria Romanorum, which has descended to our times. By the dissensions existing in the royal family of the Ostrogoths (see Goths) in Italy, Justinian was induced to attempt to bring Italy and Rome under his sceptre. B. vanquished Vitiges, king of the Goths, made him prisoner at Ravenna (540), and conducted him, together with many other Goths, to Constantinople. The war in Italy against the Goths continued; but B., not being sufficiently supplied with money and troops by the emperor, demanded his recall (548). He afterwards commanded in the war against the Bulgarians, whom he conquered in the year 555. Upon his return to Constantinople, he was accused of having taken part in a conspiracy. But Justinian was convinced of his innocence, and is said to have restored to him his property and dignities, of which he had been deprived. B. died in the year 565. His history has been much colored by the poets, and particularly by Marmontel, in his otherwise admirable politico-philosophical romance. According to his narrative, the emperor caused the eyes of the hero to be struck out, and B. was compelled to beg his bread in the streets of Constantinople. Other writers say, that Justinian had him thrown into a prison, which is still shown under the appellation of the tower of Belisarius. From this tower he is reported to have let down a bag fastened to a rope, and to have addressed the passengers in three words:—

Dixit Belisario belonat,
Quem virtus exserit, familia depressit (Give an obolus to Belisarius, whom virtue exalted, and envy has oppressed).

Of this, however, no contemporary writer makes any mention. Tzetzes, a slightly-celebrated writer of the 12th century, was the first who related this fable. Certain it is, that, through too great indulgence towards his wife Antonina, B. was impelled to many acts of injustice, and that he evinced a servile submission to the detestable Theodora, the wife of Justinian.

*Belisarius.* Jeremy: an American clergyman and author, of considerable reputation. He was born in June, 1744, graduated at Harvard college in 1762, and ordained pastor of the church in Dover, New Hampshire, in 1767. Here he spent 20 years in the diligent performance of his clerical duties, and the cultivation of literature. It was during this period that he composed his History of New Hampshire, a work by which he established himself as an author in the good opinion of his countrymen. In 1787, he took charge of a church in Boston, where he continued to officiate until his death, in 1798. Besides his History, he published two volumes of his unfinished American Biography, and a number of political, religious and literary tracts. Doctor B. wrote with ease and correctness, though not with elegance: he was more remarkable for research and extensive information, than for brilliancy or originality of talents. The History of New Hampshire and the American Biography, above mentioned, are often consulted. His sermons, and many dissertations, are but little known. As a public preacher and citizen, he enjoyed the highest estimation. He was one of the founders of the Massachusetts historical society, whose collections are important to the public annals.

**Bell.** Church bells originated in Italy, being formed, by degrees, out of the cymbals, small tinkling bells and hand-bells of the East, used, in religious ceremonies, as a means of honoring the gods, or of summoning them to the feast. The feast of Osiris, particularly, is known to have been announced by bells, and, in Athens, the priests of Cybele made use of them at their sacrifices. Pliny says that bells were invented long before his time. They were called tintinnabula; and Suetonius tells us that Augustus caused one to be hung before the temple
of Jupiter. Among Christians, they were first employed to call together religious congregations, for which purpose runners of Jupiter. Among Christians, they were had been employed before. Afterwards, the people were assembled by the sound of little pieces of board struck together; hence called sacred boards. To the present day, the Catholics use such boards in Passion-week and Lent, because the noise of bells seems to them unsuited to the solemnity of the season. On the first day of Easter, the bells ring again, and the return of the accustomed sound produces a very cheerful effect. Paulinus, bishop of Nola, in Campania, is said to have first introduced church bells, in the fourth century, and thence the Latin names of the bell, campana and sola, are said to have originated. In the sixth century, bells were used in the convents; they were suspended on the roof of the church in a frame. Towards the end of this century, bells were placed on some churches at the expense of certain cities. About 550, they were introduced into France. Pope Sebastian, who died in 605, first ordered that the hours of the day should be announced by striking the bell, that people might better attend to the holy eulogies, that is, to the hours for singing and praying. In 610, Clothair besieged Sens, when Lupus, bishop of Orleans, ordered the bells of St. Stephen to be rung. The sound so frightened Clothair, that he gave up the siege.

In the eighth century, the custom of baptizing and naming bells began. (See Baptism.) Church bells were probably introduced into England soon after their invention. They are first mentioned by Bede, about the close of the seventh century. In the East, they came into use in the ninth century; in Switzerland, in 1092, at what period they were brought into the church by the council of Constance. In the 11th century, the cathedral at Augsburg had two bells. The same spirit which induced people to build immense minsters, and to apply their wealth in ornamenting the places of worship, made them vie with each other in the size of their bells. The great bell of Moscow, cast in 1653, in the reign of the empress Anne, is said, by Mr. Clarke, to be computed to weigh 443,772 lbs. A bell in the church of St. Ivan, in the same city, weighs 197,536 lbs.; another, 356 cwt.; and the one cast in 1619 weighs 1600 cwt, the clapper alone weighing 18 cwt. On the cathedral of Paris a bell was placed, in 1690, which weighed 340 cwt., and measured 27 feet in circumference. In Vienna, a bell was cast, in 1711, of 354 cwt. In Ohmitz is one of 358 cwt. The famous bell at Erfurt, in Germany, which is considered to be of the finest bell-metal, having the largest proportion of silver in it, and is baptized Susanne, weighs 275 cwt., is more than 24 feet in circumference, and has a clapper of 4 feet, weighing 11 cwt. Great Tom, of Christ church, Oxford, weighs 17,000 lbs.; of Lincoln, 9894 lbs.; the bell of St. Paul's, London, 8400 lbs.; a bell at Naukin, in China, is said to weigh 50,000 lbs.; and seven at Pekin, 120,000 lbs. each. The inscriptions on old bells are curious, and, in some cases, have even historical value; and, at this time, when curiosities of all kinds are eagerly sought for, a collection of these inscriptions would not be uninteresting. The different uses of bells have given rise to many poems, some of which are inscribed on the bells themselves. One of the most common is the following:

Fucera plango, figura frago, sabbata pango
Excito liosos, dissipo ventos, paco cruenta.

Perhaps the finest poem which has ever been written on bells is Schiller's poem, Die Glocke (The Bell), in which he describes the casting of the bell, and all its uses, in a highly poetical manner. This has been translated into many languages, and lately into Greek and Latin, by a professor at Liege. (For the metal of which bells are made, called bell-metal, see Copper.) A bell is divided into the body or barrel, the clapper, and the ear or cannon.—The word bell is used in many, arts and sciences for instruments similar in form to church bells.

BELL. (See Copper.)

BELL-METAL. (See Copper.)

BELL-ROCK, sometimes called Inchcape; a dangerous rock of Scotland, about 12 miles from Arbroath, nearly opposite the mouth of the river Tay; lon. 22° 23' W.; lat. 50° 27' N. A light-house has been erected on it, finished in 1811, 115 feet high. During high tides, the rock is entirely covered. It is said that, in former ages, the monks of Aberbrothock caused a bell to be suspended on this rock, which was rung by the waves, and warned the mariners of this highly dangerous place. The Bell-rock light-house is famous for its construction.

Bella, Stefano de la; an engraver, born at Florence, in 1610. He followed, at first, Callot's manner, but soon adopted one of his own. In 1642, he went to Paris, where he was employed by cardinal Richelieu. He returned to Florence, and became the teacher, in drawing, of Cosmo, the son of the great duke, and
died in 1664. It is said that he engraved 1400 plates.

Bellamy, James, a Flemish poet, was born at Flushing, in the year 1757, and he soon distinguished himself; and his productions met with success. He studied Latin, made himself better acquainted with his mother tongue, and composed several pieces of merit sufficient to induce the society of arts at the Hague to incorporate them in their collections. He published his patriotic songs under the title Vaderlande-Gezangen, which secure him a place among the first poets of his nation. B. sung, likewise, the praise of love. The later works of this poet betray a certain melancholy, which renders them still more interesting. A biographical account of him has been written by G. Kuiper. He may be placed by the side of Bickerstyk, Helsera, Loots, R. Feyth, &c., as one of the restorers of modern Dutch poetry.

Bellarmino, Robert, a cardinal, and celebrated controversialist, of the Roman church, was born at Monte Pulciano, in Tuscany, in 1542. At the age of 18, he entered into the college of Jesuits, where he soon distinguished himself; and his reputation caused him to be sent into the Low Countries, to oppose the progress of the Reformers. He was ordained a priest, in 1568, by Jansenius, bishop of Ghent, and placed in the theological chair of the university of Louvain. After a residence of seven years, he returned to Italy, and was sent by Sixtus V to France, as companion to the legate. He was made a cardinal, on account of his learning, by Clement VIII, and, in 1602, created archbishop of Capua. At the elections of Leo XI and Paul V, he was thought of for the pontificate, and might have been chosen, had he not been a Jesuit. Paul V recalled him to Rome, on which he resigned his archbishopric without retaining any pension on it, as he might have done. In 1621, he left his apartments in the Vatican, and returned to a house of his order, where he died the same year, at the age of 71. So impressed were the people with the idea of his sanctity, that it was necessary to place guards to keep off the crowd, which pressed round to touch his body, or procure some relics of his garments. B. had the double merit, with the court of Rome, of supporting her temporal power and spiritual supremacy to the utmost, and of strenuously opposing the Reformers. The talent he displayed in the latter controversy called forth the utmost abilities of the Protestant pole; and, for a number of years, no eminent divine among the Reformers failed to make his arguments a particular subject of refutation. The great work which he composed in this warfare is entitled A Body of Controversy; written in Latin, the style of which is perspicuous and precise, without any pretension to purity or elegance. He displays a vast amount of Scriptural learning, and is deeply versed in the doctrine and practice of the church in all ages, as becomes one who determines every point by authority. To his credit, he exhibits none of the lax morality of his order, and, in respect to the doctrines of predestination and efficacious grace, is more a follower of St. Augustine than a Jesuit. His maxims on the right of pontiffs to depose princes caused his work on the temporal power of the popes to be condemned at Paris. On the other hand, it did not satisfy the court of Rome, because it asserted, not a direct, but an indirect, power in the popes in temporal matters; which reservation so offended Sixtus V, that he placed it among the list of prohibited books. These differences among the Catholics necessarily gave strength to the Protestant side, and produced a work from Mayer in exposition of them. In the nuncius of controversy, some malignant calumnies were uttered against the morals of B.; but it is evident, that he inclined to superstition in faith, and scrupulosity in practice. At his death, he bequeathed one half of his soul to the Virgin, and the other to Jesus Christ. His society thought so highly of his sanctity, that proofs were collected to entitle him to canonization; but the fear of giving offence to the sovereigns, whose rights he espoused, has always prevented a compliance with the pious wishes of the Jesuits. The best edition of his controversial works is that of Prague, 1721, 4 vols., folio.

Belle Alliance. (See Waterloo.)

Belle-Isle, or Belle-Isle-en-Mer, (anciently Vinditil); an island in the bay of Biscay, 115 miles from the west coast of France, about nine miles long, and from two to four broad, surrounded by sharp rocks, which leave only three fortified passages to the island. The soil is diverse, consisting of rock, salt marsh, and fertile grounds. Palais is the
BELLE-ISLE—BELLES-LETTRES.

capital. It contains three other small towns, and many villages. Lon. 3° 6' W.; lat. 47° 18' N. Pop., 5,500.

BELLE-ISLE, or BELLES-LETTRES; an island N. E. of the gulf of St. Lawrence, about 21 miles in circuit; on the north-west side has a small harbor, fit for small craft, called Lark harbor, within a little island which lies close to the shore. At the east point, it has another small harbor or cove, that will only admit fishing sloops; from whence it is about 10 miles to the coast of Labrador. The narrow channel between Newfoundland and the coast of Labrador is called the straits of Belleisle; 15 miles N. Newfoundland. Lon. 55° 17' W.; lat. 52° N.

BELLEISLE-BELLES-LETTRES. 43

Fleury reposed confidence in him; Louis XV made him governor of Metz and the three bishoprics of Lorraine, which office he held until his death. Before the breaking out of the war, in 1741, he visited the principal courts of Germany with the design of disposing them, after the death of Charles VI, to choose the elector of Bavaria emperor of Germany; and he displayed so much address, on this occasion, as to excite the admiration of Frederick II. After his return, he placed himself, together with Broglio, at the head of the French forces, to oppose those of Maria Theresa. He took Prague by assault; but, the king of Prussia having made a separate peace, he was compelled to a retreat, which he performed with admirable skill. In Dec., 1744, when on a diplomatic journey to Berlin, he was arrested at Elbingeorden, a Hanoverian post, and sent to England, where he was exchanged, however, in 1746. In the following year, he forced general Browne, who had entered the south of France from Italy, to raise the siege of Antibes, and to retreat over the Var. In 1748, the king made him a duke and peer of France, and the department of war was committed to his charge. He reformed the army by abolishing many abuses, enlarged the military academy, and caused an order of merit to be established. The city of Metz is indebted to him for an academy. He died in 1704.

BELLENNUS, William; a Scottish writer of the 17th century, distinguished for the elegance of his Latin style. He was educated at Paris, where he was professor of belles-lettres in 1622, and, though he was made master of requests by James I, he still continued to reside in the French metropolis. In 1628, he published a work entitled Ciceron Princeps, containing a selection from the works of Cicero, consisting of passages relating to the duties of a prince, &c. He afterwards republished this work, with some other treatises, in his Belldenes de Stata. This work was published again, in 1674, by an anonymous editor, since known to have been doctor Samuel Parr, who added a Latin preface on the politics of that time.

BELLEPHRON. (See Hippomus.)

BELLES-LETTRES (French) signifies the same with polite literature. It is impossible to give a satisfactory explanation of what is or has been called belles-lettres: in fact, the vaguest definition would be the best, as almost every branch of knowledge has, at one time, been included in, at another, excluded from, this denomina-
tion. The most correct definition, therefore, would be, perhaps, such as embraced all knowledge and every science, not merely abstract, nor simply useful. In the division of the departments at the lyceum of arts, established at Paris in 1792, the belles-lettres comprehended general grammar, languages, rhetoric, geography, history, antiquities and numismatics; whilst philosophy, mathematics, &c., were called, in contradistinction, sciences. If the name of belles-lettres ought to be retained at all, it would seem proper to include under it poetry, rhetoric, and all prose which has pretensions to elegance. A historical work, therefore, would fall within the definition of belles-lettres only if its style was distinguished for elegance. The same would be the case with books of travels, &c. It is, however, to be hoped that this vague, unnecessary name will soon be abandoned. In imitation of the example of the Germans, who, having investigated the philosophy of the arts and sciences more thoroughly than any other nation, and critically analyzed their principles, have rejected the term; so that it is known in Germany only as matter of history. They class poetry with the fine arts, and its history, like the history of any other art, science, nation or thing, with the sciences. Rhetoric, too, is called a fine art. It was formerly said, that the difference of belles-lettres and beaux-arts consisted in the difference of the means employed by each respectively. The former, it was said, used arbitrary signs, by which was meant language; the latter, natural signs, i.e., sounds and visible forms. It is easy to see how untenable this division is.

BELLEVUE (Fr. fine prospect). This name is given to several villas and palaces, but particularly to a beautiful country palace in the neighborhood of Paris, situated on the ridge of those mountains which stretch from St. Cloud towards Meudon. Mad. de Pompadour (q. v.) built it. The building was commenced in July, 1748, and finished in November, 1750. After the death of Louis XV, the use of it was granted to the aunt of Louis XVI, madame de France. The first French artists of the time, Coustou, Adam, Sallo, Pigalle, Greuze, and Lafrance, had exerted all their talents in embellishing Bellevue; so that this palace, at the period when it was built, was considered the most charming in all Europe. After the revolution, the convention decreed that Bellevue should be kept in repair at the expense of the nation, and that it should be devoted to public amusements. Nevertheless, it was publicly sold, during the highest pitch of revolutionary excitement, and the purchaser, M. Lenchère, a post-master in Paris, had it demolished, quite in the spirit of the Bande noire. (q. v.) Its ruins are frequently visited, on account of the beautiful view of Paris from this spot.

BELLINI, James, and his two sons, Gentile and Giovanni (who surpassed their father); celebrated painters, who made a new epoch in the Venetian school. Of James’s works nothing has been left; but several of Gentile’s (e.g., St. Mark) have reached our times. In the year 1473, Gentile went to Constantinople, Mohammed II having sent to Venice for a skilful painter. He is said to have there copied the bass-reliefs of the column of Theodosius, and to have died at Venice, in the year 1511. The most distinguished of the family was Giovanni II, who was born at Venice, about 1424, and died about 1516. He studied nature diligently, and his drawing was good. He contributed much to make oil painting popular, and has left many excellent pictures, of which one, the Savior pronouncing his Benediction, is to be found in the gallery of Dresden. His own reputation was much increased by that of his celebrated disciples, namely, Titian and Giorgione. As their instructor, he is sometimes called the founder of the Venetian school.

BELLOTA. (See Belle-Isle.)

BELLIMUND, Charles Michael, the most original among the Swedish poets, was born at Stockholm, in 1741, and grew up in the quietude of domestic life. The first proofs which he gave of his poetic talents were religious and pious effusions. The dissipated life of young men, at Stockholm, devoted to pleasure, was afterwards the subject of his poems. By these his name was spread over all Sweden. Even the attention of Gustavus III was attracted to him, and he received from the king an appointment, which enabled him to devote himself almost entirely to poetical pursuits, in an easy independence, until his death, in 1795. His songs are truly national, principally describing scenes of revelry.

BELLOSA; the goddess of war; daughter of Phorcys and Ceto. She was called the Grecian Drya, and is often confounded with Minerva. She was anciently called Duellona, and was the sister of Mars, or, according to some, his daughter or his wife. She prepared his chariot when he was going to war, and drove his
steeds through the tumult of the battle with a bloody scourge, her hair dishevelled, and a torch in her hand. The Romans paid great adoration to her; but she was held in the highest veneration by the ambassadors and generals who returned from Rome. Near the Porta Carmentalis, at which the gate was a small column, called the column of war, against which they threw a spear, whenever war was declared. The priests of this goddess consecrated themselves by making great incisions in their bodies, and particularly in the thigh, from which they received the blood in their hands to offer as a sacrifice to the goddess. In their wild enthusiasm, they often predicted bloodshed and wars, the defeat of enemies, or the besieging of towns.

Bellows: a machine so formed as to expire and inspire air by turns, by the enlargement and contraction of the capacity. As soon as men began to make use of fire, the importance of bellows was felt, since the natural bellows, if we may give this name to the lungs, could not be applied to any great extent. The invention of bellows is ascribed to Anacharsis the Scythian. Probably, this invention, like so many others, took place in different countries, since the want which occasioned it is universal. The first deviation from the ancient, and still common form of the bellows, was made by the Germans, about 100 years ago, and the forms at present are very various, as many attempts have been made for the improvement of this highly important machine, which becomes necessary wherever a powerful flame is required in the arts. As soon as the art was carried on extensively in Germany, and great heat is required in smelting the ores, and working the metals, many new kinds of bellows have been invented in that country, of which we only mention that of Mr. von Bauder, in Munich (known as the inventor of a new kind of railway). It consists of an empty box, which moves up and down in another, partially filled with water. Between the bottom of the empty box and surface of the water is a space filled with air, which is driven out by the descent of the enclosed box. Bellows of very great power are generally called blowing-machines. One of the largest is that recently erected in England, at the smithery in the king's dock-yard, at Woolwich. It is adequate to the supply of air for 40 forge fires, amongst which are several for the forging of anchors, iron knees, and many other heavy pieces of smithery. The common Chinese bellows consist of a box of wood about two feet long, and one foot square, in which a thick, square piece of board, which exactly fits the internal cavity of the box, is pushed backwards and forwards. In the bottom of the box, at each end, there is a small conical or plug valve to admit the air, and valves above to discharge it.

Bellay, Pierre Laurent Buirette de, the first French dramatist who successfully introduced native heroes upon the French stage, instead of those of Greece and Rome, or the great men of other nations, was born at St. Flour, in Auvergne, in 1727. He went to Paris when a child, lost his father soon after, and was supported by his uncle, a distinguished advocate in the parliament of Paris, who designed him for the same profession. He applied himself to this profession with reluctance, while he showed much genius for the drama. His uncle opposed this taste, and the young man secretly left his house. He now made his appearance at several northern courts, as an actor, under the name of Dormont de Bellay. Every where his character gained him love and esteem. He spent several years in Petersburg, where the empress Elisabeth showed him much kindness. In 1758, he returned to France, with the intention of having his tragedy Titus represented. His uncle obtained a warrant of imprisonment against him, in case he should appear on the stage. B. had hoped to reconcile his family to him by the success of Titus, but this hope was disappointed by the failure of the piece; and the author went once more to Petersburg. Shortly after, his uncle died, and B. returned again to France, where he brought out his tragedy Zelmire, which was acted with the most complete success. In 1765 followed his Siege de Calais, a tragedy which produced a great sensation, and is still esteemed, though it owes the applause bestowed on it rather to its subject than to its poetical merit. He received the medal promised by the king to those poets who should produce three successful pieces, and which has been awarded only on this occasion. On account of the great applause with which the Siege of Calais was received, it was counted as two, it being, in fact, only the second successful piece of B. The city of Calais sent him the freedom of the city, in a gold box, with the inscription Lauream.
of the Baltic with the Cattegat. The former runs between the islands of Zealand and Funen, and is about 15 miles in width, where it is crossed from Nyborg, in Funen, to Corsoer, in Zealand. The greatest breadth of the strait is 20 miles. The navigation is very dangerous on account of the many small islands and sand-banks, by which the channel is impeded. Vessels sailing through this strait pay tribute at Nyborg. The Little Belt is between the island of Funen and the coast of Jutland, and the narrowest part of the strait is not more than a mile in width. At this place stands the fortress Fredericia, where the tolls are paid. The fortress commands the entrance from the Cattegat. The name is also given to the small country-seats, in a simple style, or to arched bowers at the end of a garden or park, intended for the enjoyment of fresh air, or as places of shelter against the burning sun. This is the name, also, of a part of the Vatican, where the famous statue of Apollo is placed, which, on this account, is called Apollo Belvedere.

Bezo, Giambaris, that is, John Baptist; born at Padua, and educated at Rome. He was destined for the monastic life, but left the city when it was occupied by the French armies, and, in 1803, went to England, where he acted the part of Apollo and Hercules, at Astley's amphitheatre. Here he acquired, besides the study of the English language, much knowledge of the science of hydraulics, the study of which had been already opened, in the 17th century, by Pietro della Valle, and to which the French, during their expedition to Egypt, could not find the entrance, but, also, a second, known by the name of Cephrenes, and several catacombs near Thebes, especially one, in a fine state of preservation, in the valley of Bihan el Molook,
which is considered to be the mausoleum of Psammis (400 B.C). The drawings which he has furnished of these antiquities are the most exact which we possess. In the year 1816, his perseverance and skill succeeded in transporting the bust of Jupiter Memnon, together with a sarcophagus of alabaster, found in the catacombs, from Thebes to Alexandria, from whence they came to the British museum. On the 1st of August, 1817, he opened the temple of Ipsambul, near the second cataract of the Nile, which two Frenchmen, Caillaud and Drovetti (the French consul-general), had discovered the year before, but had not succeeded in opening. B. discovered a subterraneous temple in its ruins, which, until that time, had been unknown. He then visited the coasts of the Red sea, and the city of Berenice, and made an expedition into the Oasis of Jupiter Ammon. His journey to Berenice was rewarded by the discovery of the emerald mines of Zubara. B. refuted Caillaud's assertion, that he had found the famous Berenice, the great emporium of Europe and India, by subsequent investigations on the spot, and by the actual discovery of the ruins of that great city, four days journey from the place which Caillaud had taken for Berenice. B.'s Narrative of the Operations and recent Discoveries within the Pyramids, Temples, Tombs and Excavations in Egypt and Nubia; and of a Journey to the Coast of the Red Sea, in Search of Berenice; also of another to the Oasis of Jupiter Ammon, his journey to Berenice was rewarded by the discovery of the emerald mines of Zubara. B. refuted Caillaud's assertion, that he had found the famous Berenice, the great emporium of Europe and India, by subsequent investigations on the spot, and by the actual discovery of the ruins of that great city, four days journey from the place which Caillaud had taken for Berenice. B.'s Narrative of the Operations and recent Discoveries within the Pyramids, Temples, Tombs and Excavations in Egypt and Nubia; and of a Journey to the Coast of the Red Sea, in Search of Berenice; also of another to the Oasis of Jupiter Ammon (London, 1820); accompanied by a folio vol. of 44 copper-plates; was received with general approbation. B. became one of its principal members, and, for some time, took pleasure in correcting the beautiful editions which proceeded from this celebrated press. After visiting Rome, he went, in 1506, to the court of Urbino, at that time one of those Italian courts where the sciences stood highest in esteem. He lived there about six years, and gained several powerful friends. In 1512, he went to Rome with Giulio de' Medici, whose brother, pope Leo X. made him his secretary, and gave him his friend Sadoleto for a colleague. About this time, B. became acquainted with the young and beautiful Morosina, with whom he lived, in the most tender union, during 22 years. She presented him with two sons and a daughter, whom he educated with the greatest care. His many labors, arising from his office, as well as his literary pursuits, and, perhaps, too great an indulgence in pleasure, having impaired his health, he was using the baths of Padua, when he was apprized of the death of Leo X. Being by this time possessed of several church benefices, he resolved on withdrawing entirely from business, and on passing his days at Padua, (the air of which he had found very beneficial), occupied only with literature and science, and enjoying the society of his friends. The learned members of the famous university of this city eagerly frequented his house, and strangers also flocked thither. B. collected a considerable library: he had a cabinet of medals and antiquities, which, at that time, passed for one of the richest in Italy, and a fine botanical garden. He spent the spring and autumn at a villa called Bocca, which had always belonged to his family. He devoted the leisure of a country life principally to his literary pursuits. In the year 1523, after the death of Andreas Navagero, the office of historiographer of the republic of Venice was offered to him, which he accepted, after some hesitation, and declining the salary connected with it. At the same time, he was nominated librarian of the library of St. Mark. Pope Paul III., having resolved upon a new promotion of cardinals,
from the most distinguished men of his time, conferred on him, in 1539, the hat of a cardinal. From that time, B. renowned the belle-lettres, and made the fathers and the Holy Scriptures his chief study. Of his former labours, he continued only the History of Venice. Two years later, Paul III bestowed the bishopric of Novara on him, and, soon after, the rich bishopric of Bergamo. He died, loaded with honors, 1547, in the 77th year of his age. B. united in his person, his character and conversation, all that well in Latin composition, in which Cicero, Virgil and Julius Caesar were his constant models, as in the Italian, in which he chiefly imitated Petrarca. He was so rigorous with regard to purity of style, that he is said to have had 40 different partitions, through which his writings, as he polished them by degrees, successively passed; nor did he publish them till they had sustained these 40 examinations. A collection of all his works, which were frequently printed singly, appeared, in 1729, at Venice, in 4 folio vols. The most important of them are, History of Venice from 1487 to 1513, in 12 books, which he wrote both in Latin and Italian; Le Prose, dialogues, in which the rules of the Italian language are laid down; Gli Amanti, dialogues on the nature of love; Le Ritu, a collection of beautiful sonnets and canzonets; his letters, both in Latin and Italian: De Virgilii Culae et Terentii Fabula Liber; Carmina, which are ingenious and elegant, but more free than the author's profession would lead us to expect; besides several others.

Benares (in Sanscrit, Varanasi, from the two streams, Vara and Nasii) stands in lat. 25° 30' N., and lon. 83° 11' E., on the high bank and northern side of the Ganges. The town rises like an amphitheatre. The height of the houses and narrowness of the streets give it all the usual inconveniences of an Asiatic town. Its inhabitants are more than 600,000, of whom 8000 are said to be Brahmins; and, at the great Hindoo festivals, the concourse is immense; for Cari, or Cashi, the splendid, as the Indians commonly call it, is one of the most sacred places of pilgrimage in all India. To die at B. is the greatest happiness for a Hindoo, because he is then sure of immediate admission into heaven. The number of pious foundations and temples is exceedingly great. Several of the Hindoo princes have agents here to offer up sacrifices in their behalf. The principal temple is called Vishnasur or Bisaar, and is dedicated to Siva, whose sacred relic it contains. Aurungzeb built a splendid mosque on the highest ground in the city, and on the ruins of a temple. At the end of the 17th century, an observatory was erected in this city, which still exists; and a college for the instruction of Hindoos in their own literature was established by the British government in 1801; but it has not yet done much for the revival of learning among the natives, owing to the pride of the Brahmins. B. has long been the great mart for diamonds and other gems, brought principally from the Bunder. The merchants and bankers are numerous and wealthy. There are few English inhabitants, except the government officers and the members of the circuit court. Cesi was ceded to the East India company by the nabob of Andhr (Oude), in 1775, and, since 1781, has enjoyed uninterrupted tranquillity. The inhabitants are better informed than the natives of the country in general. The reader will find an interesting account of B. in bishop Heber's Narrative of a Journey through the Upper Provinces of India, in 1824—26; London, 1828, Philadelphia, 1829, vol. 1.
Benavides; an outlaw and pirate, who, for several years, proved the scourge of the southern parts of Chile. He was a native of Quirihue, in the province of Concepcion, and entered the patriot army as a common soldier at the commencement of the revolution. Having deserted to the Spaniards, and being made prisoner by the Chilians, at the battle of Membilla, in 1814, he was to have been tried for desertion, but effected his escape. Being made prisoner again at the battle of Maypu, in 1818, he was sentenced to be shot, and was supposed to have been killed; but, although shockingly wounded, and left for dead, he recovered, and, having obtained a commission from the Spanish commander Sanchez, he commenced a war upon the southern frontier of Chile, never surpassed in savage cruelty. He laid waste the country with fire and sword, murdered his prisoners, and perpetrated the most horrid cruelties upon the unarmed peasants, including women and children, who chanced to fall into his power. Notwithstanding repeated engagements with the Chilian forces of the province of Concepcion, he sustained himself, for a long time, in this atrocious course. At length he undertook to establish a navy, and, for this purpose, piratically seized upon several English and American vessels, which unsuspectingly stopped for refreshment not far from the town of Arauco, the centre of his operations. So intolerable had the grievance become that, in 1821, the Chilians fitted out an expedition against Arauco, and succeeded in breaking up the robber's strong hold. He attempted to escape to Peru in a launch, but, being captured, was condemned to death, and executed Feb. 23, 1822.

Benbow, John; an English naval character of distinguished merit; born in Shrewsbury, about 1650, and brought up to the sea in the merchant service; fought so desperately against a pirate from Salzoo, in one of his trips to the Mediterranean, about the year 1686, as to beat her off, though greatly his superior in men and men-of-war. For this gallant action, he was promoted at once, by James II, to the command of a ship of war. William III employed him in protecting the English trade in the channel, which he did with great effect. His valor and activity secured him the confidence of the nation, and he was soon promoted to the rank of rear-admiral, and charged with the blockade of Dunkirk. But the squadron in that port, under the command of Du Bart, managed to slip out of port; nor could Benbow, though he sailed instantly in pursuit, overtake it. In 1701, he sailed to the West Indies with a small fleet, having accepted a command previously declined by several of his seniors, from the supposed superiority of the enemy's force in that quarter. In August of the following year, he fell in with the French fleet under Du Casse, and for five days maintained a running fight with them, when he at length succeeded in bringing the enemy's sternmost ship to close quarters. In the heat of the action, a chain-shot carried away one of his legs, and he was taken below; but the moment the dressing had been applied to the wound, he caused himself to be brought again on deck, and continued the action. At this critical instant, being most disgracefully abandoned by several of the captains under his command, who signed a paper expressing their opinion that "nothing more was to be done," the whole fleet effected its escape. B., on his return to Jamaica, brought the delinquents to a court-martial, by which two of them were convicted of cowardice and disobedience of orders, and condemned to be shot; which sentence, on their arrival in England, was carried into execution at Plymouth. B., who suffered equally in mind and body from this disgraceful business, gradually sunk under his feelings, and expired at Jamaica, Nov. 4, 1702.
Benda, George, director of the chapel at Gotha, born at Jungblutstau, in Bohemia, 1731, received from Frederick II the place of the second violinst in the chapel at Berlin, but, in 1748, entered the service of the duke of Gotha, as chapel-master, where he constantly cultivated his talents for composition, particularly of sacred music. His Ariadne, an opera, was received with enthusiastic applause in Germany, and afterwards in all Europe, being distinguished for originality, sweetness and ingenious execution. His compositions are numerous; but his Ariadne is his best work. He died in the neighborhood of Gotha, 1755. His absence of mind has given rise to many amusing anecdotes. His elder brother, Francis, was a distinguished violinst. Their father was a poor linen-weaver.

Bender (in the Moldau language, gym.) the chief city of a district in the Russian province of Bessarabia, on the Dniester; lon. 24° 40' E.; lat. 46° 51' N.; population, 10,000. It is built in the shape of a crescent, is well fortified, has 12 mosques and 1 Armenian church. The streets are narrow and dark. Its commerce is important, and it carries on some branches of manufacture. Here was a poor linen-weaver. The streets are narrow and dark. Its commerce is important, and it carries on some branches of manufacture. Here was a poor linen-weaver.

Benedict XIV (Prosper Lambertini), born at Bologna, in 1675, of a very respectable family, distinguished himself, in his youth, by a rapid progress in all the sciences. His favorite author was St. Thomas. He applied himself with success to the canon and civil law, and became advocate to the consistory at Rome. Afterwards, he was appointed promotor fidei, and wrote a valuable work on the Ceremonies used in Beatifications (Bologna, 1734, 4 volis. fol.) He was passionately fond of learning of historical researches and monuments of art, and also associated with the distinguished men of his time; among others, with Father Montefalcon, who said of him, "Benedict has two souls; one for science, and the other for society." He also made himself familiar with the best poetical works, whereby his mind became elevated and his style animated. Benedict XIII made him, in 1727, bishop of Ancône; in 1738, cardinal, and in 1732, archbishop of Bologna. In every station, he displayed great talents, and fulfilled his duties with the most conscientious zeal. He opposed fanaticism even at the risk of his own safety, defended the oppressed, and expressed himself with the greatest frankness to Clement XII, without losing his favor. When, after the death of Clement XII, in 1740, the election of a new pope in the conclave was retarded by the intrigues of cardinal Tencini, and the cardinals could not agree, Lambertini, with his usual good nature, said to them, "If you want a saint, take Gottif; if a politician, Aibobrandi; if a good old man, myself." These words, thrown out in a humorous manner, operated on the conclave like inspiration, and Lambertini, under the name of Benedict XIV, ascended the papal throne. His choice of the ministers and friends, whom he assembled around him, does the greatest honor to his judgment. The condition of the church, and of the Roman court, had not escaped his penetration. Since the reformation, princes no longer troubled at the thunders of the Vatican. The popes had renounced their pretensions to worldly authority, and Lambertini knew that respect for the papal authority could be maintained only by a wise moderation. He constantly regulated his measures by this principle, and thus succeeded, even in difficult circumstances, in satisfying, not only the Catholic, but even the Protestant princes. The sciences were a special object of his care. He established academies at Rome; promoted the prosperity of the academy at Bologna; caused a degree of the meridian to be measured; the obelisk to be erected in the Campus Martius; the church of St. Marcellino to be built after a plan projected by himself; the beautiful pictures in St. Peter's to be executed in mosaic; the best English and French works to be translated into Italian; and commanded a catalogue of the manuscripts contained in the Vatican library (the number of which he had enlarged to 3000) to be printed. His government of the papal states did equal honor to his wisdom. He enacted severe laws against usury, favored commercial liberty, and diminished the number of holydays. His piety was sincere, yet enlightened and forbearing. He strove to maintain purity of doctrines and of morals, giving, in his own character, the most praiseworthy example. He died, after a painful sickness, during which his
cheerfulness and vivacity never deserted him, May 3, 1758. The sole reproach brought against him by the Romans was, that he wrote too much, and governed too little. His works compose, in the Venice edition, 16 vols. fol. The most important of his works is that on the synods, in which we recognise the great canonist.

BENEDICT, St.; the founder of the first religious order in the West; born at Norcia, in Spoleto (in the present Ecclesiastical States), 486. In the 14th year of his age, he retired to a cavern situated in the desert of Subiaco, 40 miles from Rome, and, in 513, drew up a rule for his monks, which was first introduced into the monastery on Monte Cassino, in the neighborhood of Naples, founded by him (529) in a grove of Apollo, after the temple had been demolished. This gradually became the rule of all the Western monks.

The abbot of Monte Cassino afterwards acquired episcopal jurisdiction, and a certain patriarchal authority over the whole order. B., with the intention of banishing idleness, prescribed, in addition to the work of God (as he called prayer and the reading of religious writings), the instruction of youth in reading, writing and ciphering, in the doctrines of Christianity, in manual labor (including mechanick arts of every kind); and in the management of the monastery. With regard to dress and food, the rule was severe, but not extravagant. B. caused a library to be founded, for which the aged and infirm brethren (conscripti) were obliged to copy manuscripts. By this means he contributed to preserve the literary remains of antiquity from ruin; for, though he had in view only the copying of religious writings, yet the practice was afterwards extended to classical works of every kind; and the learned world is indebted for the preservation of great literary treasures to the order of St. Benedict. (See, Benedict.)

BENEDICTBEURN; formerly an abbey, situated in the Bavarian circle of the Isar, about 40 miles distant from the city of Munich, on the descent of the mountains towards the Tyrol. The convent was founded as early as 740. In our days, it is only remarkable for the manufactury of optical instruments belonging to Reichenbach and Liebherr, who have furnished instruments to almost all the observatories of Europe.

BENEDICTINES. From the 6th to the 10th century, almost all monks, in the West, might be so called, because they followed the rule of St. Benedict of Norcia. (See this article, Monastery and Order.) The rule which, at that time, the monasteries, in Spain and France, received from their bishops, as well as the rule of the Irish St. Columba (born 520, died 615), were essentially the same as those of St. Benedict; and, in the progress of his order, the monasteries in Spain and France, as well as those of the order of Columba, united themselves with it. Monte Cassino, the magnificent primitive monastery of the Benedictines, became the model of all others. At that time, the monasteries, having no common superiors, were under the immediate control of the bishops in their respective dioceses, and differed from one another in many qualifications of the primitive rule. Not even the color of their dress was the same. The disciples of Columba wore white garments, like the first Benedictine nuns, who originated in France, in the 6th century. After the union which took place at a later period, all the members of this order wore black, as the founder is said to have done. The decline of monastic discipline, after the 8th century, occasioned the reforms of Benedict of Aniana, in France, the renewed inculcation of the old rule, and the adoption of new ordinances suited to the times, by the council of Aix-la-Chapelle (817), as well as the particular rules and fraternities of the celebrated monasteries in France, Germany and England, which, in those barbarous times, became seats of civilization; and, finally, the institution of the Cluniacs, a new branch of the Benedictines, which proceeded from the convent of Clugny, in Burgundy, founded in the year 910. The Benedictine monasteries, in the middle ages, were often asylums in which science took refuge, and found asylum. In the place of the discordant and uncertain rules which had hitherto existed, the Cluniacs made fixed regulations concerning the hours of worship, the obedience, discipline and common government of all the monasteries belonging to their order, which were soon imitated in all Europe. In the 12th century, their order contained 2000 monasteries, whose luxury frequently called for reforms, and finally became the chief cause of their decline. The remains of the Cluniacs united themselves, in the 17th century, under the patronage of Richelieu, with the Benedictine fraternities of St. Vannes and St. Mauros, the latter of which, founded in 1618, had, in the beginning of the 18th century, 180 abbeys and priories in France, and acquired, by means of its learned members,
such as Mabillon, Montfaucon, Martène, merited distinction. To this family belong those new orders, established on the foundation, and observing the rule of St. Benedict, which have originated since the 11th century, and are distinguished from the proper Benedictines by their dress, names, and particular regulations; e.g., the Camaldulians, the monks of Vallombrosa, the Sylvesterians, the Grandmontensians, the Carthusians, the Cistercians, the Bernardines, the Trappists, and the monks of Fontevraud. The Benedictine monasteries never constituted one society, constitutionally regulated and governed under an aristocratical or monarchical form; on the contrary, a great many monasteries, which descended from the old Benedictines, were compelled, by the council of Trent, to unite themselves gradually into particular fraternities. Among these, the Benedictines of Monte Cassino, of Monte Vergine, and the council of Trent, to unite them, are distinguished from the proper Benedictines by their dress, names, and particular regulations; e.g., the Camaldulians, the monks of Vallombrosa, the Sylvesterians, the Grandmontensians, the Carthusians, the Cistercians, the Bernardines, the Trappists, and Benedictine monasteries new-constituted, governed under an aristocratical or monarchical form: on the contrary, a great many monasteries, which descended from the old Benedictines, were compelled, by the council of Trent, to unite themselves gradually into particular fraternities. Among these, the Benedictines of Monte Cassino, of Monte Vergine, and Monte Oliveto (who call themselves Ottaviani), in Italy and Sicily, where they have flourished uninterruptedly even to the present time; those of Valladolid andMontserrat, in Spain, where they are among the wealthiest orders; those of Hersche and Fulda, together with Bursfeld, which have now ceased to exist, and that of Moelk, in Germany, deserve particular notice, on account of the extent of their possessions, the magnificence of their churches, and the mildness of their rules. To the fraternity of Moelk, which still exists, but accommodated to the spirit of the times (the government having ordered its revenues to be applied to the public service), the rest of the Benedictine convents in Austria are joined. Many of the monasteries of this order are reserved for the nobility, because the places in them are equal to the most lucrative benefices. The Benedictines in Sicily, who are, for the greater part, the younger sons of distinguished families, live under very lax rules. In Modena, they have settled again, and received a convent, with revenues for their support. 

Benediction signifies the act of conferring a blessing (q. v.)—Benedictio benedictio; the blessing bestowed on the penitent sick. It is also called visitation.—Benedictio sacerdotalis is the nuptial benediction pronounced by the priest on the occasion of a wedding.—To give the benediction, is an expression used with regard to the pope, the cardinals, bishops or papal munition, when they bestow a blessing, either in the church, or in the street, with the sign of the cross, on the people, or some private person. The pope gives a solemn benediction three times every year; viz. on Maundy-Thursday, on Easter, and on Ascension-day.

Benefit of Clergy was a privilege of clergymen, which originated in a pious regard for the church, whereby the clergy of Roman Catholic countries were either partially or wholly exempted from the jurisdiction of the lay tribunals. It extended, in England, only to the case of felony; and, though it was intended to apply only to clerical felons or clerks, yet, as every one who could read was, by the laws of England, considered to be a clerk, when the rudiments of learning came to be diffused, almost every man in the community became entitled to this privilege. Peers were entitled to it, whether they could read or not; and by the statutes of 3 and 4 William and Mary, c. 9, and 4 and 5 William and Mary, c. 24, it was extended to women. In the earlier ages of the English Roman Catholic church, the clerk, on being convicted of felony, and claiming the benefit of clergy, was handed over to the ecclesiastical tribunal for a new trial or purgation, the pretty uniform result of which was his acquittal. This pretended trial or purgation gave rise to a great deal of abuse and perjury, so that, at length, the secular judges, instead of handing over the culprit to the ecclesiastics for purgation, ordered him to be detained in prison, until he should be pardoned by the king. By the statute of 18 Elizabeth, c. 7, persons convicted of felony, and entitled to the benefit of clergy, were to be discharged from prison, being first branded in the thumb, if laymen, it being left to the discretion of the judge to detain them in prison not exceeding one year; and, by the statute of 5 Anne, c. 6, it was enacted, that it should no longer be requisite that a person should be able to read, in order to be entitled to the benefit of clergy, so that, from the passing of this act, a felon was no more liable to be hanged on account of defect of learning. The English statutes formerly made specific provisions, that, in particular cases, the culprit should not be entitled to benefit of clergy, but the statute of 7 and 8 George IV, c. 23, provides, that "benefit of clergy, with respect to persons convicted of felony, shall be abolished." This privilege has been formally abolished in some of the United States, and allowed only in one or two cases in others, while, in others again, it does not appear to have been known at all. By the act of congress of April 30,
BENEVOLENT BENEZET.

1790, it is enacted, "that benefit of clergy shall not be used or allowed, upon conviction of any crime, for which, by any statute of the United States, the punishment is, or shall be, declared to be death."

BENEVOLENT: a dukedom in the Neapolitan province Principato Oltra (86 square miles, with 20,348 inhabitants), which, including a city and eight villages, belongs to the papal see. In 1806, Napoleon made a present of it to his minister Talleyrand, who received thence the title of prince of Benevento. In 1815, it was restored to the pope. Cattle, grain, wine, oranges, and dead game are exported. The public revenue amounts to 6000 dollars. In 1820, the inhabitants revolted. In the most remote times, the state of Benevento belonged to the country of the Samnites. The Lombards, in 571, made it a dukedom, which, long after the extinction of the Lombard kingdom, remained independent. At a later period, it fell into the hands of the Saracens and Normans. The city, however, was not conquered by the latter, because Henry III had given it to the pope, Leo IX. The city of B. (lon. 14° 38' E., lat. 40° 6' N.), on a hill between the rivers Sabato and Calore, has 13,800 inhabitants, 8 churches and 19 convents. Since 1803, it has been the see of an archbishop. It has several manufactories. Few cities in Italy deserve so much attention, on account of the antiquities which they contain, as B. Almost every wall consists of fragments of altars, sepulchres, columns and entablatures. Among other things, the well-preserved, magnificent triumphal arch of Trajan, built in 114, deserves particular notice. It is now called porta aurea (the golden gate), and is a gate of the city. The cathedral is a gloomy building, in the old Gothic style.

BENZET, Anthony; a distinguished philanthropist, born at St. Quentin, in France, January 1713. His parents, in Philadelphia. His first employment was that of an instructor of youth at Germantown—a calling which led him to prepare and publish, several elementary books for the use of schools. The leading traits of his character—enthusiastic benevolence and profound piety—were developed at this period. About the year 1750, he was particularly struck with the iniquity of the slave trade, and the cruelty which was exercised by too many of those who purchased and employed the negroes. His voice and his pen were now employed in behalf of this oppressed portion of his fellow-beings. Finding the blacks in Philadelphia numerous, and insensibly ignorant, he established an evening school for them, and taught them himself, gratuitously. In this office he was signaliy successful, and accomplished the additional good of removing prejudices against the intellect of the Negro by exhibiting the proficiency of his pupils. His first attempts to rouse the public feeling, on the subject of Negro slavery, consisted in short essays in almanacs and newspapers, which he was indefatigable in circulating. He soon published a variety of more elaborate and extensive tracts, among which are the following:—An Account of that Part of Africa inhabited by the Negroes, 1762: a Caution and Warning to Great Britain and her Colonies, on the calamitous State of the enslaved Negroes, 1767: an Historical Account of Guinea, its Situation, Produce, and the general Disposition of its Inhabitants; with an Enquiry into the Rise and Progress of the Slave-Trade, its Nature and calamitous Effects. These works were printed at his own expense, and distributed without charge, wherever he thought they would make an impression. He addressed them directly, with suitable letters, to most of the crowned heads of Europe; and to many of the most illustrious divines and philosophers. The favor of his style, and the force of his facts, obtained for his philanthropic efforts the notice which he sought for the benefit of his cause. Great personages, on both sides of the Atlantic, corresponded with him, and it is certain that he gave the original impulse to dispositions and measures which induced the abolition of the slave-trade by England and the United States. Clarksen, the British philanthropist, whose labors contributed so largely to the accomplishment of that object, acknowledges, that his understanding was enlightened, and his zeal kindled, by one of B.'s books,
when he was about to treat the question submitted to the senior bachelors of arts in the university of Cambridge. \textit{Avis liceat invitos in servitutem dare}—B. regarded all mankind as his brethren. About the year 1765, the wrongs inflicted on the aboriginal race of North America excited his susceptible mind, and prompted him to publish a tract, entitled, \textit{Some Observations on the Situation, Disposition and Character of the Indian Natives of this Continent}. He addressed the British governors and military commanders on the effect of hostilities against the natives, that the crops of one year are sufficient for the consumption of its inhabitants for two. It abounds in fruits and animals of many varieties, and yields every article essential to the comfort, or even, luxury, of man. Its ingenious inhabitants are well versed in all the arts of useful industry; and, whilst their delicate and valuable manufactures are exported to every part of the world, they require no assistance from other countries. In short, it has been truly said of this province, that it is the most valuable jewel in the British crown. The revenues of B. consist chiefly of rents paid to the government by a great part of the people. The revenues of B. consist chiefly of rents paid to the government for land. In the year 1811—12, they amounted, including those of Behar and Orissa, to £2,500,000 sterling, to which may be added nearly £200,000 for the monopolies of salt and opium. The exports of B. are principally rice, cotton and silk, both raw and manufactured; indigo, sugar, saltpetre, ivory, tobacco, and drugs of various kinds; hemp and flax are also to be procured in great abundance. Its imports by sea are gold and silver, copper and bar-iron, woolen cloths of every description, tea, salt glass and china ware, wines, and other commodities, for the use of its European inhabitants, and a few Arabian and English horses. The native breed of these animals being diminutive, B. is chiefly supplied with them from the north-west provinces, although the government have a stud of their own in Behar, and hold out great encouragement to the zemindars, or landholders, to breed them. The south-east districts produce fine elephants, which are not only in considerable demand, among the opulent natives, for state or riding, but also used for carrying the camp equipage of the army. They vary in price from £50 to £100; a good one should be from 8 to 10 feet high, and not less than 30 years of age.—B. is intersected by the
Ganges, the Brahmapootra, Dummooda, and several other rivers, so connected by various streams, and the annual inundations, that there is scarcely a town which does not enjoy the benefits of an inland navigation; the boats employed in which are of various sizes and shapes, many of them very handsome, and fitted both for convenience and state. The Delta of the Ganges, the water of which is either salt or brackish, exhibits a labyrinth of uninhabited inland navigation; and in other parts of the country, during the rainy season, some hundred miles of rice fields may be sailed over. These inundations are, however, frequently the cause of much injury, by carrying away the cattle, stores of grain, and inhabitants of the poor peasants. The greater proportion of the inhabitants of B. are Hindoos; they are olive-colored, with black hair and eyes. They are small and delicate in their persons, and, although very timid, are ingenious; humble to their superiors, and insolent to their inferiors. In youth, they are quick and inquisitive, and would probably be much improved by their intercourse with Europeans, but for the supreme contempt in which they hold other nations, from the notion of their being degraded Hindoos. The indigent wear scarcely anything other than a rag round their waist; the rich, when out of doors, dress much like Mohammedans; within the house, they usually resume their old national costume, which consists merely of different pieces of cloth twisted round the body, and having one end tucked into the folds. No small part of the population are Mohammedans; they are the descendants of the Afghan and Mogul conquerors, and Arabian merchants, softened, in the course of time, by an intermixture with Hindoo women, convert and children, whom they purchased during a scarcity, and educated in their own religion. There are also a number of the descendants of the Portuguese, and of various other nations; and, in spite of the checks held out by the English against colonization, it is probable, that, in the course of another century, their descendants will become so numerous, that it will be necessary to permit them to become cultivators of the soil. The thermometer, part of the year, in B., is as high as 100 degrees, and the climate is injurious to European constitutions. The year is there divided into three seasons: viz., the hot, the rainy and the cool; the former begins in March, and ends in June; the rains then commence, and continue till October; after which it becomes cool, and the weather continues pleasant for four months. Of the ancient history of B., we have no authentic information. It is said to have been sometimes an independent kingdom, and at other times tributary to Magadha (Belar). In the institutes of Akbar, a list of 61 Hindoo kings is given; but the number of years assigned to many of the reigns does away its credibility. B. was first invaded and conquered by the Afghan Mohammedans in A.D. 1203, and continued tributary to the emperor of Delhi till the year 1340, when Fakher Addeen, a confidential servant of the governor, murdered his master, and, having seized the reins of government, threw off his allegiance, and took the title of Sultan Sekander. From this period till 1538, B. remained an independent kingdom, when it was conquered by Shere Shah, who shortly after annexed it to Delhi. From the descendants of Shere Shah it was conquered by the emperor Akbar, and continued subject to Delhi, or nominally so, till the year 1757, when it fell into the hands of the English, who have gradually changed its form of government, and introduced a code of regulations, founded on the Hindoo, Mohammedan and English laws, by which impartial justice is administered to all the inhabitants, and toleration granted to all religions, owing to which the country improves, and the population increases. The cities of Gour, Tonda, Rajmahal, Dacca and Moorshedabad have each, at various times, been the capital; but, since the conquest of it by the English, Calcutta is become the seat of government. The government of this presidency is vested in the supreme council, consisting of the governor-general and three councillors. The latter are appointed by the king; the former are chosen by the court of directors from the civil servants of at least 12 years' standing. For the administration of justice, there is a supreme court at Calcutta, 6 courts of appeal and circuit, and 46 inferior magistrates, stationed in as many different towns or districts. The circuit courts are formed by 3 judges, with an assistant and native officers. Criminal cases are tried by the Mohammedan law, in form and name, but so modified as to approach nearly, in fact, to the English; and capital sentences are confirmed by the nizamat adalat, or supreme court at Calcutta. The district magistrates or judges, as they are often called, have each a registrar and one or more of the junior civil servants,
as assistants, with native lawyers, Mussulman and Hindoo. An appeal lies from
their sentence, in almost all cases, to the provincial court. The average size of a
district in this presidency is about 6600 square miles. In civil causes, the
respective codes of the Mohammedans and Hindoos are generally followed. In 1783,
regular advocates, educated at the Mo-
hammedan and Hindoo colleges at Cal-
cutta and Benares, were appointed to
plead in these courts. Their fees are
regulated by law. Written pleadings are
allowed, and written evidence must some-
times be admitted, on account of the dis-
inclination of the Asiatics to have women
appear in public.—Domestic slavery is
permitted by law, but the slaves are kind-
ly treated. The number of these slaves
it has been thought unsafe to ascer-
tain. Their marriage is never impeded; but
few children are sold, as it is reputed dis-
creditable to sell them, and their mar-
riage is considered an act of piety. Parents
themselves, who are reduced by famine,
&c., are usually the persons who supply the slave-market. Inability to
provide for their children, not the desire
of gain, seems to be the real motive of
this horrid custom. Slaves, like freemen,
are under the protection of law.—The
Mohammedans may be estimated at one
seventh of the whole population. Various
estimates of the population have been
made at different times, but rather from
conjecture than from well-authenticated
documents. The sum total for Bengal
appears to be 25,306,000, and there are
strong reasons for believing this number
to be short of the real amount. The
number of native troops, called sepoys
(sipahis) or soldiers, was, in 1811, 207,577,
besides 8575 invalids. The non-commis-
sioned officers are natives, those who
have commissions are Europeans, and
the number of the latter in this presi-
dency, at the time above mentioned, was
3024. About 22,000 of the king's troops
are also stationed in India, and occasion
an expense to the company of about
£160,000 per annum.—Before conclud-
ing this article, it may be proper to ob-
servre, that the Dutch possess the town of
Chinsura, the French, Chinduagore, and the
Danes, Serampore, with a small territory
adjoining each. These towns are situ-
ated on the Hoogly river, from 15 to 25
miles above Calcutta.

BENGAL; a country in Africa, bound-
red N. by Angola, E. by the country of
Jaga Cassangi, S. by Matam, and W. by
the sea. Cape Negro forms its S. W.
extremity, whence mountains run north-
ward, in which are contained the springs
of many rivers. The productions are
similar to those of Angola and Congo.
one of the principal is manioc; divers sorts of palms are found; dates grow in great abundance; the vines naturally form alleys and arbours; cassia and tannins also flourish; and, from the humidity of the soil, there are two fruit seasons in the year. The air of the country is exceedingly unwholesome. The chief towns are Old Benguela, St. Philip or New Benguela, Man-kikondo, and Kuselul. Lon. 30° to 33° E.; lat. 15° 30’ to 13° 30’ S.

Benny, a kingdom in the west of Africa, the limits of which are not well ascertained; but the name may be applied to that part of the coast extending from the river Lagos, the eastern limit of the Slave coast, to the Formosa, about 180 miles. The interior limit is unknown. The whole coast presents a succession of estuaries, some of them very broad, and their origin never explored. Between the Lagos and Cross rivers, the number of rivers flowing into the gulf of Guinea is said to exceed 20, some of them very broad and deep. This tract, called the Delta of Benin, is about 200 miles in extent. The aspect of the coast, and the great body of water flowing into the gulf, have led to the supposition that the waters of the Niger here find an entrance into the ocean. This region has been but little explored, and is little known. The country is low and flat, the soil on the banks of the rivers very fertile, but the climate unhealthy. The inhabitants are of a mild disposition; polygamy is practised; almost all labor is performed by females; the government is despotic. Chief towns, Benin, Agatan, Bododa, Ozebo and Meiberg, which are situated on the Formosa, the principal river.

Benin; capital of the above kingdom, on the Formosa; lon. 5° 6’ E.; lat. 3° 13’ N. This town, according to some, is 12 miles in circuit, the largest street 3 miles long, and others nearly equal; according to other statements, it is only 4 miles in circuit. The streets are filled with various articles of merchandise, and present the appearance of a crowded market, though always clean. The houses are large, and, though their walls are of clay, the reeds and leaves, with which they are covered, give them a pleasing appearance. The king’s palace consists of a great number of square enclosures.

Benjowsky, Maurice Augustus, count, of a man of indefatigable activity and extraordinary adventures, born in 1741, at Werbowa, in Hungary, where his father was a general in the Austrian army, entered the same service himself, and acted as lieutenant in the seven years’ war till 1758. He afterwards studied navigation in Hamburg, Amsterdam and Plymouth. He then went to Poland, joined the confederacy against the Russians, and became colonel, commander of cavalry and quartermaster general. B. was taken prisoner by the Russians in 1763, and sent, the next year, to Kamtschaka. On the voyage thither, he saved the ship that carried him, when in peril from a storm. This circumstance procured him a favorable reception from governor Niloff, whose children he instructed in the German and French languages. Aphanasia, Niloff’s younger daughter, fell in love with him. B. prevailed on her father to set him at liberty, and to betroth her to him. He had, however, already conceived the project of escaping from Kamtschaka, together with several other conspirators. Aphanasia discovered his design, but did not forsake him. On the contrary, she warned him when it was resolved to secure his person. Accompanied by Aphanasia, who remained invariably faithful to him, though she had now learned that he was married, B., together with 96 other persons, left Kamtschaka in May, 1771, and sailed to Formosa; from thence to Macao, where many of his companions died, and among them the faithful Aphanasia. At length he arrived in France, where he was commissioned to found a colony in Madagascar; an undertaking of which he foresaw the difficulties, especially as the success depended on the assistance of the officers in the Isle of France, to whom he was referred for the greater part of his equipment. In June, 1774, B. arrived in Madagascar, established a settlement at Foul point, and gained the good will of several tribes, who, in 1776, appointed him their am-pansecole, or king; on which occasion the women also swore allegiance to his wife. Afterwards, he went to Europe, with the design of obtaining for the nation a powerful ally and some commercial advantages. But, on his arrival in France, he was compelled, by the persecutions of the French ministry, to enter into the Austrian service, in which he commanded against the Prussians in the battle of Habelschwerdt, 1778. In 1783, he made an attempt in England to fit out an expedition to Madagascar. He received assistance from private persons in London, and particularly from a commercial house at Baltimore, in America.
October, 1784, he set out, leaving his wife in America, and landed in Madagascar, 1785. Having there commenced hostilities against the French, the authorities in the Isle of France sent troops against him. In an action which took place May 23, 1786, he was mortally wounded in the breast by a ball. It was the last act of the events of his life in France. William Nicholson has published an English translation of it, made from the manuscript. His widow died at her estate Vieska, near Betzko, Dec. 4, 1825. Benjowsky's only son is said to have been devoured by rats in Madagascar.

Ben-Lawers; a mountain of Scotland, in the county of Perth, 4015 feet above the level of the sea; 11 miles S. George.

Ben-Loch; a mountain of Scotland, in Forfarshire, 3240 feet above the sea; 18 miles W. of Strirling.

Ben-Macduie; a mountain of Scotland, on the western confines of Aberdeenshire, 4900 feet high. It is the second highest mountain in Great Britain.

Ben-More; a mountain of Scotland, in the island of Mull, 3897 feet above the level of the sea.

Ben-Mores; a mountain of Scotland, in Perthshire, 3303 feet above the level of the sea; 20 miles W. of Crieff.

Ben-Nevis; a mountain of Scotland, in the county of Dumbarton, the highest in the island of Great Britain. It rises 4370 feet above the level of the sea. A great portion of this mountain consists of porphyry of different shades, and beautiful red granite. It also contains a vein of lead ore, richly impregnated with silver. The summit is generally covered with snow.

Benning, Levin Augustus, baron of Russian commander-in-chief, born at Rastow, in Hanover, 1743, early entered into the Russian service, and distinguished himself by great gallantry in the war against Poland, under the empress Catharine II. He acted a chief part in the conspiracy of the palace against the emperor Paul I. In 1796, he was appointed to command the Russian army which hastened to the assistance of the Prussias; but, before his arrival, the Prussians were defeated at Jena. He afterwards fought the murderous battle of Eylau (next to that of Moguisk, perhaps the most bloody in military history), and the battle of Friedland. After the peace of Tilsit, he retired to his estates. In 1813, he led a Russian army, called the army of Poland, into Saxony, took part in the battle of Leipsic, and blockaded Hamburg. After commanding the army in the south of Russia, he finally settled in his native country, and died Oct. 3, 1826. He is the author of Thoughts on certain Points requisite for an Officer of Light Cavalry to be acquainted with (Riga, 1794; Wilna, 1805).

Bennington; a post-town in a county of the same name, in Vermont, watered by a branch of the Hoosack; 37 miles N. E. Albany, 68 S. W. Windsor, 115 S. by W. Montpelier, 132 W. N. W. Boston. Lon. 73° W.; lat. 42° 42' N. Population in 1810, 2524; in 1820, 2485. It borders on New York, is situated in a good farming country, and is a place of considerable trade and manufactures. The courts for the county are held alternately at Bennington and Manchester. On mount Anthony, in this town, there is a cave containing many beautiful petrifactions.—Two famous battles were fought here, on the 16th of August, 1777, in which general Stark, at the head of 1600 American militia, gained a distinguished victory over the British.

Benno, St., of the family of the counts of Woldenberg, born at Hildesheim, in 1010, became (1028) a Benedictine monk, in the convent of St. Michael there. Henry IV (1006) made him bishop of Missia, and favored him by repeated donations of estates for his church. Nevertheless, B. took a secret part in the conspiracy of the Saxon nobles against the emperor, for which reason Henry led him away prisoner, when he passed Missia, in 1075, after the battle on the Unstrut. He was afterwards set at liberty, but several times proved faithless to the emperor. He died 1107. His bones began by degrees to work miracles; and pope Adrian VI, after many entreaties from the Saxons, as well as from the emperor Charles V, and having received large sums of money, placed him among the saints, 1523. It was thought that this canonization would tend to the promotion of the Catholic faith in Saxony. At present, the bones of St. Benno are in the city of Munich, which has chosen him for its patron.

Benserae, Isaac de, a poet at the court of Louis XIV, born, 1612, at Lyons-la-Forêt, a small town in Normandy, wrote for the stage, and composed a great number of ingenious verses for the king and many distinguished persons at court. In the first half of the reign of Louis XIV,
the court, and the followers of the court, patronised songs of gallantry, rondeaux, triolos, madrigals and sonnets, containing salutes of wit, conceits and effusions of gallantry, in the affected style then prevalent. No one succeeded so well in this art as B., who was therefore called, by way of eminence, le poète de la cour. He received many pensions for his performances, and lived at great expense. Wearing, at last, with the life which he led at court, he retired to his country-seat, Gentilly, and died 1831.

BENSON, Thomas; a printer in Fleet street, London. He and Bulmer are among the first typographical artists in England. He distinguished himself first by the edition which he printed of the English translation of Lavater's Physiognomy, London, 1789, 5 vols., 4to. The most beautiful productions of his press are Macklin's splendid edition of the English translation of the Bible (1800–18, 7 vols., folio), and Hume's History of England (1806, 10 vols., folio), both adorned with excellent copper-plates. Among his impressions of a smaller size, the editions of Shakespeare (1845, 7 vols.), and Hume (1863, 10 vols.), with masterly engravings on wood, are distinguished. He has also furnished several well-executed impressions on parchment, and first used the printing-press invented by Koenig and Bauer, for Elliotson's English translation of Blumenbach's Physiology (London, 1818).

BENTHAM, Jeremy, an English lawyer, born in 1748; never appeared at the bar, nor has he published his chief works himself. They have been arranged and translated into French by his friend M. Dumont, and printed partly in Paris and partly in London. Among them are Traité de législation, civile et pénale, &c. (Paris, 1802, 3 vols.), and Théorie des Peines et des Récouvrements (London, 1801, 2 vols.). B. is a friend of reform in parliament, and of a thorough correction of civil and criminal legislation. His Fragments on Government, in opposition to Blackstone, appeared anonymously in 1776, and with his name, London, 1823. In France, his literary labors found a better reception than in England or Germany. A small pamphlet on the liberty of the press (London, 1821) was addressed by him to the Spanish cortes, during their discussion of this subject; and, in another (Three Tracts relative to the Spanish and Portuguese Affairs, London, 1821), he refuted the idea of the necessity of a house of peers in Spain, as well as Montesquieu's proposition, that judicial forms are the defence of innocence. His latest work is the Art of Packing (London, 1821); that is, of arranging juries so as to obtain any verdict desired. His previous work, Essai sur la Tactique des Assemblées législatives, edited, from the author's papers, by Étienne Dumont (Geneva, 1815), and translated into German, contains many useful observations. His Introduction to the Principles of Morals and Legislation (London, 1823, 2 vols.) treats of the principal objects of government in a profound and comprehensive manner. Zanobelli has translated Bentham's Theory of Legal Evidence into Italian (Bergamo, 1824, 2 vols.). Among the earlier works of B. was his Defence of Usury, showing the Impolicy of the present legal restraints on the Terms of pecuniary Business (1757).

BENTIVOGLIO, Cornelio; cardinal and poet, born at Ferrara, 1658, of a family that held the highest offices in the former republic of Bologna. He early distinguished himself by his progress in the fine arts, literature, philosophy, theology and jurisprudence. While at Ferrara, he patronised the literary institutions there. Pope Clement XI made him his domestic prelate and secretary to the apostolic chamber, and sent him, in 1712, as nuncio to Paris, where, during the last years of the reign of Louis XIV, he acted an important part in the affair of the bull Unigenitus. The duke of Orleans, regent after the death of Louis, was not favorably disposed towards him; the pope, therefore, transferred him to Ferrara, and, in 1719, bestowed on him the hat of a cardinal, and employed him at first in Rome, near his own person, then as legate a latere in Romagna, &c. B. died in Rome, 1732. Poetry has occupied the leisure hours of the learned cardinal. Some sonnets composed by him are to be found in Gobbi's collection, vol. 3, and in other collections of his time. Under the name of Selvaggio Porpora, he translated the Thebaïs of Statius into Italian. He delivered several addresses before societies for the promotion of the fine arts. His discourse in defence of the utility and moral influence of painting, sculpture and architecture, delivered in the academy of design, at Rome, 1707, was reprinted by the academy of the Arcadians, in the 2d vol. of the Prose degli Artisti.

BENTIVOGLIO, Guy or Guido, celebrated as a cardinal and a historian, was born at Ferrara, in 1570. He studied at Padua with great reputation, and afterwards, fix-
ing his residence at Rome, acquired general esteem by his prudence and integrity. He was nuncio in Flanders from 1607 to 1616, and afterwards in France till 1631. His character stood so high, that, on the death of Urban VIII, in 1644, he was generally thought to be the most likely person to succeed him; but, on entering the conclave, in the hottest and most unwholesome season of the year, he was seized with a fever of which he died, aged 65 years. He had lived in a magnificent style, and was much embarrassed at the time of his death—a circumstance attributed to his canvass for the papacy. Cardinal B. was an able politician, and his historical memoirs are such as we should expect from such a man. The most valuable of these are his History of the Civil Wars in Flanders, written in Italian, and first published at Cologne, 1630, a translation of which, by Henry earl of Monmouth, appeared in 1654 (London, folio); an Account of Flanders, during his legation, also translated by the earl of Monmouth (folio, 1629); his own Memoirs; and a collection of letters, which are reckoned among the best specimens of epistolary writing in the Italian language (an edition of which was published at Cambridge in 1727). All these, except the Memoirs, have been published together at Paris, 1645—1658, folio, and at Venice, 1658, 4to.

Bentley, Richard, a celebrated English divine and classical scholar, distinguished as a polemical writer, in the latter part of the 17th century, was born in 1662. His father is said to have been a blacksmith. To his mother, who was a woman of strong natural abilities, he was indebted for the first rudiments of his education. At the age of 14, he entered St. John's college, Cambridge. In 1682, he left the university, and became usher of a school at Spalding; and this situation he relinquished, in the following year, for that of tutor to the son of doctor Stillington, dean of St. Paul's. He accompanied his pupil to Oxford, where he availed himself of the literary treasures of the Bodleian library, in the prosecution of his studies. In 1684, he took the degree of A.M. at Cambridge, and, in 1685, obtained the same honor at the sister university. His first published work was a Latin epistle to doctor John Mill, in an edition of the Chronicle of John Malala, which appeared in 1691. It contained observations on the writings of that Greek historian, and displayed so much profound learning and critical acumen, as excited the sanguine anticipations of classical scholars from the future labors of the author. Doctor Stillington, having been raised to the bishopric of Worcester, made B. his chaplain, and, in 1692, collated him to a prebend in his cathedral. The recommendation of his patron and of bishop Lloyd procured him the honor of being chosen the first preacher of the lecture instituted by the celebrated Robert Boyle for the defence of Christianity. The discourses against atheism, which he delivered on this occasion, were published in 1694; they have since been often reprinted, and translated into several foreign languages. In 1699, he was appointed keeper of the royal library at St. James's—a circumstance which incidentally led to his famous controversy with the hon. Charles Boyle, afterwards earl of Orrery, relative to the genuineness of the Greek Epistles of Phalaris, an edition of which was published by the latter, then a student at Christ-church, Oxford. In this dispute, Bentley was completely victorious, though opposed by the greatest wits and critics of the age, including Pope, Swift, Garth, Atterbury, Aldrich, Dodwell, and Conyers Middleton, who advocated the opinion of Boyle with a degree of warmth and liberality which appears very extraordinary. But the motives of B.'s assailants were various. Swift, in his Battle of the Books, took up the cudgels against him in defence of his friend sir William Temple; doctor Garth attacked him probably from mere wantonness, in the well-known couplet in his Dispensary:

So diamonds owe a lustre to their foil,
And to a Boyle as we owe a Boyle.

Some were actuated by personal considerations, among whom was Conyers Middleton, whose persevering hostility to B., during a long series of years, seems to have originated from the latter having applied to the former, when a young student in the university, the contemptuous epithet of fiddling Conyers, because he played on the violin. It does not appear who was the author of a punning caricature, which was produced on this occasion, representing B. about to be thrust into the brazen bull of Phalaris, and exclaiming, "I had rather be roasted than Boyled." In 1695, B., who had three years before been created D. D., published his Dissertation on the Epistles of Phalaris, in which he satisfactorily proved that they were not the compositions of the tyrant of Agrigentum, who lived more than five centuries before the Christian era, but
were written by some sophist, under the borrowed name of Phalaris, in the declining age of Greek literature. Soon after this publication, doctor B. was presented by the crown to the mastership of Trinity college, Cambridge, worth nearly £1000 a year. He now resigned the prebend of Worcester, and, in 1701, was collated to the archdeaconry of Ely. His conduct as head of the college gave rise to accusations against him from the vice-master and some of the fellows, who, among various offences, charged him with embezzling the college money. The contest was much protracted, and occasioned a lawsuit, which was decided in the doctor's favor, about twenty years after. In 1711, he published an edition of Horace, at Cambridge, in 4to., which was reprinted at Amsterdam; and, in 1713, appeared his remarks on Collins's Discourse on Free-thinking, under the form of a Letter to F. H. [Francis Hare] D. D., by Philemon Lipsiensis. He was appointed regius professor of divinity in 1716; and, in the same year, issued proposals for a new edition of the Greek Testament—on undertaking for which he was admirably qualified, but which he was prevented from executing, in consequence of the annual versions of his determined adversary; Middleton.

In 1717, George I, visiting the university, nominated by mandate, as is usual on such occasions, several persons for the doctor's degree in divinity. It was the duty of B., as professor, to perform the ceremony called creation; previous to which he made a demand of four guineas from each candidate beyond the usual fees, absolutely refusing to create any doctor without payment. Some submitted; but others, among whom was Middleton, withstood the demand, and commenced a prosecution against the professor before the vice-chancellor, who, deciding in favor of the complainants, first suspended B., and subsequently degraded him from his honors, rights, and offices in the university. These proceedings were, after considerable litigation, annulled by the court of king's bench; and the doctor, in 1728, was restored to all his former honors and emoluments. In 1726, he published an edition of Terence and Phaedrus; and his notes on the comedies of the former involved him in a dispute with bishop hare, on the metres of Terence, which provoked the sarcastic observation of sir Isaac Newton, that "two dignified clergymen, instead of minding their duty, had fallen out about a play-book." The last work of doctor B. was an edition of Milton's Paradise Lost, with conjectural emendations, which appeared in 1732. This added nothing to his reputation, and may, in one word, be characterized a failure. He died at the master's lodge at Trinity, July 14, 1742, and was interred in the college chapel. As a scholar and a critic, B. was very distinguished. The best informed of his opponents respected his talents, while they were leading him with classical abuse, which he did not fail to return with interest. Now that the prejudices excited apparently by his personal conduct, have subsided, his preeminence in that species of literature which he cultivated, is universally acknowledged. The celebrated German philologist J. A. Wolf wrote an excellent biography of B. in the Analecta, (vol. I. Berlin.)

BENTZEN-STERNAU, Charles Christian, count, born at Mentz, 1750, was, in 1812, president of the ministry for the department of the interior in the former grand-duchy of Frankfort, and now lives in the neighborhood of Hanau. He is one of the most humorous writers of our time, and, in the character of his writings, resembles J. Paul Richter. His fame was established by the Golden Calf (a biography, 1802—1804, 4 vols. in the first edition). B. has written much, and all his productions display wit, richness of imagery, and nice observation of character.

BENZENBERG, John Frederic, born, May 5, 1777, at Scholler, a village between Elberfeld and Dusseldorf, studied theology in Marburg, and, in Göttingen, mathematics and natural philosophy. He rendered much service to the latter science, by his observations on the fall of bodies, and the motion of the earth, which he began by experiments in the steeple of the church of St. Michael, in Hamburg, and continued in the shaft of a mine, in the county of Mark, having a depth of 206 feet. He was appointed, in 1805, professor of astronomy and natural philosophy, by the then elector of Bavaria, in Dusseldorf. At a later period, he has written much in favor of the Prussian government; but the influence of his political pieces has not been so great as that of his scientific observations above-mentioned. B. lives now retired, near Crefeld, in the neighborhood of the Rhine.

BENZOIC ACID is obtained by the application of a moderate heat to the balsam of Peru; it rises in vapor, and condenses in slender prisms, which are white and brilliant. It has a peculiar aromatic odor. When heated on burning fuel, it inflames

BENTLEY-BENZOIC ACID. 1 6
and burns with a clear yellow light. It unites with alkalies and earths, forming salts called benzates, which are unimportant, except the benzate of iron, which, from its insolubility, affords a convenient means of separating iron from its solutions, so as to ascertain its quantity, and also of making it free from manganese, which forms with the acid a soluble salt.

(See Benzoin.)

Benzoin is a solid, fragrant, vegetable substance, of a reddish-brown color. In commerce, there are two varieties distinguished, viz. the common and the myrrh-douidal; the latter containing whitish tears, of an almond shape, diffused through its substance. It is imported from Sumatra, Siam and Java, and is found also, in South America. Benzoin is obtained from the tree called styrox benzoin, and perhaps from some others. On making incisions into the bark, it flows out in the form of a balsamic juice, having a pungent taste, and an agreeable odor. The pure balsam consists of two principal substances, viz. a resin, and a peculiar acid termed benzic (q.v.), which is obtained from the mass by sublimation.

It is soluble in water. This acid is found, also, as a constituent principle in storax and the balsams of Tolu and Peru; it exists in the大宗商品 in a crystalline form, on the pods of the vanilla. Benzoin is not soluble in water, but is readily dissolved in alcohol, by the aid of a gentle heat. The tincture thus made is used in pharmacy. A small quantity of this tincture, dropped into water, forms a white, milky fluid, which is used in France as a cosmetic, under the name of Đăng virginale. The gum is a principal ingredient of the common court plaster. The acid, as well as the gum, is employed in medicine; they are stimulating, and act more particularly upon the pulmonary system; whence they are used in asthma and chronic catarrh.

Beranger, Pierre, Jean de; a lyric poet, of that class which, in modern literature, is almost peculiar to the French, called chansonnier; born Aug. 19, 1782; educated by his grandfather, a poor tailor; was destined for the printer's business, when his talents for poetry excited attention. Lucien Bouchut became the patron of the amiable poet, who gave zest to his social songs by allusions to the politics of the day. The imperial censors spared him; the royal suppressed his songs, which, for this reason, were read and sung with the greater eagerness. In 1822, he was condemned to imprisonment for 13 months, and deprived of a small office in the royal university. This process increased his reputation. The last edition of the Chansons de P. J. de Beranger, (1 vol., Paris, 1822, 24mo.) contains the happiest specimens of wit, humor, gayety, satire, and flashes of sublime poetry, which place him by the side of the most distinguished chansonniers of France—Hœl, Collé and Yanard.

B. ascends with singular ease from the lower sphere of poetry to a high and noble enthusiasm, and the rapidity of the transition produces a striking effect. We would refer the reader to his beautiful verses entitled Mon Ami. He was never a flatterer of Napoleon, when money or titles were to be gained by flattery, and has never reviled him since reviling has been a means of rising. He is a truly national poet, and Benjamin Constant has said of him, Beranger fait des odes sublimes, quand il ne croit faire que de simples chansons (Beranger makes sublime odes, when he thinks he is making simple songs). Dec. 11, 1828, B. was sentenced, by the court of correctional police, to pay 10,000 francs (about £300 dollars), and to undergo nine months' imprisonment, for having attacked the dignity of the church and of the king in his poems the Guardian Angel, Coronation of Charles the Simple, and Gerontocracy. His songs are at once a storehouse of gayety and satire, and a record of the history of his time; and happy is that nation which can boast of so excellent and national a poet. He often sings of wine, and we recollect no other great modern poet who has written a series of songs on this subject, except Goethe, in his Buch der Schenken, one of the 12 books of the Westöstlicher Divan. The difference between them is striking. Goethe mixes philosophical reflections and praises of the liquor with a boldness which borders on temerity, while B. is gay almost to extravagance. We doubt whether B's poems in translation would ever give a fair idea of the original, because their beauty consists, in a great measure, in the delicacy and pungency of the expression, which could hardly be transferred to another language.

Berbers; the name of a people spread over nearly the whole of Northern Africa. From their name the appellation of Barbary is derived. (See Barbary States.) They are considered the most ancient inhabitants of that country. Their different tribes are scattered over the whole
space intervening between the shores of
the Atlantic and the confines of Egypt;
but the different branches of mount Atlas
are their principal abode; while to the
south they are bounded by the Negro
states on the edge of the great Sahara, or
Desert. For most of what we know of
them, we are indebted to Leo Africanus
and the Arabian writers, whose state­
ments are corroborated by Horenmann
(q. v.) and captain Lyon, who have visited
them in our own days. Much informa­
tion concerning them is yet wanted.
Where they live by themselves, and are
not spread among the Arabsians and other
people of the Barbary states, they man­
ifest very little cultivation,—warlike nomi­
ades, without written laws,—and ex­
hibit the chief traits which characterize
all the African nations. They are ex­
tremely abstinent. Their language is a
matter of much curiosity for the philolo­
gist. It has many points of resemblance
with the Teutonic languages. (See Ade­
lung’s Mithridates, vol. 3, 5th part, page
45 et seq., and the article, in volume 2,
new-series, p. 458 et seq. of the Trans­
actions of the American Philosophical So­
ciety.) We know, from trustworthy ac­
counts, that Mr. Hodgson, attached to the
American consulate-general at Algiers,
had sent to an eminent scholar of the U.
States communications concerning the
Berber language, which will add much
to the knowledge already possessed of
that dialect. (For further information re­
specting the Berbers, see Lyon’s Travels
in Northern Africa, Lantiè’s translation
of Horenmann’s Travels in Africa, and
almost all the works which treat of the
north of Africa.) It appears from the
Berber language, that the first inhabi­
tants of the Canary islands were of the Berber
race.

BERBICE; a district of Guiana, formerly
belonging to the Dutch, but ceded to
Great Britain in 1814; watered by the
river Berbice, the Canje, and others. It
extends from Aharry creek, on the west,
to Commarine river on the east, along the
cost, about 150 miles. The towns are
New Amsterdam, the capital, and Fort
Nassau. The productions are sugar, rum,
cotton, coffee, cocoa and tobacco. The
coast is marshy and the air damp. Popu­
lation, in 1815, 20,050; of whom 550
were whites, 240 people of color, and
25,109 slaves.

BERCHTOLD, Leopold, count, born in
1725; devoted his life to the relief of the
wretched. He spent 13 years in travel­
ing through Europe, and 4 in travelling
through Asia and Africa, to alleviate hu­
man misery. The results of his experi­
ence are contained in his Essay to direct
and extend the Inquiries of patriotic
Travellers (London, 1789, 2 vols.) He

work Frauenreith, and the aqueducts
which conduct the salt water to the works
called Reichenhall. The rock-salt does
not appear here in large, solid masses,
but in small pieces mixed with clay.
Fresh water is let into the mines, and,
having been saturated with salt, is carried
into large reservoirs, from which, at the
works of Frauenreith, 130,000 cwt. of salt
are annually obtained. A large part of
the water is conducted to Reichenhall.
At this place a large salt-spring was dis­
covered in 1613, and, on account of a
deficiency in wood required in the prepa­
ration of the salt, the water was conveyed,
by means of an aqueduct, to Traunstein,
20 miles distant. Another aqueduct, 35
miles long, from Reichenhall to Rosen­
heim, was completed in 1809, and, in
1817, these were again brought into
communication with B. in a most admira­
table way. The first machine, which
rises the brine coming from B. 50 feet
high, is near this place. From hence, it
runs in pipes 3500 feet, with a fall of 17
feet only, into the second reservoir. A
hydraulic machine, invented by von
Reichenbach, here lifts the salt water
511 feet high, in iron pipes 934 feet long.
The water then runs in pipes 7480 feet,
with 87 feet fall, to a valley, over which
it is led in iron pipes, 1233 feet long, and,
after running 12,073 feet farther, it falls
into the third reservoir. Here is a second
hydraulic machine, which lifts the water
to a perpendicular height of 1218 feet,
in pipe 3390 feet long; and hence it flows,
in pipes 75,000 feet long, to Reichenhall.
The pipes running from B. to Reichen­
hall amount to 104,140 feet. From
Reichenhall to Siegsdorf there is but one
aqueduct for the salt water intended for
Traunstein and Rosenheim, 94,800 feet
long. From Siegsdorf to Traunstein
the brine flows without an aqueduct.
In Traunstein, 140,000 cwt. are annually
produced. The other part of the brine
flows in pipes, 75,000 feet long, to Rosen­
heim, which produces annually 150,050
cwt. of salt. The water required to work
the numerous machines is brought from
places many of which are 16—19,060
feet distant.

BERCHTOLD, Leopold, count, born in
1725; devoted his life to the relief of the
wretched. He spent 13 years in travel­
ing through Europe, and 4 in travelling
through Asia and Africa, to alleviate hu­
man misery. The results of his experi­
ence are contained in his Essay to direct
and extend the Inquiries of patriotic
Travellers (London, 1789, 2 vols.) He
wrote several pamphlets on the means of reforming the police, which he caused to be printed in different European countries, at his own expense, and to be distributed gratis. His prize-questions gave rise to many pamphlets and treatises on the means of saving the drowned and the seemingly dead. He offered a prize of 1000 florins for the best treatise on beneficent institutions, and was himself the founder of many. From 1795 to 1797, he travelled through Asiatic and European Turkey, chiefly for the purpose of counteracting the ravages of the plague. At a later period, he was engaged in making vaccination more extensively known. During the famine that raged in the Reisengelirge (Giant mountains), from 1805 to 1806, he procured corn and other provisions from distant regions. He fitted up the palace Buchlovitz on his estate Buchlovitz in Moravia, as an hospital for the sick and wounded Austrian soldiers. Here this patriot and philanthropist was carried off by a contagious nervous fever, July 26, 1809.

Bercy; a village on the Scine, at its confluence with the Marne, in the neighborhood of Paris. The Parisian wine-merchants have here their stores of wine, wine-vinegar, distilled liquors, &c.; so that the intercourse between B. and the capital is extremely active. It is increased also by several important tanneries, paper-mills, and distilleries. A large park, Le grand Bercy, was built by Levas at the close of the 17th century. The park which belongs to it, containing 900 acres, was planted by Lenotre. M. de Calonne was for some time in possession of it. The present proprietor is M. de Nicolai.

Berengarius of Berenger, of Tours, a teacher in the philosophical school in that city, and in 1040, archdeacon of Angers, is renowned for his philosophical acuteness as one of the scholastic writers, and also for the boldness with which, in 1050, he declared himself against the doctrine of transubstantiation, and for his consequent persecutions. He was several times compelled to recant, but always returned to the same opinion, that the bread in the Lord's supper is merely a symbol of the body of Christ, and in which he agreed with the Scotchman John Erigena (called Secula). The Catholics ranked him among the most dangerous heretics. He was treated with forbearance by Gregory VII, but the scholastics belonging to the party of the great Lanfranc, archbishop of Cantebury, were irritated against him to such a degree, that he retired to the isle of St. Cosmas, in the neighborhood of Tours, in the year 1088, where he closed his life at a great age, in pious exercises (1088). On the history of this controversy, which has been very much misrepresented by the Benedictines, new light has been shed by Lessing, in his Berenger (1770), and by Stanfurd, who has likewise published the work of B. against Lanfranc. This B. must not be confounded with Peter Berenger of Poitiers, who wrote a defense of his instructor Abelard.

Berenkroft, Francis Leopold von; one of the first of the writers by whom the military art has been founded on clear and certain principles. He was a natural son of prince Leopold of Dessau, and was born in 1755. In 1765, he became the adjutant of Frederic II. After the seven years' war, he lived at Dessau. He died in 1814.

Berenice (Greek, a bringer of victory). 1. This was the name of the wife of Mithridates the Great, king of Pontus. Her husband, when vanquished by Lucullus, caused her to be put to death (about the year 71 B.C.), lest she should fall into the hands of his enemies. M. de Calonne was for some time in possession of it. The present proprietor is M. de Nicolai.

Beresford, William, baron. 2. This was the name of the wife of Herod, brother to the great Agrippa, her father, at whose request Herod was made king of Chalcis, by the emperor Claudius, but soon died. In spite of her dissolute life, she instuted herself into the favor of the emperor Vespasian and his son Titus. The latter was at one time, on the point of marrying her. 3. The wife of Polynymo Eregerotes, who loved her husband with rare tenderness, and, when he went to war in Syria, made a vow to devote her beautiful hair to the gods, if he returned safe. Upon his return, B. performed her vow in the temple of Venus. Soon after, the hair was missed, and the astronomer Comon of Samos declared that the gods had transferred it to the skies as a constellation. From this circumstance, the seven stars near the tail of the Lion are called comam Berenices (the hair of Berenice).

Beresford, William, baron; duke of Elzas and marquis of Campo Mayor, for the alacrity and courage which he displayed in the war of Portugal against France, is ranked among the distinguished generals of Great Britain. He organized the Portuguese army, and also the militia of the country, in so excellent a manner, that they could vie with the
best soldiers of the combined armies in the wars of the peninsula. In 1810, Beresford gained a victory over Soult, at Albuera. In 1812, he commanded under Wellington, and took an important part in the victories at Vittoria, Bayonne and Toulose. He made his entrance into Bordeaux, March 13, 1814, with the duke of Angoulême. May 6, he was raised to the rank of baron by the king of England, and, soon after, sent to Brazil, whence he returned to England in 1815. The prince regent of Portugal made him generalissimo of the Portuguese armies. He had scarcely arrived at Lisbon, when he was sent, by the English government, on an important mission to Rio Janeiro. The rigor with which he punished a conspiracy of general Freyre against the British army and the regency, in Lisbon (1817), rendered him odious to the Portuguese military. He was, therefore, dismissed by the cortes in 1820. He then went again to Brazil, afterwards to England, and, in Dec., 1824, appeared anew in Lisbon, at the head of the English forces sent to aid in quelling the rebellion.

Berșizia: a river in the Russian province of Minsk, rendered famous by the passage of the French army under Napoleon, Nov. 25 and 26, 1812. Admiral Tschitschakoff, with the Moldavian army, forced his way from the south, to join the main army, which, after Borzoff had been retaken, was to assist the army led by Wigenstein from the Dwina, and, in this manner, cut off Napoleon from the Vistula. Napoleon was, therefore, obliged to make the greatest efforts, notwithstanding immense difficulties occasioned by the nature of the country, the climate, and the critical situation of his troops, to reach Minsk, or, at least, the B., and to pass it earlier than the Russians. To effect this, it was necessary to sacrifice a great part of the baggage and artillery, Nov. 25. After the advanced guard of the Moldavian army had been repelled by Borzoff, by Oudinot, and the bridge there burnt by them, early in the morning of Nov. 25, two bridges were built near Sandun, about two miles above Borzoff, an undertaking the more difficult, because both banks of the river were bordered by extensive morasses, covered, like the river itself, with too not sufficiently strong to afford passage to the army, while other passes were already threatened by the Russians. Scarcely had a few corps effected their passage, when the greater part of the army, unarmèd and in confusion, rushed in crowds upon the bridges. Discipline had long before disappeared. The confusion increased with every minute. Those who could not hope to escape over the bridges sought their safety on the floating ice of the Berșiza, where most of them perished, while many others were crowded into the river by their comrades. In this fatal retreat, the duke of Reggio (Oudinot) led the advanced guard, with the Poles under Dombrowsky in front; the rear guard was formed by the corps of the duke of Belluno. Nov. 27, at noon, the dear-bought end was gained, and the army, leaving the road to Minsk, took that of Wilna, with the hope of providing for their necessities in Wilna. Besides the multitudes who were obliged to remain beyond the B., the division of Parteauers, which formed the rear guard, was also lost. It was entrusted with the charge of burning the bridges in its rear, but it fell into the hands of the enemy. According to the French bulletin, only a detachment of 2000 men, who missed their way, was taken; according to the Russian accounts, the whole corps, 7500 men and 5 generals.

Berg; a duchy of Germany; bounded on the north by the duchy of Cleves, on the east by the county of Mark and Westphalia, on the south by the Westphalian, and on the west by the Rhine. It belonged, formerly, to the elector of Bavaria, but has been included, since 1815, in the grand-duchy of the Lower Rhine, which belongs to Prussia. It contains 1186 square miles, with 283,000 inhabitants. There are mines of iron, copper, lead and quicksilver; but the principal objects of attention are the manufactures, which render it one of the most populous and flourishing countries in Germany: of these, the principal are iron, steel, linen, woollen, cotton and silk. The extent of the manufactures of B. is, in a great measure, owing to the multitude of skilful workmen whom the fury of the Spaniards, in the war against the Netherlands, forced to leave their country. The richest fled to London and Hamburg, the poorer sort, which included a great proportion of the manufacturers, to the neighboring Berg. At a later period, when Louis XIV revoked the edict of Nantes, many of the most industrious of the French Protestants fled also to this duchy, which thus became the most manufacturing part of Germany. Elberfeld is the most important of the manufacturing places of B. Another reason of the great prosperity of this country is, that it
has been under the government of rich princes; and the smallness of its territory has often enabled it to remain a long time neutral, when all the other German states were devastated by war. The duchy of B. continued in the possession of the electors of Bavaria until 1802, when it was ceded to France, and bestowed by Napoleon on his brother-in-law Murat, under the title of the grand-duchy of Berg. There was at the same time added to it part of Cleves, the counties of Homburg, Bentheim-Steinfurt, Iphofen, Nassau-Dietz, Dillenburg, Halunke, and a number of lordships and scattered bailiwicks and towns. On Murat's receiving the kingdom of Naples, Napoleon named his nephew Napoleon Louis, eldest son of the king of Holland, hereditary grand-duke of Berg, with the condition that the country should be under the immediate management of the French government until the young prince should be of age. At the same time, the Prussian part of Munster and the county of Mark were annexed to it, and the whole was divided into the departments of the Rhine, the Ems, the Roer and the Sieg, having a population of 878,000 on 9308 square miles. At the congress of Vienna, in 1815, the whole was given to the king of Prussia.

BERG, Book oy. (See Symbolic Books.)

BERGAMO, capital of the district of Bergamo (1150 square miles and 300,000 inhabitants), in the Lombardo-Venetian kingdom, is situated on hills between the rivers Brembo and Serio, in the Lombardo-Venetian kingdom, is situated on hills between the rivers Brembo and Serio, has a castle within the city, and another, called la cappa, without it, besides two suburbs encircled by walls, and four others that are open, containing together 30,000 inhabitants. Amongst many distinguished men born here, is the famous Traboschi, the historian of Italian literature. B. exported, formerly, more than 5000 bales of silk, which produced, on an average, £150,000 sterling yearly. In 1428, the Bergamesco put themselves under the republic of Venice. In 1796, Bonaparte took B., and it was subsequently made the capital of the department of the Serio, in the kingdom of Italy. Lon. 49° 36' E.; lat. 43° 42' N. The city is the seat of a bishop and of the authorities of the district. It has an academy of painting and sculpture, a museum, an ethnium, a public library, several academies, many manufactories, especially of silk. There is, also, a small Protestant congregation in this city.

BERGAMOT are a variety of citron. It is said to have been produced at first by grafting a citron on the stock of a bergamot pear-tree. The fruit has a fine taste and smell, and its essential oil is in high esteem as a perfume.

BERGASSE, Nicholas; a statesman and author, born at Lyons, in 1750, where he was an advocate. He afterwards became advocate to the parliament of Paris. Here he showed his talents in the famous lawsuit of Beaumarchais (q. v.) with the banker Kornmann. Upon the breaking out of the revolution, he was chosen a member of the states-general by the city of Lyons, but abandoned his seat, even earlier than Mourier and Lally-Tollendal, a step which, both in his case and theirs, was universally condemned. During the reign of terror, his life was saved only by the events of the 9th of Thermidor. Since that time, B. has devoted himself to metaphysical speculations. He is distinguished among the modern French idealists by a splendid style and richness of ideas. He is the author of Morale réfléchisee, De l'influence de la Volonté et sur l'Intelligence, and De la Propriété (1807). B. was also one of the most zealous adherents to the doctrine of Mesmer respecting animal magnetism. During the abode of the Russian emperor in Paris, 1815, this monarch paid him a visit.

BERGEN; a bishopric in the kingdom of Norway, that borders on Aggerhus to the east, Drammen to the north, Christiania to the south, and the German ocean to the west; lon. 4° 43'-4° 53' E.; lat. 59° 30'-58° 52' N. It contains about 13,000 square miles, 57 parishes, 180 churches and chapels, 137,700 inhabitants, or nearly 10 to a square mile. Bergen, the fortified capital, with a citadel (Bergenhus), the largest city in Norway, is situated in lon. 5° 21' E., lat. 60° 10' N., 180 miles N. of Stavanger, 270 S. W. of Drammen, at the bottom of the bay of Wang, that stretches far into the country, forming a safe harbor, surrounded by high and steep rocks. The entrance, however, is dangerous. The wall of rocks also makes the access to the city on the land side difficult. The climate is comparatively mild, on account of the sheltered situation of the town. It is remarkable for frequent fogs. B. is well built, yet several streets are crooked and uneven, on account of the rocks. The city contains 2300 houses, 15,000...
inhabitants, 1 German and 3 Danish churches; it has a bishop, a classical school, a seminary, founded by bishop Pontoppidan, for 12 students, who are instructed gratis in the higher branches of literature, a naval academy, an hospital for such as are infected with the scurvy, which is common among the fishermen, arising from their food, principally smoked or salt meat and fish; besides other useful institutions. The inhabitants of the middle coast of Norway bring their boards, masts, laths, fire-wood, tar, train-oil, hides, &c., and particularly dried fish (stock-fish) to B., to exchange them for corn and other necessaries, brought thither by the English, Dutch and Germans. B. thus carries on its commerce with but 100 vessels of its own. In the year 1445, a factory and several warehouses were established here by the Hanseatic cities of Germany, and the German traders, as they called themselves, enjoyed, for some time, the protection of the Hanseatic league. The German factory consisted of about 60 warehouses. The roads leading into the interior of the country are frequented only in the winter, when they are possible in sleds. B. is the native place of the poet Holberg. Bergen is also the name of other places; amongst them is, 1, a town in the Netherlands, a post of some consequence in the wars of 1739 and 1814.—2. A town in the electorate of Hesse. A bloody battle was fought here, April 13, 1739, between the French and allies, in the seven years' war, in which the former were victorious. It is three miles N. E. from Frankfurt.—3. The capital of the island of Rügen, in the Baltic, now subject to Prussia.—4. A small island in the Indian ocean, 60 miles W. of Sumatra; lat. 3° 20' S.

Bergen, Louis von, was born in Oldenburg, where he held a high office in the administration. When the Russians approached, in 1813, the citizens of Oldenburg took up arms. The French magistrates fled, but not until they had appointed a committee of regency, of which von Berger and Fink were members. This committee was afterwards summoned before a court-martial in Bremen, in which general Vandamme presided, and these two excellent men were condemned to death, though their accuser had only proposed their imprisonment. They were shot, April 10, 1813. The clearness, firmness and power of language, with which von Berger exposed this mock-trial, is well described in the Murder of Fink and Berger, written by Gildemeister of Bremen. The remains of the two patriots are deposited in Oldenburg.

Bergerac; a town of France, in the department of the Dordogne, 48 miles E. of Bordeaux, which gives the name to an agreeable French wine, cultivated on the banks of the Dordogne. There is a white and a red sort. In France, it is sometimes also called petit Champagne.

Berghem, Nicholas, born at Harlem, in 1624, received his first instruction in painting from his father, Peter of Harlem, who was a very indifferent artist. He then continued his studies under van Goyen, and the elder Weenix. It is related, that once, when pursued by his father, he fled into the workshop of van Goyen, who, to protect him, called to his pupils, "Berg hem" (conceal him): this, it is said, occasioned his new name. Love of his art, and the great demand for his paintings, as likewise the avarice of his wife, prompted him to labor with extreme assiduity. To buy engravings, of which he was very fond, he was often compelled to borrow money from his students, which he could only refund by deceiving his wife in regard to the price of his paintings. In this manner he obtained a rich collection. B.'s landscapes and representations of animals adorn the most celebrated galleries. The distinguishing characters of the pictures of B. are the breadth and just distribution of the lights, the grandeur of his masses of light and shadow, the natural ease and simplicity in the attitudes of his figures, the brilliancy and harmony as well as transparency of his coloring, the correctness and true perspective of his design, and the elegance of his composition. Although he hardly ever left his workshop, yet he had closely observed nature, during a long residence in the palace of Bentheim. He died at Harlem, 1683. Charles Dujardin and Glauber were among his pupils. At the auction of P. de Smet's collection of paintings, Amsterdam, 1810, four of B.'s were sold for 800, 1000, 1025, 2500 Dutch guilders.

Bergmann, Torbern Olof, a natural philosopher and chemist, born at Catharineberg, in the Swedish province of West Gothland, March 9, 1735, obtained, after many difficulties, the permission of his family to devote himself entirely to the sciences. At that time, disciples flocked from all quarters to Linnaeus at Upsal. They were joined by B., in 1752, who, by his acuteness and his discoveries, which were facilitated by his attainments in geometry and physics, excited the no-
BERGMANN—BERKELEY.

tice of this great man. In 1758, he became doctor of philosophy and professor of physics at Upsal. Upon the resignation of the celebrated Wallerius, B. was a candidate for the professorship of chemistry and mineralogy. His competitors charged him with ignorance of the subject, because he had never written on it. To refute them, he shut himself up for some time in a laboratory, and prepared a treatise on the manufacture of alum, which is still considered as a standard work. In 1767, he became professor of chemistry, and devoted himself with ardor to this science. He invented the preparation of artificial mineral-waters, and discovered the sulphuretted hydrogen gas of mineral springs. We are indebted to him for a knowledge of the characters which distinguish nickel from other metals. On a number of minerals he made chemical experiments, with an accuracy before unexampled. He published a classification of minerals, in which the chief divisions are based on their chemical character, and the subdivisions on their external form. In preparing this work, he was much aided by his former discovery of the geometrical relations between different crystals of the same substance, which may be deduced from one primitive form, and are produced by the aggregation of similar particles, according to fixed and obvious laws. His theory of the chemical relations is still esteemed, and, if it has received some new developments from the further researches of Berthollet, it has not been overthrown. The order of Gustavus Vasa was bestowed on B. He declined the invitation of Frederick the Great to remove to Berlin. He died, exhausted by his exertions, in 1784, in the 40th year of his age. Among his works, the first place is due to Oeconomy Phys. et Chem. (Stockholm, 1778, 3 vols.), and Physical Description of the Globe.

BERNSTRASE. [Germ., mountain road]; a fertile tract of land on the right of the Rhine, lying west of the Odenwald and Molbins, and forming a beautiful road, about 30 miles in length, planted with walnut and chestnut-trees and vines. It extends from Darmstadt to the convent of Neuburg, about a mile distant from Heidelberg. All travellers on the Rhine are delighted with this road.

BERKELEY, doctor George; bishop of Cloyne, in Ireland; celebrated for his ideal theory. He maintains, that the belief in the existence of an exterior material world is false and inconsistent with himself; that those things which are called sensible material objects are not external, but exist in the mind, and are merely impressions made on our minds by the immediate act of God, according to certain rules termed laws of nature, from which he never deviates; and that the steady adherence of the Supreme Spirit to these rules is what constitutes the reality of things to his creatures; and so effectually distinguishes the ideas perceived by sense from such as are the work of the mind itself or of dreams, that there is no more danger of confounding them together on this hypothesis than on that of the existence of matter. He was born at Kilcrin, Ireland, in 1684; became fellow of Trinity college, Dublin, in 1707; travelled in Italy as far as Leghorn, in 1713 and 1714, and, at a later period, accompanied Mr. Ashe, son of the bishop of Clogher, on a tour through Italy, Sicily and France. In 1721, he was appointed chaplain to the lord lieutenant of Ireland, the duke of Grafton. He appeared with much applause as an author before he was 20 years old. His works on philosophy and mathematics (among which his Theory of Vision, published in 1700, is the most brilliant proof of the author's acuteness) procured him a wide-spread fame. By a legacy of Mrs. Vanhomrigh, the celebrated Vanessa, who has become so generally known through her love to Swift, his fortune was considerably increased. In 1724, he was promoted to the deanship of Derry, and resigned his fellowship. He now published his Proposals for the Conversion of the American Savages to Christianity by the Establishment of a College in the Bermuda Islands. The project was very favorably received, and persons of the first rank raised considerable sums by subscription to aid it; and B., having resigned his prebendary, set sail for Rhode Island, with several other persons of similar views, to make arrangements for carrying on his college. The resistance of parliament, which had been promised, not being afforded, his undertaking miscarried, after he had spent seven years and a considerable part of his fortune in his efforts to accomplish it. He afterward wrote numerous philosophical, religious and political-economical works. Towards his 60th year, he was attacked by a nervous colic, which he attempted to cure by the use of tar-water, whereby he was induced to publish two treatises on the utility of this water. He died suddenly at Oxford, in 1733.
BERLIN; the capital of the Prussian dominions; principal residence of the king, and seat of the highest councils of the kingdom; situated in the province of Brandenburg, on the Spree, 127 feet above the level of the sea; lon. 13° 22' E.; lat. 52° 31' N.; one of the largest and handsomest cities of Europe. It is about 13 miles in circumference, and consists of 5 towns—Berlin Proper, Köln, or Cologne, on the Spree; Friedrichswerder, Neuwied, or Dortmunderstadt and Friedrichstadt; and 5 suburbs—Louisenstadt, the King's suburb, Spandau, and Stralau, and, outside of the walls, Oranienburg suburb. B. has 22 squares and market-places, 13 gates, 27 parish churches, 37 bridges, &c. In the year 1817, there were 7133 houses, including the churches, the other public buildings (174), the manufactories (61), the stables and barns (483). At the close of the year 1825, B. contained (the military included) 220,000 inhabitants, among whom were about 3700 Jews; 4000 Catholics, and more than 10,000 Calvinists. 1. Berlin Proper, consisting of 39 streets, was built in 1163, by margrave Albert the Bear. It received its name from the wildness of the country, and was settled by emigrants from Holland. It contains the royal post-office, the town-house, the general military academy, the academy for cadets, the royal school of the gray convent, that of Joachimsthal, the Lutheran parish church of St. Nicholas (the oldest church in B.), the Frederic orphan asylum (established in 1818, for 1000 orphans), with a church, and a royal institution for vaccination (where, since 1802, 25,322 children, beside adults, have been vaccinated gratuitously), the synagogue of the Jews, the new market, and many other public buildings. The suburbs of B., taking the name in its most limited sense, are, the King's suburb (Königsvorstadt), containing the new theatre, where the famous Mile. Fontaine performed before she went to Paris; the suburb of Spandau, where are the royal palace Monbijou, the veterinary college, the great hospital La Charité, with which a clinical institution is connected (numbering, in 1816, 5144 patients, among whom were 419 with mental disorders), the new royal mint, &c. and, finally, Stralau. Outside of the walls, the Rosental-suburb, or Neuwoigtal, is situated. Before the Oranienburg gate are the iron foundry, where cast-iron ware, of every description, is made; the royal hospital of invalids, which receives upwards of 1000 inmates, officers, soldiers, women and children—2. Köln, or Cologne, on the Spree, which received this name when it was built from the Kölngen (piles), on which the Vandals (Wenden) driven out by Albert the Bear, had built their huts in the midst of bogs and morasses, contains 25 streets, enclosed by two branches of the Spree; a bridge 100 feet long, of stone, resting upon 3 arches, and adorned with a colossal equestrian statue of the great elector Frederic William, in bronze, planned by Schliiter, and cast by Jacobi; the royal palace, 400 feet in length, 276 in breadth, and 1014 in height, containing the gallery of paintings, the cabinet of artificial and natural curiosities, the collection of medals, &c.; and the museum of art, a most magnificent building, newly erected by Schinkel; the royal riding academy. A part of Köln is called Nau-Köln, and consists of 4 streets, built along the Spree—3. Friedrichswerder, including 19 streets, was founded by the elector Frederic William the Great. Here are situated, the palace, inhabited by the present king, originally intended for the crown-prince; the splendid arsenal, in the yard of which the 363 famous heads of dying warriors, in relief, by Schliiter, serve as key-stones in the arches of the windows; the royal foundry; the new guard-house, knowledge. His character commanded the respect and love of all who knew him. Pope, his constant friend, describes him as possessed of "every virtue under heaven." His most celebrated philosophical works are, a Treatise on the Principles of Human Knowledge (London, 1710); Three Dialogues between Hylas and Philonous (London, 1713); Alciphron, or the Minute Philosopher (London, 1732). His works appeared in London, 1784, 2 vols. 4to., preceded by a biography written by Arbuthnot.
BERLIN.

built by Schinkel, near which are the statues of Schlemihor and Biihow, by Kauch, and three pieces of ordnance of the largest caliber, two of which were taken from the French; opposite to it stands the colossal statue of Biiher, in bronze, a work of Rauch.—4. Mus or Dorotheenstadt, likewise built by the elector Frederick William the Great, and named after his second wife, has but 5 regular streets, among which is the stately street "beneath the lines," 2089 feet in length, and 126 in breadth, affording the most beautiful walk in the city, and a part of Frederick-street, which is 4250 paces in length. The principal buildings in this quarter are, the university edifice; the Catholic church, built on the plan of the Pantheon in Rome; the fine opera-house; the royal library, the style of which is bad; the academy building, destined for a museum, with an observatory whose platform rises 43 feet from the pavement of the street; the great singing-academy, erected by Schinkel, and devoted only to church music; the Paris-place, &c. The Brandenburg gate, which is 155 feet in width, 226 in length, in 1720, by Langhans, in imitation of the Propylaeum at Athens, but on a much larger scale. Above it is the famous Victoria in a quadriga, which was carried away by the French, in 1807, and, in 1814, brought back from Paris by the Prussians: before it lies the park, 520 acres in extent, containing, besides various walks, the royal palace Bellevue, and several country-seats, belonging to wealthy individuals. —5. Friedenstadt, founded, in 1688, by the elector Frederick III (king Frederick I), surpasses the four other divisions of the city in extent, and consists of 23 wide streets, among which the above-mentioned Frederick-street is distinguished. Worthy of notice are, the Gendarmes market; also William-place, a quadrangle 100 paces in length and 90 in breadth, containing the marble statues of the generals Schwerin, Wintzfeld, Seydlitz, Keith, and Ziehen, who, in the grotesque taste of the last century, are represented in Roman costume and periwigs; the Leipsic-place; the palace of Kalle-Al- liance; the Bohemian church; the Trinity church; the French and the new church, with two famous steeples; the royal porcelain manufactury; the academy of Frederick William, with the Rottehalle (which belongs to the class of high schools, and contains, in the year 1816, 630 scholars); the Collegium or council-house, where the legislative committee, the chief court of justice, also the Kammergericht, and council for minors, hold their sessions, and the archives of the Brandenburg fields are kept; the bank; the house of the society for foreign commerce; the theatre, which, in 1817, was consumed by fire, and was afterwards rebuilt under the direction of Schinkel; several handsome buildings belonging to private persons, &c.—Lichtenstein, for the greater part, consists of fields and gardens. Before the Cottbus gate, upon a rising ground covered with wood, called Huenelaidt, was the first spot devoted to the new gymnastic exercises in Germany, invented by doctor Jahn. On the top of the mountain of the cross, formerly Teppelhof mountain, before the Halle gate, is a monument of iron, erected, in 1820, in commemoration of the wars against France. —B. contains upwards of 100 public and 50 private elementary schools; of burgher or intermediate schools, 10 public, 60 private, and 13 special schools (schools in which youth are educated for particular employments): 5 gymnasia or classical schools, 7 higher special schools or colleges, and the university: also several academies and literary societies, as the royal academy of science (see Academy); the academy of fine arts, mechanical sciences and architecture, with the schools of art appertaining to this academy; the society for natural history and natural philosophy; the medico-chirurgical, the pharmacological, the philological, the physico-medical societies; the society for cultivating the German language; the association of artists. There are also, in this city, a museum of antiquities, established in 1820; the royal medico-chirurgical academy, for the military; two royal medico-chirurgical seminaries, intended to educate surgeons for the army; the royal veterinary school; two seminaries for the education of town and country school-masters; the seminary for missionaries, destined to convert the heathens in the western parts of Africa; several institutions for the deaf and dumb and the blind; a free school for Jewish children; an academy for foresters (an institution in which the knowledge relating to the cultivation of woods and forests is acquired); a singing academy; a military swimming-school; a Bible society; a society for the advancement of Christianity among the Jews; an association for the cultivation of gardens; an institution for preparing artificial mineral waters, &c. There are many charitable institutions in B., the poor, who cannot subsist without help, being about 12,000. Among them, the female charitable association, under 54
directresses, provided, December, 1816, for 1200 poor persons, dispersed in 180 families. The most benevolent institution is that established, in 1704, by Kranz, counsellor of war, for relieving impoverished citizens, and which has since numbered some of its former beneficiaries among its members. B. has a considerable commerce and some important manufactories; a royal bank; a royal society for foreign commerce; a wool-market; upwards of 300 machines for spinning wool and cotton, with 29,000 spindles, 4,534 looms for weaving cloth, silk, woollen, cotton and linen, carpets, &c.; numerous manufactories of silk, woollen or cotton ribands, 44 manufactories for coloring and printing stuffs, 60 dye-houses, 5 sugar refineries, 4 manufactories of ornamental tin-ware, porcelain and stone-ware factories, the royal bronze manufactories, important manufactories of gold and silver ware, of fine cabinet work, of pelmet, straw hats, artificial flowers and feathers; about 25 printing houses, 8 powder mills, &c.; also Mr. Jacob's valuable collection of works of art. The pavement of B. is extremely bad; the illumination of the streets imperfect. Though some parts of this city are beautiful, yet, on the other hand, its flat and sandy environs are extremely unpleasant. The university of B. was founded in 1809, when Prussia was groaning beneath the heavy yoke of the French. It proceeded from the noble efforts of those men who, at that time, conducted the public concerns of the kingdom (Stein was one of the most distinguished among them), and were convinced that the only efficient preparation for a future deliverance from the French was a moral regeneration of the people; at the same time thinking all that diffuses knowledge and intellectual light an excellent means of producing this moral change—an idea which was realized by the result. Although the university of B. is so young an establishment, yet it ranks among the first in the world, and is, in one branch of science—in philology—the very first. By means of this and many other scientific institutions, a literary spirit has been awakened among the citizens, by which they are very advantageously distinguished from the inhabitants of other cities; but, on the other hand, the society of B. has not the refined manners of a royal residence, nor the gay manners of many other cities. To the university belong the botanical garden without the city; near Schönberg, the anatomical and zoological museum, the theological and philosophical seminary, the cabinet of minerals, the clinical institution, the lying-in hospital, &c. In the year 1826, there were 1610 students in the university of B., among whom were 400 foreigners. More than 90 professors are employed in the university. In the year 1829, the annual meeting of German naturalists, for the promotion of natural science, was held at B., under the direction of Alexander von Humboldt. It furnished a splendid array of talent, and many discourses of great interest were delivered.

BERMUDAS' ISLANDS, or SOMERS' ISLANDS; a cluster of small islands in the Atlantic ocean. They are in number about 400, but for the most part so small and so barren, that they have neither inhabitants nor name. They were first discovered by Juan Bermudas, a Spaniard, in 1522; in 1600, sir George Somers, an Englishman, was wrecked here, and, after his shipwreck, formed the first settlement. The most considerable of these islands are St. George, St. David, Cooper, Ireland, Somerset, Long island, Bird island, and Nonesuch. The first contains a town (St. George's Town); the two following, some villages; the others, only farms dispersed.—The air is so healthy, that sick people, from the continent of America, frequently go thither for the recovery of their health. The winter is hardly perceptible; it may be said to be perpetually spring; the trees never lose their verdure, and the leaves only fall when new ones begin to spring and breed without intermission.—But these advantages are counterbalanced by frightful storms, accompanied by formidable thunder, which are announced by a circle round the moon. Some fertile plains are seen, but, in general, the country is montagnous. The soil is of divers colors, brown, white and red, of which the first is the best; although light and stony, it is, in general, rich and fertile. The water is, in general, salt; there is but little fresh, except rain water, preserved in cisterns. The inhabitants gather two harvests of Indian corn in a year, one in July, and the other in December: this forms their principal food. They likewise cultivate tobacco, legumes, and fruit sufficient for their wants. Their trees are principally the cedar and palmetto. Besides these, they have orange-trees, olive, laurel, pear-trees, &c. The red-wood is peculiar to these islands: its colored fruit feeds worms, which become flies, a little larger than the cochineal bug, instead
of which they are used. There are no venomous reptiles. Building of vessels is the principal trade of the inhabitants. These islands extend from N. E. to S. W., about 45 miles. The whole shore is surrounded with rocks, most of which are dry at low water, but covered at flood. They are 230 leagues S. E. Cape Fear, in North Carolina. The north point of these islands lies in lon. 64° 28' W.; lat. 32° 22' N. Pop. a few years since, 10,321; whites, 5,492; slaves, 4,919.

BERMUDAS' ISLANDS—BERN.

BERN; the largest canton of Switzerland (3967 square miles, 335,000 inhabitants, among whom are 40,000 Catholics, and 30,000 Protestants, with a capital of the same name. Cuno von Bubenberg, in the 13th century, enclosed the small place Bern, in the vicinity of the fortress of Nydeck, with a moat and walls, and the duke of Zähringen, to whom Nydeck belonged, gave the new city laws. Its population was much increased in the 13th century. The lower nobility of the adjacent country fled to it for protection against the oppressions of the higher, and were joined by the country people, and particularly by the citizens of Fribourg and Zurich. The emperor Frederic II declared it a free city of the empire, in 1218, and confirmed its privileges by a charter, which is still preserved in the archives. In 1228, B. was besieged by Rodolph of Hapsburg, but not taken; and, in 1231, the citizens of B., under Ulrich von Bubenberg, made war against their own nobility, commanded by Ulrich von Erlach. B. now became an asylum for all those who suffered under the oppression of the nobles of Austria, and rose to a height of power that excited the envy of other cities, as well as of its own nobility. The latter, therefore, entered into an alliance with the hostile cities, for the purpose of destroying it. Their army, consisting of 15,000 men, headed by 700 of the higher nobility, with 1200 knights, was totally vanquished at Laupen, June 21, 1339, by the citizens of B., led by Rodolph von Erlach, though these were only one third of their number. After this victory, the city continued to increase, and, in 1533, entered into the perpetual league of the Helvetic confederacy, in which it held a rank inferior only to Zurich. Until the close of that century, B. enlarged its dominions, partly by purchase, and partly by conquest. In 1463, the greater part of the city was destroyed by fire, but was afterwards regularly rebuilt. The long wars with Austria, Milan, Burgundy and Savoy soon after broke out, from all which the confederacy came off victorious, and in which B. conquered Aargau. In 1528, the citizens of B. embraced the cause of the Reformation. In the subsequent war with the duke of Savoy, they conquered the Pays de Vaud. The countries gained by conquest were governed by bailiffs, who resided in mountain castles. From that time to March 5, 1798, the prosperity and wealth of B. was constantly increasing, as may be clearly perceived from the large sums spent for the public administration. At that time, the canton contained over 3000 square miles, and about 280,000 inhabitants. Upon the day above-mentioned, 30,000 French troops marched against B. It was again an Erlach who led 18,000 citizens of B., together with 8000 auxiliary troops of the confederate cantons, into the field; but the memory of Morgarten, of Laupen and Murten, no longer inspired them to victory: the troops of the confederates, on their retreat, slew their own commander. B., for the first time, opened its gates to an enemy, and lost about half of its possessions. The northern part was united with the present canton of Aargau, and out of the south-western (Pays de Vaud) the present canton of Vaud was formed. By the decree of the congress at Vienna, however, the greater part of the bishopric of Basel was joined to the canton of B. According to the new aristocratic constitution of the canton, the sovereign power is exercised by a bailiff; and the great and lesser councils of the city and republic of B., consisting of 200 members chosen from the city of B., and 19 from the towns and the country. The former are chosen from the citizens over 29 years old, by an elective assembly composed of the members of the lesser council, and a committee of the great. The 29 members from the towns and country are chosen partly from the towns, by the municipal authorities; partly from each of the 22 districts, into which the country is divided, by elective assemblies; and partly by the great council. Two bailiffs preside in turn, each for the space of a year, in the great and lesser councils. The former has the legislative, the latter the executive power. The latter consists of the two bailiffs, 23 members, and 2 secretaries, and is chosen by the former from among its own members. The northern part of the canton is hilly, with beautiful plains and valleys, and has a fertile and highly cultivated soil, producing corn, wine and fruits. Here is situated Zimmernthal, one of the richest and most
fertile valleys in Switzerland, where the finest cattle are raised, and the well-known Emmenental cheese made. Next houses, comfortable dresses, and cheerfulness, indicate the prosperity of the inhabitants of this valley. The southern part of the canton, the Oberland (Upperland), (to which the valleys of Hasli, Grindelwald, Lauterbrun, Cander, Frutigen, Adelbo-den, Simmen and Saancn, with numerous smaller valleys, belong), begins at the foot of the high mountain chain towards BERNARD, Pierre Joseph; son of a statesman, born at Grenoble, 1710; died at Choisy, near Paris, 1775; studied with the finest cattle are raised, and the well-known promenades, or where they are kept in smaller valleys, belong), begins at the bernard of the Rhine at Lauften, if not in height, saphorn, the Schreckhorn, and Wetterhorn, of the dragoons, and, afterwards, librarian of the lower valleys produce good fruits; and Choisy, near Paris, 1775; studied with the economical society, in soldier, where prince Maurice of Nassau, of the Holy Spirit, the university built; TIERARD, duke of 

Bernard, duke of Weimar, general in the thirty years' war, born Aug. 6, 1604, the fourth son of duke John of Saxe-Weimar, entered into the service of Holland, at that time the best school for a soldier, where prince Maurice of Nassau (the creator of a better system of tactics), his brother Frederic Henry, the marquis of Spinola, and other great generals, were opposed to one another. B. afterwards entered the Danish army employed in Holstein against the troops of the emperor, and commanded by the margrave of Baden-Durlach, and was present at the conference of Lubeck, 1629, for negotiating peace. When Gustavus Adolphus entered Germany, B. joined him, and was present at the attack upon Wallenstein's camp, in the neighborhood of Nuremberg, Aug. 24, 1632. In the battle of Lutzen, Oct. 6, 1632, he commanded the left wing of the Swedish army, avenged the death of Gustavus Adolphus, and, although himself severely wounded, put the right wing of the imperial troops to flight. Chancellor Oxenstern, the Swedish director

BERN—BERNARD. 73
BERNARD.

of the war in Germany, after the death of the king, committed the command of half the army to him. B., in 1633, took Bamberg, Cronach, Hochstadt and Aichstadt; but his attempt upon Ingolstadt miscarried. He also brought the cities of Ratisbon and Straubing into his power, and frustrated Wallenstein's intentions. The king of Sweden made him duke of Franconia. His impetuosity caused the defeat at Nordlingen (q. v.), Aug. 29, 1634. He himself narrowly escaped being made prisoner. The prudence of Oxenstiern and the valor of B. soon made amends for this fault. France, now entering into a closer alliance with Sweden, concluded a separate treaty with B., who went to Paris, Oct. 16, 1635. B. promised, for 4,000,000 livres, to raise an army of 18,000 men on the Rhine, to act against Austria. He now carried on the war in the country adjoining to the Rhine, took the fortress of Zaberu, in Alsace, spread his army over Lorraine and Burgundy, and vanquished the forces of the emperor in several battles. At the commencement of the year 1635, he laid siege to Rheinfelden, not far from Basle. Here he was unexpectedly attacked in his camp, Feb. 15, by an Austrian army that had advanced to raise the siege. B. was obliged to retreat before superior numbers; but, having soon collected his forces, he attacked the Austrians by surprise, Feb. 21, and obtained a complete victory. Several Austrian generals were made prisoners, and the fortress of Rheinfelden was obliged to surrender, May 13. He then undertook the siege of Brisach, the possession of which was necessary for maintaining himself in Alsace. An imperial army, under the command of general Goetz, that approached with the intention of raising the siege, was defeated with a great loss by B., July 30. B. captured several places of inferior importance, during the siege of Brisach, which, however, did not surrender until he had repeatedly defeated the Austrians, and then upon very moderate conditions, which B. signed in his own name, without mentioning France. The possession of Alsace, which he had before ceded to France under certain conditions, was now secured; but he also demanded Brisach as an appurtenance to Alsace. He garrisoned all the conquered places with German troops, and ordered money to be coined with the Saxon coat of arms and that of Brisach. In vain were the efforts of France to deprive the duke of the possession of Brisach, by proposing to place a French garrison in the fortress; the duke declined not only this proposal, but also an invitation to Paris, and the offer of a marriage with the duchess d'Aiguillon, niece of cardinal Richelieu. Instead of that match, he proposed one with the princess of Rohan, to which, however, the French court would not accede, lest the party of the Huguenots should be strengthened. It is probable that Richelieu had recourse to secret means, in order to rid France of the duke, who was become formidable by his growing power. He was suddenly seized with a disorder, which terminated his life, July 8, 1639. Most of the contemporary writers conjectured that Richelieu caused him to be poisoned; the duke himself had no doubt that he had swallowed poison. Immediately after his death, several French commissioners appeared, who enlisted his troops into the French army; the command of them was committed to marshal Guébriant. With B. fell one of the chief supporters of the Protestants. His successors, Baner and Torstensoln (q. v.), pursued his victorious course, and France seriously exerted herself, in the war which continued, for the benefit of the Protestants. In B. a graceful person, intelligence and valor were united with a magnanimity which could not be shaken by adverse events; his only fault was too great impetuosity.

BERNARD of Clairvaux: one of the most influential ecclesiastics of the middle ages, born at Fontaines, in Burgundy, 1091, of a noble family. In 1105, he became a monk at Citeaux; in 1115, first abbot of Clairvaux, near Langres. An austere manner of living, solitary studies, an inspiring eloquence, boldness of language, and the reputation of a prophet, rendered him an oracle to all Christian Europe. He was named the heavenly teacher, and his writings were styled a stream from paradise. The doctrine of the immaculate conception of Mary was rejected by him. He principally promoted the crusade in 1148, and quieted the fermentations, caused at that time by a party of monks, against the Jews in Germany. He declined all promotion, and, in the rank of abbot of his beloved Jerusalem (as he used to call Clairvaux), he continued with all humility, but with great boldness, his censures of the clergy and his counsels to the popes. Innocent II owed to him the possession of the right of investiture in Germany, and Eugenius III his education. He was, at the same time, the umpire of princes and bishops, and his voice in the synods was regarded as
divine. By his rigid orthodoxy and his mystical doctrines, which, though at times enthusiastic, were always directed to the promotion of practical Christianity, he refuted the subtleties and dialectics of the scholastic philosophers, although his severity against Abelard and Gilbert of Poitiers can by no means be justified. Luther says of him, "If there has ever been a pious monk who feared God, it was St. Bernard; whom alone I hold in much higher esteem than all other monks and priests throughout the globe." He died in 1153, and was canonized by Alexander III, in 1174. (See Ang. Neander's St. Bernard and His Times, Berlin, 1813.) His works have been translated from the Latin, and published by professor Silber (Vienna, 1820).

Bernard, Great St.; a mountain between the Valais and the valley of Aosta, 11,000 feet high. On its top is the boundary between the Valais and Piedmont. The road from the lake of Geneva through the Valais, into the valley of Aosta, passes over it. The Little St. B., 7194 feet high, separates Piedmont from Savoy. Over this Hannibal directed his march. Bernard de Marchon, a Savoyard nobleman, who lived from 923 to 1008, built here, in 982, two hospitia, for the benefit of those on a pilgrimage to Rome, one upon Mount Joux, where a temple of Jupiter stood, the other on the road that leads over the Grison Alps, at a place called Colonnie Joux, from a pillar which was an object of idolatrous worship. Animated by a pious zeal, Bernard destroyed the pillar and temple, and, with their ruins, built the two hospitia on the Great and Little St. Bernard, so called after him. He committed the care of both these establishments to monks of the order of St. Augustine, who, with an almost unexampled self-devotion, exercised the most generous hospitality towards travellers, down to the time of Charles Emanuel III of Sardinia. This king, falling into a dispute with the cantons of Switzerland about the nomination of a provost, sequestrated the possessions of the monks, and gave the administration of the hospitia to regular canons of the Augustine order, who, with equal humanity and devotion, discharge the duties of their pious calling. Upon the barren height (7685 feet), where the hospitia of the Great St. Bernard stands, which is considered to be the highest inhabited place in Europe, an almost everlasting winter reigns; in vain do we look for a tree or bush; the glittering snow dazzles the eye of the wanderer. Assisted by the servants of the convent, the heroic ecclesiastics, provided with wine and bread, devote themselves to the guidance of travellers; and, in order to defend the poor against the cold, they lend or give them clothes, which are kept for that purpose. Upwards of 9000 persons annually pass over the mountain, who are refreshed in the hospitium. In the midst of tempests and snow-storms, the monks, accompanied by dogs (called marons), set out for the purpose of tracking those who have lost their way. If they find the body of a traveller who has perished, they carry it into the vault of the dead, where it is wrapped in linen, and remains lying on a table till another victim occupies the place. It is then set up against the wall, among the other dead bodies, which, on account of the cold, decay so slowly, that they are often recognised by their friends after the lapse of years. Adjoining this vault is a kind of burying-ground, where the bones are deposited, when they accumulate too much in the vault. It is impossible to bury them, because there is nothing around the hospitium but naked rocks. In the church is the monument of general Dessax, who fell in the battle of Marengo. The first consul ordered him to be embalmed, and assigned him a resting place on the summit of the Alps. The monument of marble represents Dessau in relief, wounded, and sinking from his horse into the arms of his aid Le Brun. On the stairs of the convent stands a statue of Des saix in relief, wounded, and sinking from his horse into the arms of his aid Le Brun. On the stairs of the convent stands his statue of marble. Opposite to it there is a slab of marble, on which the republio passage over the St. B. Mary 15, 1800, with an inscription in letters of gold. By means of a contribution raised through Europe, a short time ago, the habitations of the 9 or 10 ecclesiastics have been made more comfortable.

Bernardi, Augustus Frederic, a German scholar, born in Berlin, in 1768, died there in 1820. In his youth, his attention was directed to universal language (that is, to language as far as it is common to all rational beings), to the mystery of its construction, the mathematics, as it were, of language. B; considering all different languages as a whole, endeavored to discover a universal grammar common to them all. The result of his researches appears in his works, Reine Sprachlehre (Abstract Grammar), 1801, 2 vols.; Angewandte Sprachlehre (Grammar in its Application), 1803; and Anfangsgrunde der Sprachwissenschaft (Elements of the Science of Language), in which
many philosophical principles of language are laid down. B. was a man of cultivated mind and extensive knowledge. He was also a professor and director of a classical school in Berlin.

Bernard de St. Pierre. (See Pierre, St.)

Bernardine Monks. (See Cistercians.)

Bernburg, Anhalt; one of the three dukedoms of Anhalt (233 square miles, 7 towns, 51 villages, with 38,400 inhabitants. The income is valued at 450,000 guilders. Its contingent to the army of the German confederation is 370 men. In 1526, the Lutheran and Calvinistic parts of the population were united. The capital of this dukedom is Bernburg, on the Saale, with 4900 inhabitants. The public debt amounts to 1,031,500 guilders. Napoleon made the princes of Bernburg dukes.

Bemers, or Barnes, Juliana; an English lady of the 15th century, of whom little more is known than that she was prioress of the nunnery of Sopewell, near St. Albans, and has her name prefixed, as the writer or compiler, to one of the earliest and most curious productions of the English press. The title of the second edition, printed in the abbey of St. Alban's, in 1486, is, The Book of Hawking and Hunting, with other Pleasures divers, and also Cootarmaries. The first edition (1481) does not treat of coat-armour or heraldry. This work, under the title of the Book of St. Alban's, became a popular manual of sporting science, and was several times reprinted in the 16th century. As a typographical curiosity, a small impression of it was published, in 1511, by Mr. Haslwood.

Berti, Francesco (also Berna, and Bernia); a poet of the 16th century, born at Lamporecchio, in the territory of Tuscany, towards the close of the 15th century, of a noble but poor Florentine family; went to Florence, and, at the age of 19, to Rome, where he lived under the care of his relation, cardinal Bibiena, who, as he himself says, did him neither good nor harm, and he was at length obliged to enter the service of the bishop of Verona, Giulietti, datary of the papal chancery, as secretary. In the hope of promotion, he took orders; but, disgusted with the duties of his office, he sought recreation in amusements, which displeased the prelate. A society had been established at Rome, consisting of young ecclesiastics of a jovial temper, like B., and a poetical vein, who, in order to de-
cavalieri Bernini, born in Naples, 1598, is praised by his contemporaries as the Michael Angelo of modern times, on account of his success as a painter, a statuary, and an architect; but he deserves his fame principally in the latter character. Richly endowed by nature, and favored by circumstances, he rose superior to the rules of art, creating for himself an easy manner, the faults of which he knew how to disguise by its brilliancy. From his early youth, he manifested a great power to excel in the arts of design, and, at the age of eight years, executed the head of a child in marble, which was considered a remarkable production. That such rare endowments might be suitably cultivated, his father carried him to Rome. One of B.'s first works was the marble bust of the prelate Montajolo; after which he made the bust of the pope, and of several cardinals; also sundry figures of the natural size. He was not yet 18, when he produced the Apollo and Daphne, in marble, a masterpiece of grace and execution. Looking at this group near the close of his life, he declared that he had made very little progress since the time when that was produced. His manner was indeed more chase and less affected, in the early part of his career, than at a later period. After the death of Gregory XV, cardinal Maffeo Barberini, his successor, employed B. to prepare plans for the embellishment of the Basilica of St. Peter, assigning to him a monthly pension of 300 crowns, which was afterwards augmented. Without forsaking sculpture, B.'s genius embraced architecture, and he furnished the design for the canopy and pulpit of St. Peter, as well as for the circular place before the church. Among his numerous works, were the palace Barberini, the belifty of St. Peter, the model of the monument of the countess Matilda, and the monument of Urban VIII; his benefactor.—In the year 1644, cardinal Mazarin, in the name of the king of France, offered him a salary of 12,000 crowns; but he declined the invitation. Urban had scarcely closed his eyes, and Innocent X ascended the papal throne, when the envy engendered by the merits of the artist and the favor bestowed on him broke forth. His enemies triumphed; but he regained the favor of the pope by a model for a fountain. About the same time, he erected the palace of Monte Citorio. Alexander VII, the successor of Innocent X, displayed much taste for the arts, and favor to this artist, and required of him a plan for the embellishment of the piazza di San Pietro. The admirable colonnade, which is so beautifully proportioned to the Basilica, was built under the direction of B. We may also mention the palace Odescalchi, the rotunda della Ricerca, the house for novices, belonging to the Jesuits, on Monte Cavallo, &c. Louis XIV having invited him, in the most flattering terms, to Paris, he set out from Rome, in 1665, at the age of 68, accompanied by one of his sons, and a numerous retinue. Never did an artist travel with so great pomp, and under such flattering circumstances. The reception which he met with in Paris was highly honorable. He was first occupied in preparing plans for the restoration of the Louvre, which, however, were never executed. But, notwithstanding the esteem which he enjoyed in Paris, some disagreeable circumstances induced him to return to Rome: he left Paris loaded with presents. Cardinal Rospigliosi having become pope, B. was admitted to an intimate intercourse with him, and charged with several works; among others, with the decoration of the bridge of St. Angelo. In his 70th year, this indefatigable artist executed one of his most beautiful works, the tomb of Alexander VII. He still continued to devote himself to several works of architecture, as well as of statuary, with such ardor, that, exhausted by his labors, he died, Nov. 28, 1680, at the age of 82. He was buried, with great magnificence, in the church of St. Maria Maggiore. To his children he left a fortune amounting to about 3,300,000 francs. B.'s favorite maxim was, Chi non esce talvolta dalla regola, non passa mai. Thus he was of opinion, that, in order to excel in the arts, one must rise above all rules, and create a manner peculiar to one's self. This B. has accomplished with a rare good fortune, but the influence of his style has been transient. His most eminent disciples are Pietro Bernini, his brother, a statuary, architect and mathematician; Mathia Rossi, Francois Duquesnoi, surnamed the Fleming, and Borromini.
his income to 6000 livres. Not succeeding however, in attaining this moderate fortune, he resolved to aim at a larger one. He went as ambassador to Venice, and obtained great respect in this difficult post. After his return, he enjoyed the highest favor at court, and soon became minister of foreign affairs. The political system of Europe was changed at that time. France and Austria, hitherto enemies, united in an offensive and defensive alliance, which was succeeded by the seven years’ war, so unfortunate for France. B. has been designated, by several writers, as the chief author of this alliance. Duclos, however, asserts, that it was the intention of B. to maintain the old system, which, since the time of Henry IV, and especially since the time of Richelieu, had made France the protectress of the less powerful states of Germany, and the rival of Austria. Oppressed by the misfortunes of his country, which, in part, at least, were ascribed to him, B. surrendered his post, and was soon after banished from court. His disgrace lasted till the year 1764, when the king appointed him archbishop of Alby; and, five years later, ambassador to Rome. Here he remained till his death. In the name of his court, and against his own opinion, he labored to effect the abolition of the order of the Jesuits. When the aunts of Louis XVI left France, in 1791, they fled to him for refuge, and lived in his house. The revolution deprived him of his fortune, and the means of indulging his generous disposition. He was reduced to a state of poverty, from which he was relieved by a pension from the Spanish court. B. died in Rome, Nov. 2, 1794, nearly 80 years old. The easy poetry of his youth had procured him a place in the French academy. He himself is its severest critic. His verses have been reproached with affectation, negligence, and an excess of ornament and mythological images. Voltaire called him Babet-le-Bouquetin, from a fat flower-woman, who sold her nosegays before the opera house. Nevertheless, Voltaire had a great esteem for his talents, his judgment, his criticisms, and his character, as is evident from their correspondence (published, in 1799, by Bourgeois), which, in every respect, is very honorable to B. Another correspondence, between B. and Paris du Verney, appeared in print in 1790. After his death, Azara published his poem La Religion vengée (Religion avenged), which, though it contains many beautiful verses and sublime ideas, is deficient in fire and animation. A collection of B.’s works was published in 1797, by Didot.

BERNOULLI: a family which has produced eight distinguished men, who have all cultivated the mathematical sciences with success. The family, emigrating from Antwerp on account of religious persecutions, under the administration of the duke of Alva, fled first to Frankfort, and afterwards removed to Bale, where it was elevated to the highest dignities of the republic.—1. James, born at Bale, 1654, became professor of mathematics there 1687, and died 1705. The differential calculus, discovered by Leibnitz and Newton, was applied by him to the most difficult questions of geometry and mechanics: he calculated the loxodromic and catenary curve, the logarithmic spirals, the evolutes of several curved lines, and discovered the numbers of Bernoulli, as they are called.—2. John B., born at Bale, 1657, was one of the greatest mathematicians of his time, and the worthy rival of Newton and Leibnitz. He was destined for commerce, but his inclination led him to the sciences, and, from the year 1683, he principally devoted himself to medicine and mathematics. To him, and his brother James, we are indebted for an excellent treatise on the differential calculus. He also developed the method of proceeding from infinitely small numbers to the finite, of which the former are the elements or differences, and called this method the integral calculus. In 1686—92, he made a journey to France, where, he instructed the marquis de l’Hôpital in mathematics. At this time, he discovered the exponential calculus, before Leibnitz had made any communications respecting it, and made it known in 1697. In 1694, he became doctor of medicine at Bale, and, in 1705, went, as professor of mathematics, to Groningen, where he discovered the mercurial phosphorus or luminous barometer, for which he received, from king Frederic I of Prussia, a gold medal, and was made a member of the academy in Berlin, afterwards of that in Paris, &c. After the death, of his brother, in 1705, he received the professorship of mathematics at Bale, which he held until his death, January 1, 1748.—3. Nicholas B., nephew of the former, born at Bale, in 1687, studied law, but more particularly devoted himself to mathematics; in 1705, went to Groningen, to John B.; returned, however, with him to Bale towards the close of the year, and became there professor of
BERNOULLI-BERRI.

Bernoulli; the name of a German noble family, many members of which have been distinguished. The most so was John Hartwig Ernst, count of B., Danish secretary of foreign affairs. He was born in Hanover, May 13, 1713. His father was also secretary of state in Denmark. In 1730, he was made member of the council of state, after having served for a long time as foreign minister. He soon became the most influential member of the government, which distinguished itself, under his direction, by a wise neutrality during the seven years' war, and other political disturbances in Europe; by liberal measures for improving the condition of the Danish peasantry, who were even then in a state of bondage; by promoting science and sending an expedition to Asia, which the famous traveller Niebuhr accompanied. He himself set the example of munificence to the peasants, and gave the fourth part of his income to the poor. By his efforts, Denmark acquired Holstein. B. is described by all historians, as a model of wisdom, benevolence, and intelligence. Frederic V (q. v.), whose government he directed so well, died in 1766, and he continued in his office, under Christian VII, until 1770, when Struensee (q. v.) contrived to displace him. After the fall of Struensee, he was recalled, but died when preparing for his return to Denmark from Hamburg, in 1772, Feb. 19. Christian VII had made him count. -Andrew Peter, count of B., his cousin, was also a very distinguished statesman, successor of the preceding, and deserves great praise, among other things, for his endeavors to emancipate the peasantry. He was born Aug. 25, 1735, and died June 21, 1797. His son is now Prussian minister of foreign affairs.

Beri, or Berry, Charles Ferdinand, duke of; second son of the count d'Artois (now Charles X) and Maria Theresa of Savoy, born at Versailles, Jan. 24, 1778. Together with the duke of Angoulême, he received an inadequate education under the duke of Svevä; nevertheless, in his early youth, he displayed some talents and a good heart. In 1792, he fled with his father to Turin, served under him and Comte on the Rhine, and early learned the art of winning the love of the soldiers. With his family, he repaired to Russia, and, in 1801, to England, where he lived alternately at London and Harwell, continually occupied with plans for the restoration of the Bour-
bons. April 13, 1814, B. landed at Cherbourg, and passed through the cities of Bajaux, Castro, Rouen, &c., gaining over the soldiers and national guards to the cause of the Bourbons, distributing alms, and delivering prisoners. He made his entrance into Paris April 21, where he gained popularity by visiting the merchants, manufacturers and artists. May 15, he was appointed colonel-general, receiving a civil list of 1,500,000 francs.

Aug. 1, he set out on a visit to the department of the North, and the fortified places in Lorraine, Franche-Comté and Alsace. When Napoleon landed from Elba, the king committed to B. the chief-command of all the troops in and round Paris. All his efforts to secure their fidelity proving ineffectual, he was obliged to retreat, on the night of March 19, with the troops of the household, to Ghent, and Alost, where the king then was. The battle of Waterloo enabled him to return to Paris, where he arrived July 8, and surrendered his command over the troops of the household into the hands of the king. In August, he was made president of the electoral college of the department of the North.

At the opening of the chambers in Paris, he took the oath to maintain the constitution, and was appointed president of the fourth bureau; but he soon retired from public life. Louvel (q. v.) had been, for several years, meditating the extirpation of the house of Bourbon, by the assassination of the duke. Feb. 13, 1820, he attacked him just as he had left the opera-house, and was on the point of stopping into his carriage, and gave him a mortal blow. The duke showed the greatest firmness and Christian resignation even to the moment of his death (Feb. 14, at 6 o'clock in the morning). He had been carried into the saloon of the opera-house. Here he consol'd his wife, and said, Mangez-vous pour l'enfant que vous portez dans votre sein! (Take care of yourself, for the sake of the child in your bosom!) He then caused the children, whom he had in London before his marriage, to be called, and, after recommending them to his wife, prepared himself for death, forgave his murderer, confessed himself, and received the sacrament. Benevolence, gratitude and generosity were the best features in the character of this prince, by whose death all France was plunged into consternation. (See Chateaubriand's Mémoires touchant la Vie et la Mort du Duc de Berry; Paris, 1820.)

The duke left by his wife, Caroline Ferdinanda Louise, eldest daughter of prince, afterwards king Francis I, ruler of the Two Sicilies, whom he married June 17, 1816, only a daughter, Louisa Maria Theresa of Artois, made-moiseille de France, born Feb. 21, 1819. Great was the joy of the royal family, when the duke's widow was delivered, Sept. 23, of a prince, who bears the name of Henry, duke of Bordeaux (Henri Charles Ferdinand Dieudonné d'Artois, petit-fils de France). (See Chamber.)

Although Louvel's deed had no connexion with a conspiracy, not the slightest trace of an accomplice being discovered, yet the mutual denunciations to which it gave rise produced much party excitement, and occasioned some laws of exception. (See France, and Exception, laws of.) The opera-house, near which the crime was committed, and in which the duke died, was pulled down, and a column erected on the spot. A new opera-house was built in another place.

BERRY, or BERRI; before the revolution of France, a province and dukedom of that country, of which Bourges was the capital, almost in the centre of France. (See Department.)

Berserker, a descendant of the eight-handed Starkader and the beautiful Albilde, was, according to the Scandinavian mythology, a famous warrior. He disdained the protection of armor, whence he received his name, which signifies, according to Ætre, armless. He raged like a madman in battle. He killed king Swafirun, and married his daughter, by whom he had 12 sons, all unamissible to himself. They were also called Berserker, and, since their time, the name has been commonly given to men of headstrong violence.

Bertiér, Alexander; prince of Neufchâtel and Wagram, marshal, vice-commander of France, &c.; born in Paris, Dec. 30, 1753; son of a distinguished officer; was, while yet young, employed in the general staff; served in America, and fought with Lafayette for the liberty of the U. States. In the first years of the revolution, he was appointed major-general in the national guard of Versailles, and conducted himself in this post with uniform moderation. Dec. 25, 1791, he was appointed chief of the general staff in the army of marshal Luckner, marched against La Vendée in 1793, and joined the army of Italy in 1796, with the rank of general of division, where, as chief of the general staff, he contributed much to the success of the campaign. In October, 1797, general Bonaparte sent him to Paris to deliver the directory the treaty
of Campo-Formio. In January, 1798, he received the chief command of the army of Italy, and was ordered by the directory to march against the dominions of the pope. In the beginning of February, he made his entrance into Rome, abolished the papal government, and established a consular one. Being much attached to general Bonaparte, he followed him to Egypt as chief of the general staff. After the 15th of Brumaire, Bonaparte appointed him minister of war. He afterwards became general-in-chief of the army of reserve, accompanied Bonaparte to Italy, in 1800, and contributed to the passage of St. Bernard and the victory at Marengo. He signed the armistice of Alessandria, formed the provisional government of Piedmont, and went on an extraordinary mission to Spain. He then received again the department of war, which, in the mean time, had been in the hands of Carnot. He accompanied Napoleon to Milan, June, 1805, to be present at his coronation, and, in October, was appointed chief of the general staff of the grand army in Germany. Oct. 19, he signed the capitulation of Ulm, with Mack, and, Dec. 6, the armistice of Austerlitz. Having, in 1806, accompanied the emperor in his campaign against Prussia, he signed the armistice of Tilsit, June, 1807. He afterwards resigned his post as minister of war, and, having been appointed vice-consul of France, married, in 1808, Maria Elizabeth Amalia, daughter of duke William of Bavaria-Birkenfeld, and continued companion of Napoleon in all his expeditions. In the campaign against Austria, in 1809, he distinguished himself at Wagram, and received the title of prince of Wagram. In 1810, as proxy of Napoleon, he received the hand of Maria Louise, daughter of the emperor Francis I, and accompanied her to France. Somewhat later, Napoleon made him colonel-general of the Swiss troops. In 1812, he was with the army in Russia, as chief of the general staff, which post he also held in 1813. After Napoleon's abdication, he lost his principality of Neuchâtel, but retained his other honors, and possessed the favor and confidence of Louis XVIII, whom, after Napoleon's return, he accompanied to the Netherlands, whence he repaired to his family at Bainberg, where he arrived May 30. After his arrival at this place, he was observed to be sunk in a profound melancholy; and when, on the afternoon of June 1, the music of the Russian troops, on their march to the French borders, was heard at the gates of the city, he put an end to his life by throwing himself from a window of the third story of his palace. (See Mémoires d'Alexandre Ber­thier, Pr. de Neuchâtel et de Wagram, Paris, 1835.) He left a son, Alexander (born in 1810), and two daughters.

Berthollet, Claude Louis, count; member of the scientific academies at Paris, London, Turin, Halle, &c.; one of the most eminent theoretical chemists of our times; born at Talloire, in Savoy, Dec. 9, 1748; studied medicine at Turin; went, in 1772, to Paris, where he became connected with Lavoisier; was admitted, in 1783, a member of the academy of sciences in that city; was made, in 1794, professor in the normal school there, and was sent to Italy, in 1796, in order to select the monuments that were to be carried to Paris. He followed Bonaparte to Egypt, and returned with him in 1799. After the 15th of Brumaire, he was made a member of the senat-conservateur; afterwards, count and grand officer of the legions of honor. In 1804, Napoleon appointed him senator for the district of Montpellier. In 1813, he received the grand cross of the order of the Reunion. April 1, 1814, however, he voted for the establishment of a provisional government and the dechancement of Napoleon. Louis XVIII made him a peer; but Napoleon passed him by in 1815. After the restoration of Louis, he took his seat again in the chamber of peers. Among the inventions and new processes with which the sciences and the arts were enriched by him, the most important are those for the charring of vessels to preserve water in ships, for the stiffening and glazing of linen, &c., but principally that for the bleaching of vegetable substances by means of oxymuriatic acid, which, since 1786, has been in general use in France. Besides different essays in the collections of the academy and the institutes, he has written several larger works, among which his Essai de Statique Chimi­que (1803, 2 vols.; translated into English, German and Italian) must be considered the most important, and as one of the finest productions of our times. The complicated phenomena of chemistry are reduced, in this work, to the strict and simple laws of mechanics. He had also a large share in the reformation of the chemical nomenclature, as well as in the publication of the work that appeared on this subject in Paris, 1757—Méthode de Nomenclature Chimique. He died in Paris, Nov. 7, 1822.
BERTHOUDB, Ferdinand, celebrated for his marine chronometers, born at Planchémont, in the county of Neufchatel, in 1727, was destined for the church, but, at the age of 16, conceived an irresistible inclination for mechanics. His father caused him to be instructed in the art of watchmaking, and, to afford him an opportunity of perfecting his knowledge, sent him to Paris. He resided in that city from 1745, and there made his first marine chronometers, which have been used, by French navigators, on so many occasions, for extending and correcting geographical knowledge. He left several works relating to his art. He died in 1807, and his nephew, Louis B., his pupil, and the heir of his talents, has extended his improvements still further. His chronometers are in the hands of almost all navies, in 1676, at Moretto, in Friuli; the war of 1809 against Austria, he distinguished himself equally in the campaigns of 1812 and 1813, particularly at Lützen and Bautzen. In October, 1813, he defended several important posts against superior numbers, and, after the battle of Lepau, in which he defended Lindenau, conducted the retreat in good order. After the battle of Hanau, he covered Mentz till the army had passed the Rhine. He took part in the campaign of 1814, by the side of Napoleon, whom he accompanied to Elba, returned with him, and finally shared his residence in St. Helena. After Napoleon's death (1821), he returned from this island to France.

BERTRAND, Henri Gratien, count; general of division, aide-de-camp of Napoleon, grand marshal of the palace, &c.; famous for his attachment to Napoleon, whom he and his family voluntarily accompanied to St. Helena. He was born of parents in the middle ranks of life, entered the military service, distinguished himself in the corps of engineers, and rose to the post of general of brigade. In the camp at Boulogne, in 1804, Napoleon had occasion to become acquainted with his worth. From that time B. was with him in all his campaigns, signalizing himself everywhere, especially at Austerlitz, where he was one of the emperor's aides-de-camp. In 1806, he took Spandau; a fortress about 6 or 7 miles from Berlin, after an attack of a few days; and, in 1807, contributed to the victory over the Russians at Friedland, and excited the admiration of the enemy by his masterly conduct in building two bridges over the Danube, after the battle at Aspern, in the war of 1809 against Austria. He distinguished himself equally in the campaigns of 1812 and 1813, particularly at Lützen and Bautzen. In October, 1813, he defended several important posts against superior numbers, and, after the battle of Lepau, in which he defended Lindenau, conducted the retreat in good order. After the battle of Hanau, he covered Mentz till the army had passed the Rhine. He took part in the campaign of 1814, by the side of Napoleon, whom he accompanied to Elba, returned with him, and finally shared his residence in St. Helena. After Napoleon's death (1821), he returned from this island to France.

BERTOLI, Giovanni Domenico, count; born in 1676, at Moretto, in Friuli; the war of 1809 against Austria, he distinguished himself equally in the campaigns of 1812 and 1813, particularly at Lützen and Bautzen. In October, 1813, he defended several important posts against superior numbers, and, after the battle of Lepau, in which he defended Lindenau, conducted the retreat in good order. After the battle of Hanau, he covered Mentz till the army had passed the Rhine. He took part in the campaign of 1814, by the side of Napoleon, whom he accompanied to Elba, returned with him, and finally shared his residence in St. Helena. After Napoleon's death (1821), he returned from this island to France.
French school, born at Paris in 1756, studied his art under George Wille, and may be considered his most eminent pupil. The works of B. are among the best of the French school, but are not numerous. The most celebrated of them is the full length figure of Louis XVI, after a picture of Callot. The copies are very rare and dear, because the plate was broken to pieces in the revolutionary tumults of 1793. The exactness of his drawing, the firmness and brilliancy of his touch, the purity and correctness of his design, and the happiness with which he transferred to his plate the beauties of the original, give a high character to his productions. He died in 1822.

Berwick, James Fitz-James, duke of, commanded the armies of England, France and Spain, was a peer of England and France, as well as a grandee of Spain, and was knighted by the sovereign of each of these countries. He was the natural son of the duke of York, afterwards king James II, and Arabella Churchill, sister of the duke of Marlborough; was born in 1670, and first went by the name of Fitz-James. He received his education in France, and served his first campaigns in Hungary, under Charles duke of Lorraine, general of Leopold I. A short time after, the English revolution broke out. B. followed his father in the expedition against Ireland, and was wounded in a battle in 1689. He afterwards served under Luxemburg, in Flanders; in 1702 and 1703, under the duke of Burgundy; then under marshal Villeroi; and was naturalized in France. In 1705, he was made marshal of France, and was sent to Spain, where he gained the battle of Almanza; which rendered king Philip V' again master of Valencia. In 1718 and 1719, however, he was obliged to serve against Philip V, who, from gratitude to the marshal, had taken a son of his into his service. On his entrance into the Spanish dominions, he wrote to his son, the duke of Liria, admonishing him to do his duty to his sovereign. At the siege of Philipburg, in 1734, his life was terminated by a cannon ball.

Berwick-upon-Tweed (anciently Tharsis); a town of England, on the north or Scotch side of the Tweed, within half a mile of its confluence with the German ocean. It is a county of itself, regularly fortified with walls, bastions and ditches; 54 miles S. E. Edinburgh; 335 N. W. London; lon. 2° W.; lat. 55° 47' N.; pop. 7746. It exports corn, pork, eggs and salmon. The town has been, of late, much improved, and the streets are well paved. The bridge over the Tweed is 1164 feet long, and contains 6 arches. The barracks can accommodate 600 men. B. sends two members to parliament, and has markets on Wednesday and Saturday.

It was formerly the chief town in the county of Berwick, and the theatre of many sanguinary conflicts between the English and Scottish armies. Both nations considering it a fortress of great importance, the town and its neighborhood were a constant scene of bloodshed. After repeated sieges, it was finally ceded to England in the year 1502; and, by a treaty between Edward VI and Mary queen of Scotland, it was declared to be a free town, independent of both states. Upon the death of Elizabeth, in 1603, James VI of Scotland was proclaimed at B. king of England, France and Ireland; and when that monarch entered into his new dominions, the constituted authorities of the town received him with every demonstration of joy and respect. In return, the king confirmed all their ancient charters, adding many privileges, which still remain peculiar to the town and its liberties. The peculiar privileges of B., and the circumstance that it was once independent of England and Scotland, are the occasion why it was formerly the custom to extend the provisions of English statutes to B. by name. The statute 20 Geo. II, c. 42, provides, that, where England only is mentioned in an act of parliament, the same shall be deemed to comprehend the dominion of Wales and the town of B.

Beryl, or Emerald; a well-known species in mineralogy, sometimes passing in its structure, though commonly found crystallized in regular, six-sided prisms, often deeply striated longitudinally, and terminated at one or both extremities by a rough, imperfect plane, or, more rarely, by a very flat, six-sided pyramid, of which the summit is replaced. Its crystals are of various dimensions, being from half an inch to upwards of a foot in length, and from a quarter of an inch to 10 inches in diameter. The larger crystals, however, are inferior to the smaller, in regard to those qualities for which this species is esteemed. The lustre of the beryl is vitreous; its color, green, passing into blue, yellow and white. The brightest of these colors is emerald green, which, as it is rarely known to pass insensibly into the paler hues, has been made the basis of a distinct species in those specimens in which it occurs under the name of emerald. This distinction of species is not
considered, at present, as well founded; and the beryl and emerald are looked upon as identical by most mineralogists. It is translucent or transparent, and its hardness enables it to scratch quartz. Its specific gravity is from 2.6 to 2.7. It is composed of silex, 68.35; alumine, 17.60; glucose, 13.15; oxide of iron, 72, with a trace of lime and oxide of chrome. The beryl is widely diffused. It belongs to the primitive rocks, and is embedded in veins of quartz and feldspar, which traverse granite and mica slate. It is also found in from hence the equator. Here also the specific gravity is from 2.6 to 2.7. It is heavy enough for watchmakers, containing 200 and probably. Work in particular, he has a number of troops are kept in

BERZELIUS, James; born at Linkoping, in East Gothland, in 1779. As early as about 1280 he began the study of medicine and the natural sciences, particularly chemistry, for the prosecution of which he has since made some scientific journeys. He is, at present, professor of chemistry and pharmacy, secretary of the royal academy of sciences at Stockholm, &c. Charles XIV (Bernadotte) has made him a nobleman. He has done much towards establishing the electro-chemical system, which at present prevails, and according to which no chemical process can take place without the intervention of electricity. He has enriched chemistry, which, in our times, has become a perfectly new science, by the most important discoveries and profound works. In particular, he has distinguished himself by researches into the laws of definite proportions, discovered by Kicther, and has proved himself one of the best chemical analysts. His system of mineralogy is founded on his chemical principles. Most of his works have been translated into English and French.

BESANÇON (in old German, Biesanz); lon. 6° 3' E.; lat. 47° 14' N.; 48 miles from Paris; a large, old, well-built city, much fortified by Louis XIV; was transferred, by the peace of Nimwegen, with Franche-Comte to France; at present, is the chief place of the sixth military division; has 28,000 inhabitants, and is situated in the department Doubs. There is an arch-

BESSEL, Frederick William; considered by many the best astronomical observer of the present age; has been professor of astronomy in Königsberg since 1810; was born in Minden, July 22, 1784; entered, at the age of 15 years one of the first commercial houses in Bremen. The maritime intercourse of that place with foreign countries excited in him an inclination for geography, and afterwards for the science of navigation, and induced him to attempt the acquisition of mathematical knowledge from books. He soon passed to astronomy, and, as his days were other-
wise occupied, he devoted his nights to
these labors. An astronomical work
which he wrote procured him the ac­
quaintance of Olbers (q. v.), who, from
that time, became his adviser. In 1806,
he joined Scuter at Lilienthal, with rec­
ommendations from Olbers, and was em­
ployed for four years as inspector of the
instruments belonging to the university of
Göttingen. From thence he was invited
to Königsberg, where he built, in 1812—
13, the observatory, which is a monument
of the scientific enterprise of the north of
Germany, since it was erected when Prus­
sia was almost exhausted by war, and
Königsberg was situated on the great
theatre of Napoleon's operations against
Russia. The observations, uninterruptedly
continued at this observatory, are con­
tained in 5 vols., folio. The observatory
of Königsberg was, till 1819, provided
with English instruments, when the min­
istry supplied it with the means of pro­
curing new instruments, made by Rech­
cubach (q. v.), of the best workmanship.
Besides these observations and separate
treatises, B. published, in his work on
the comet of 1807, a theory of the dis­
turbances of these celestial bodies, and
Fundamenta Astronomiae pro ca. 1755—a
work in which he has reduced Bradley's
observations, and given their results. He
treats also of the various subjects con­
nected with these observations, namely,
the instruments used and the corrections
to be made in them. For the present
period, B. has endeavored, by his own
observations and a strict criticism of meth­
ods and instruments, to attain the necessary
certainty. Of his Astronomical Observa­
tions at the Observatory of Königsberg,
the 10th No., from Jan. 1 to Dec. 31,
1824, appeared at Königsberg, 1826.
BETEL is the leaf of a climbing East
Indian plant (piper-labetl), which belongs
to the same tribe as pepper, and, in shape
and appearance, is not much unlike ivy,
but is more tender, and full of juice.
There is an almost incredible consump­
tion of betel throughout India, and other
parts of the East. The inhabitants chew
it almost incessantly, and in such quantity
that their lips become quite red, and their
teeth black—a color greatly preferred by
them to the whiteness which the Europe­
ans so much affect. They carry it, in lit­
tle white boxes, about their persons, and
present it to each other, by way of com­
pliment and civility, in the same manner
as Europeans do snuff. This is done by
the women as well as by the men; and it
would be considered an offence, if those
to whom it is offered should refuse to ac­
cept of and chew it. The leaves are
sometimes used alone, but much more
commonly when covered with a kind of
linen made of sea-shells, and wrapped round
slices of the areca nut, the fruit of the
areca palm, of the size of a small egg, and
resembling a nutmeg deprived of its husk.
BETHANIA, or BETHANY; a village at
the foot of mount Olivet, on the west side,
about two miles east of Jerusalem, where
Lazarus dwelt, and was raised from the
dead, and where the ascension of Christ
is related to have taken place. The
house and grave of Lazarus and the
house of Mary Magdalene are still shown
to curious travellers. The name of B.
was sometimes extended to the whole
tract from the village itself to Bethphage.
BETHESDA; a pool in Judea, the name
of which signifies house of mercy. In the
five halls or porticos near it many patients
lay waiting, according to the account
of John (ch. v), for the moving of the waters,
to bathe in it. According to the opinion
of the Jews, an angel descended, at a cer­
tain time, into the pool, and troubled the
water, and whoever first entered the wa­
ter, after this agitation, was cured. This
pool seems to have been composed of a
red-colored mineral water, which received
its healing power from the red earth at
the bottom. If the healing fountain, after
having been obstructed for a time, began
to bubble up anew, and the patient made
use of it before the motion ceased, it
healed his disease. — To lie at the pool
of Bethesda, is used proverbially, in Germany,
in speaking of the theological candidates
who are waiting for a benefice.
BETHLEHEM; the birth-place of David
and Christ; a village, formerly a town, in
Palestine, a part of Syria, in the pachalic
of Damascus, five miles from Jerusalem,
at the foot of a hill covered with elms
and olive-trees, which, however, is not the
mount of Olives mentioned in the Bible.
An aqueduct conveys water from the hill
to the village. It has 300 houses, and
2400 Greek and Armenian inhabitants,
who make wooden rosaries and cruci­
fices, inlaid with mother of pearl, for pil­
grims; also excellent white wine. In a
rich grotto, furnished with silver and
crystal lamps, under the choir of the
church of a convent in this village, a
trough of marble is shown, which is said
to be the manger in which Jesus was
laid after his birth. There are three con­
vents there, for Catholics, Greeks and Ar­
menians. The greatest ornament of the
place is the stately church erected by the
empress Helena over the place where Christ is said to have been born, and bearing her name. It is built in the form of a cross, and the top commands a fine view over the surrounding country. Several spots mentioned in the Bible are shown there.

Bethlehem. There are many places in the U.S. States with this name. One of the most important is the borough and post-town in Northampton county, Pennsylvania, on the Lehigh, 12 miles S. W. Easton, 54 N. N. W. Philadelphia. Population in 1810, 1436; in 1820, 1660. It is pleasantly situated, regularly laid out, built chiefly of stone, and inhabited wholly by Moravians, who have a bishop there. It contains two academies, one for young ladies, and another for boys.

Betrothement; in law; a mutual promise or compact between two parties, by which they bind themselves to marry. The word imports giving one's troth, i.e., true faith or promise. Betrothement amounts to the same with what is called, by civilians and canonists, sponsalia or espousals, sometimes dispensation, and, by the French, fiançailles. Betrothement is either solemn (made in the face of the church), or private (made before witnesses out of the church). According to the Roman law, betrothement ought to be made by a stipulation, i.e., a contract, in which one binds himself, by an answer to a question put to him, to the fulfilment of a contract. As betrothements are contracts, they are subject to the same rules as other contracts; for instance, that they are valid only between persons whose capacity to contract is recognized by law; and the use of fraud, violence or intimidation vitiates the contract. The consent of both parties, of course, is required. This may be expressed either verbally, or by writing, or by action. In Germany, the consent of the parents is always necessary, if the parties are under age, not yet sui iuris. But if the parents withhold their consent unreasonably, the permission of the judge is allowed to sanction the contract. If the opinions of the parents are diverse, the law gives effect to that of the father. Some provincial laws require the consent of the relations, and the presence of witnesses. Betrothements contracted thus, according to law, are called sponsalia publica; others are called sponsalia clandestina. The latter are, in some places, utterly invalid; in others, only punishable. By the common German law, however, they are valid in every case in which consummation or consecration by the priest has taken place. The parents, in these cases, are not allowed to apply for a dissolution of the contract, nor can they refuse their consent, except for highly important reasons. Public betrothement induces the obligation to marry. In case of refusal to complete the contract by marriage, the injured party is allowed an action at law to compel its performance; but, since unhappy marriages are among the greatest misfortunes, the means of compulsion applied by the law are never great, amounting only to a small fine, or a short imprisonment. If circumstances take place which, if happening before the betrothement, would have necessarily prevented it, the party affected by them is allowed to recede from the engagement, and the modern laws allow only an action for damages. In Germany, betrothement generally takes place in a small company of relations and friends. In Russia, it was once binding and indissoluble, like marriage, but is now a mere form accompanying the marriage ceremony.

Betterment is a term used, in some of the U. States, to signify the improvements made on lands by the occupant, in building, fencing, draining, &c.; and the statutes of some of the U. States provide, that where a purchaser comes into possession under what he supposes to be a good title, and the land is afterwards recovered against him by virtue of a better title, in case he or those under whom he claims have been in possession of it a certain number of years, he shall be entitled to claim against the owner who so recovers possession of the land, the value of the improvements or betterments. This is a very equitable provision of the laws in states where, as in many parts of the U. States, titles are not fully established and confirmed by a long period of possession, and where, in newly-settled territories, the improvements may, in a few years, amount to more than the original value of the land.

Betterton, Thomas, a celebrated actor in the reign of Charles II, was born in Westminster, in 1635, and excelled in Shakespeare's characters of Hamlet, Othello, Brutus and Hotspur. In 1635, he opened a new play-house in Lincoln's-inn-fields, but did not succeed. He died in 1710, and was buried in Westminster abbey. He wrote the Woman made a Justice, a comedy; the Amorous Widow, or the Wanton Wife; Diocletian, a dramatic opera, &c. The Unjust Judge, or Appius and Virginia, a tragedy, was...
written originally by Mr. John Webster, and altered by B.

**Bettinelli.** Saverio, an Italian author, born at Mantua, in 1716, studied there and at Bologna, under the Jesuits; entered, in 1730, the novitiate of this order, and taught, from 1730 to 44, belles-lettres at Brescia, where he made himself known by some poems composed for the use of schools. In Bologna, where he studied theology, he continued to cultivate his poetical talents, and wrote for the theatre of the college his tragedy of Jonathan. In 1751, he was intrusted with the direction of the college of nobles at Parma. After having remained there eight years, he travelled in France and Germany, and returned to Verona, where he remained till 1767, engaged in preaching and instruction. After the suppression of the Jesuits, in 1773, he returned to his native city, where he resumed his literary labours with renewed zeal. He published several works, among which some were intended for ladies; as, his Correspondence between two Ladies, his Letters to Lesbia on Epigrams, and likewise his Twenty-four Dialogues on Love. He began, in 1799, a complete edition of his works (Venice, 1801, 12 vols. 12mo.) He preserved the cheerfulness and serenity of his spirit to the age of 90 years, and died in 1808, with the composure of a philosopher, and the devotion of a Christian. Besides his works already mentioned, we cite his *Dell' Entusiasmo delle Arti, Risorgimento negli Studi, nelle Lettere dieci di Virgilio agli Eraci* (3 vols.), a superficial work, which is, however, not destitute of new and just views. The *Lettere dilette di Virgilio agli Arcadi* attracted great attention. The ideas expressed in this work of the two great names of Italian poetry, particularly of Dante, involved him in many contests. His *Poesie* (3 vols.) contain 7 poemettti, 16 letters in blank verse, sonnets, canzoni, &c. Although this collection does not show any great poetical power, yet it is always elegant and ingenious. It is preceded by a treatise on Italian poetry.

**Bey,** among the Turks, signifies a governor of a town, seaport or small district. The Turks write the word *bey* (q. v.) (See also Begerleg.)

**Beza** (properly, de Beza), Theodore; next to Calvin, the most distinguished for genius and influence among the preachers of the Calvinistic church in the 16th century. Born of a noble family at Vezelay, in Burgundy, June 24, 1519; educated in Orleans, under Melchior Vulmar, a German philologist devoted to the reformation; and early familiar with the ancient classical literature, he became known, at the age of 20 years, as a Latin poet, by his petulant and witty *Jenititia* (a collection of poems of which he was afterwards ashamed). In 1538, he was made a licentiate of law, and, in the same year, invited by his family to Paris. He received from his uncle the reversion of his valuable abbey Froidmond, and lived on the income of two benefices and the property which he had inherited from a brother. His habits, at this time, were dissipated. His handsome figure, his talents, and his connexion with the most distinguished families, opened to him the most splendid prospects. But a clandestine marriage, in 1543, recalled him from his excesses, and a dangerous illness confirmed the intention, which he had formed at Orleans, of devoting himself to the service of the reformed church; so that, after his recovery, he forsook all the advantages of his situation in Paris, and repaired, with his wife, to Geneva, in 1547. Soon after, he accepted a professorship of the Greek language at Lausanne. During the 10 years of his continuance in this office, he wrote a tragi-comic drama, in French,—the *Sacrifice of Abraham,—* which was received with much approbation; delivered lectures (which were numerously attended) on the Epistle to the Romans and the Epistles of Peter (which served as the basis of his Latin translation of the New Testament, of which he afterwards published several editions, always with improvements); finished Marot's translation of the Psalms in French verse; and obtained to such a degree the confidence of the Swiss Calvinists that he was sent, in 1558, on an embassy to the Protestant princes of Germany, to obtain their intercession at the French court for the release of the Huguenots imprisoned in Paris. In the following year, he went to Geneva as a preacher, and, soon after, became a professor of theology, and the most active assistant of Calvin, to whom he had already recommended himself by several works (on the punishment of heretics by the magistrate, the vindication of the burning of Servetus, and some violent controversial writings on the doctrine of predestination and the communion, against Castulo, Westphal and Hesslus). His talents for negotiation were now often put in requisition by the Calvinists. He was sent to the court of Anthony, king of Navarre, at Nerac, to obtain the toleration of the French Hu-
IlEZa-BEZOAR.

guenots, and, at his desire, he appeared, 1561, at the religious conference at Poissy, where he spoke in behalf of his party with a boldness, presence of mind and energy, which gained him the esteem of the French court. He often preached in Paris before the queen of Navarre and the prince of Condé; also in the suburbs. At the conference of St. Germain, in 1562, he spoke strongly against the worship of images, and, after the commencement of the civil war, accompanied the prince of Condé as chaplain, and, on the capture of the prince, joined the admiral Coligny. After the restoration of peace, he returned to Geneva, in 1563, where, besides discharging the duties of his office, he continued to engage in theological controversies in support of the Calvinists; and, after Calvin's death, in 1564, became his successor, and was considered the first theologian of this church. He presided in the synods of the French Calvinists at La Rochelle (1571) and at Nismes (1572), where he opposed Morel's proposal for the alteration of clerical discipline; was sent by Conde (1574) to the court of the elector palatine; and, at the religious conference at Montpellier (1580), opposed the theologians of Wurttemberg, particularly James Arnaud. At the age of 83 years, he married his second wife (1588), and still continued to repel, with the power of truth and wit, the attacks and calumnies which his enemies, apostatized Calvinists (such as Volez), Lutherans, and particularly the Jesuits, heaped upon him. They reported, in 1597, that he had died, and returned before his death to the Catholic faith. B., now 78 years old, met his assailants in a poem full of youthful enthusiasm, and resisted, in the same year, the attempts of St. Francis de Sales to convert him, and the alluring offers of the pope. In 1603, he visited Henry IV, in the territory of Geneva, who presented him with 500 ducats. After having enjoyed excellent health during almost his whole life, he died, Oct. 13, 1605, of old age. By a rigorous adherence to the principles of Calvin, in whose spirit he presided over the church of Geneva, he had become the chief of his party, and enjoyed for 40 years the reputation of a patriarch, without whose approval no important step was taken. In order to preserve the unity and permanency of his church, he sacrificed his own opinions to the established dogmas of Calvin, and rendered the most important services by his various ordination, his constant zeal, his active spirit, his brilliant eloquence, and even by the impression of his personal appearance, which age made still more striking. He defended his doctrines with ability and enthusiasm, and often with merciless severity and obstinacy. Among his many works, his exegetical writings, and an able and correct History of Calvinism in France, from 1521 to 1633, which is ascribed to him, are still much esteemed. His correspondence with Calvin is to be found in the ducal library at Gotha. A catalogue of his works is given by Anthony la Faye, who has written an account of his life.

BEZANT; round, flat pieces of pure gold, without any impression, supposed to have been the current coin of Byzantium. This coin was probably introduced into coat-of-armor by the crusaders. Doctor Henry, in his History of England, estimates its value at 3s. 4d. sterling. The gold offered by the king of England on the altar, at the feast of the Epiphany and the Purification, is called bezant.

BEZOAR (Persian, pazar, a goat, or pezazhar, against poison); a concretion or calculus, of an orbicular or oval form, met with in the bodies of various animals. These substances are found in the stomach, gall-bladder, salivary ducts, and pineal gland, but especially in the intestines of certain animals of the order mammalia. They were formerly celebrated for their supposed medicinal virtues, and distinguished by the name of the countries from which they came, or the animals in which they were found. They were considered as highly alexipharmic; so much so, that other medicines, supposed to possess the same virtues, obtained the name of bezoars. So efficacious were these once thought, that they were eagerly bought for 10 times their weight in gold. Besides being taken internally, they were worn around the neck, as preservatives from contagion. For this purpose, it is said, that in Portugal it was customary to hire them at the price of about 10 shillings per day. On analysis, these substances are found to contain, for the most part, bile and resin. It is almost needless to add, that the accounts of their extraordinary virtues must now be considered as totally fabulous.—A strange origin was assigned to the bezoar by some of the old naturalists. The Oriental stags, when oppressed with age and infirmity, were said to feed upon serpents which restored their youthfult vigor. To counteract the poison which by this means was absorbed into their system, they plunged into some running stream, leav-
ing their heads only above water. In this situation, a viscous fluid distilled from their eyes, which was indurated by the heat of the sun, and formed the bezoar.—The great value of the bezoar at one time gave birth to many imitations of it, and various tests have been proposed to detect the artificial stones. The following cruel and absurd one is given by Clusius:—Thread a needle, and draw the thread through a leaf plucked from a yew-tree; then pass the needle through a dog's foot, and leave the thread in the wound; when the dog becomes convulsed, and appears dying, mix some scrapings of bezoar with water, and moisten the animal's mouth with it; if he recover, the stone is genuine. Simpler methods, perhaps, are, immersion in warm water, which neither loses its own color, nor diminishes the weight of the bezoar; or rubbing it over paper smeared with chalk or quick-lime; the genuine stone leaves a yellow hue on the first, a green one on the last.

Bia; a name given by the Siamese to those small shells which are called cowries throughout almost all the other parts of the East Indies. (See Cowries.)

Biagoli, Josephat; a learned Italian linguist at Paris. Before the invasion of Italy, by the joint forces of Austria and France, in 1796, he was professor of Greek and Latin literature at the university of Urbino. As B. had shown himself a friend to the cause of liberty, he took refuge in Paris, and was appointed professor of Italian literature at a pref- erential salary, and delivered lectures before a splendid audience. He is the editor of the Lettre del Card. Bentivoglio (Paris, 1800), which obtained a magnificent reception. He edited the following works (1727), on the planet Venus and on the sepulchre of Augustus. He died in 1729. A monument was erected to his memory in the cathedral at Verona. He united the most extensive learning with modesty and the most amiable manners.

Bias; son of Teutamus; born at Priene, one of the principal cities of Ionia, about 570 B.C. He was a practical philosopher, studied the laws of his country, and employed his knowledge in the service of his friends; defending them in the courts of justice, or settling their disputes. He made a noble use of his wealth. His advice, that the Ionians should fly before the victorious Cyrus to Sardis, was not followed, and the victory of the army of Cyrus confirmed the correctness of his opinion. The inhabitants of Priene, when besieged by Mazaras, resolved to abandon the city with their property. On this oc-
occasion, B. replied to one of his fellow-citizens, who expressed his astonishment that he had made no preparations for his departure,—"I carry every thing with me." B. remained in his native country, where he died at a very advanced age. His countrymen buried him with splendor, and honored his memory. Some of his sayings and precepts are yet preserved. He was numbered among the seven sages of Greece.

BIBELLA, Fernando; a painter and architect. His father, Giovanni Maria Galli (a less distinguished painter and architect), named his son B. from his native town in Tuscany. The son was born at Bologna, 1657. Carlo Cignani (q. v.) directed his studies. B. was afterwards invited to Barcelona. The duke of Parma subsequently made him director of his theatres. Charles VI afterwards invited him to Vienna. Several beautiful buildings were erected in Austria from his plans. In his theatrical paintings, he has continued the vicious style of Borromini and others. His writings display extent and accuracy of knowledge. When considerably advanced in life, his weak sight prevented him from painting, and he occupied himself with the revision of his works, which he published anew at Bologna, in 1677. Carlo Cignani directed his studies. B. was afterwards made director of the theatres. He finally became blind, and died 1743. His three sons extended their father's art through all Italy and Germany. Antonio succeeded to his father's place at the court of the emperor Charles VI. Giuseppe died at Berlin, and Alessandro in the service of the elector palatine. A collection of B.'s decorations has been published at Augsburg.

BIBLE; a book, from the Greek βιβλίον, which signifies the soft bark of a tree, on which the ancients wrote. The collection of the Sacred Writings, or Holy Scriptures of the Christians, is called the Bible, or the Book, by way of excellence. Some of these writings, which are also received by the Jews as the records of their faith, are called the Old Testament, or writings of the old covenant, because the Jewish religion was represented as a compact or covenant between God and the Jews, and the Greek word for covenant (αὐθεντήματος) signifies also last will, or testament. The same figure was applied to the Christian religion, which was considered as an extension of the old covenant, or a covenant between God and the whole human race. The sacred writings peculiar to the Christians are, therefore, called the Scriptures of the New Testament. (See Testament.) The order of the books of the Old Testament, as they are arranged in the editions of the Latin version, called the Vulgate (q. v.), according to the decree of the council of Trent (sess. 4), is as follows—Genesis, Exodus, Leviticus, Numbers, Deuteronomy, Joshua, Judges and Ruth; I Samuel, II Samuel, or II Kings; I Kings, otherwise called III Kings; II Kings, otherwise called IV Kings; I Esdras (as it is called in the Septuagint (q. v.) and Vulgate), or Ezra; II Esdras, or (as we call it) Nehemiah; *Esther, *Judith, *Esther, Job, Psalms, Proverbs, Ecclesiastes, Song of Solomon, *The Book of Wisdom, *Ecclesiasticus, Isaiah, Jeremiah and *Baruch; Ezekiel, Daniel, Hosea, Joel, Amos, Obadiah, Nahum (which, in our editions, is placed after Micah and before Habakkuk), Jonah (which we place after Obadiah), Micah, Habakkuk, Zephaniah, Haggai, Zechariah, Malachi, *I Maccabees and *II Maccabees. (Those to which an asterisk is prefixed are, by Protestants, considered apocryphal. q. v.)

The books received by the Jews were divided by Ezra into three classes:—I. The Law, contained in the Pentateuch, (q. v.) or five books of Moses. 2. The Prophets, comprising Joshua, Judges and Ruth, I and II Samuel, I and II Kings, I and II Chronicles, Isaiah, Jeremiah and Lamentations, Ezekiel, Daniel, the 12 minor prophets, Ezra, Nehemiah and Esther. 3. The Cetabim, or Hagiography, that is, holy writings, containing the Psalms, the Proverbs, Ecclesiastes and the Song of Solomon. These books were written in the Hebrew language (q. v.), while those which are rejected from the canon as apocryphal by the Protestants, are found only in Greek or Latin. The books of Moses were deposited, according to the Bible, after his death, in the tabernacle, near the ark; the other sacred writings, it is further said, were successively deposited in the same place, as they were written. After the building of the temple, they were removed by Solomon to that edifice; on the capture of Jerusalem by Nebuchadnezzar, the autographs probably perished, but numerous copies were preserved, as is inferred from allusions in writers subsequent to the Babylonish captivity. It is generally admitted, that the canon of the Old Testament was settled soon after the return from Babylon, and the reestablishment of the Jewish religion. This work was accomplished, according to the traditions of the Jews, by Ezra, with the
assistance of the great synagogue, who collected and compared as many copies as could be found. From this collation a correct edition of the whole was prepared, with the exception of the writings of Ezra, Malachi, and the Hasmonean, which were added by Simon the Just. When Judas Maccabaeus repaired the temple, which had been destroyed by Antiochus Epiphanes, he placed in it a correct copy of the Hebrew Scriptures, whether the autograph of Ezra or not is not known. This copy was carried to Rome by Titus. The division into chapters and verses is of modern origin. Cardinal Hugo, who flourished in the 13th century, having divided the Vulgate into chapters, for convenience of reference, similar divisions were made in the Hebrew text by rabbi Mordecai Nathan, in the 15th century. The present division into verses was made by Athias, a Jew of Amsterdam, in his edition of 1661. The punctuation is also the work of modern scholars. Biblical critics divide the Scriptures of the Old Testament into the Pentateuch, or five books of Moses; the historical books, from Joshua to Esther inclusive; the doctrinal or poetical books of Job, Psalms, Proverbs, Ecclesiastes and the Song of Solomon; the prophetical books.—The most esteemed manuscripts of the Hebrew Bible are those of the Spanish Jews. The most ancient are not more than seven or eight centuries old; the famous manuscript of the Samaritan Pentateuch, in the possession of the Samaritans of Sichem, is only 500 years old: a manuscript in the Bodleian library is supposed to have been written in 973. In some manuscripts, the Masora (q. v.) is added.—The printed editions of the Hebrew Bible are very numerous. The earliest was printed at Soncino, in 1488. The Brescian edition of 1525 was used by Luther, in making his German translation. The editions of Athias, a Jew of Amsterdam, 1661 and 1667, are much esteemed for their beauty and correctness. Van der Hooght followed the latter. Doctor Kennicott did more than any one of his predecessors to settle the Hebrew text. His Hebrew Bible appeared at Oxford, in 1776-1780, 2 vols., folio. The text is from that of Van der Hooght, with which 630 MSS. were collated. De Rossi, who published a supplement to Kennicott’s edition (Parma, 1784-99, 5 vols., 4to.), collated 988 MSS. The German Orientalists, Gesenius, De Wette, &c., in recent times, have done much towards correcting the Hebrew text. The earliest and most famous version of the Old Testament is the Septuagint, or Greek translation. The Syriac version, called the Peshitta, was made early in the second century. It is celebrated for its fidelity. The Coptic version was made from the Septuagint, some time before the seventh century. The Gothic version, by Ulphilus, was also made from the Septuagint, in the fourth century. The most important Latin version is the Vulgate. (For an account of the principal polyglots, see Polyglot.)—The books of the New Testament were all written in Greek, unless it be true, as some critics suppose, that the Gospel of St. Matthew was originally written in Hebrew. Most of the writings have always been received as canonical; but the Epistle to the Hebrews, by an uncertain author, that of St. Jude, the second of Peter, the second and third of John, and the Apocalypse (q. v.) have been doubted. Eusebius distinguishes three sorts of books connected with the New Testament:—1. those which have always been universally received, namely, the four Gospels, the Acts of the Apostles, 13 Epistles of Paul, the first Epistle of Peter, and the first of John: 2. those which were not received, at first, by all the churches; of these, some which have been already mentioned, though at first rejected by some churches, have been since universally received; others, such as the Books of the Shepherd, the Letter of St. Barnabas, the two Epistles of St. Clement, have not been generally acknowledged as canonical: 3. books forged by heretics, to maintain their doctrines; such are the Gospels of St. Thomas, St. Peter, &c. The division of the text of the New Testament into chapters and verses was introduced earlier than that of the Old Testament; but it is not precisely known when, or by whom. (For the numerous translations of the Bible, in modern times, see the article Bible Societies, and the annual reports of these societies, particularly of the British and foreign Bible society.) In Biblical criticism, the Germans have, without doubt, done much more than any other nation; and we should far exceed our limits, if we were to attempt an enumeration of their works in this department. (See Wette, Griesbach, Gesenius, Schleiermacher, Michaelis, &c.)—The whole Bible was translated into Saxon by Bede, in the beginning of the eighth century. The first English translation, by an unknown
BIBLE-BIBLE SOCIETIES.

hand, is supposed to have been made near the end of the 13th century. Wickliffe's translation of the entire Bible from the Vulgate, 1380, was first printed 1731. The first printed edition of any part of the Scriptures in English was a translation of the New Testament from the original Greek, published by Tindal, 1526. The authorized version now in use, in England and America, was made by the command of James I, and is commonly called King James's Bible. Forty-seven distinguished scholars were appointed for this purpose, and divided into six classes. Ten at Westminster were to translate to the end of II Kings; eight at Cambridge were to finish the remaining historical books and the Hagiographa; at Oxford, seven were engaged on the Prophets: the four Gospels, Acts of the Apostles and Apocalypse were assigned to another company of eight at Oxford; and the Epistles were allotted to a company of seven at Westminster: the apocryphal books were to be translated by a company at Cambridge. Each individual translated all the books allotted to his class. The whole class then compared all the translations, and adopted the readings agreed on by the majority. The book, thus finished, was sent to each of the other classes. This translation occupied three years. Copies were then sent to London, one from each of the above-named places. Here a committee of six, one from each class, reviewed the whole, which was last of all revised by doctor Smith and doctor Bishop of Winchester. It was printed in 1611. The latest and most complete revision was made by doctor Blayney, Oxford, 1729. (For an account of the German translation, see Luther, and Reformation. As a general book of reference, relating to the literature of the Bible, Horne's Introduction to the Study of the Scriptures may be consulted. See also Harris's Natural History of the Bible.)

Bible and Geography, describes Palestine, and gives an account of the Asiatic countries bordering on Palestine, and of the provinces of the Roman empire into which Christianity was introduced, during the age of the apostles. The sources of this science are the Scriptures, the writings of Josephus, the geographical authors of antiquity,—Strabo, Ptolemy and Pompianus Mela,—and the Onomasticon Urbium et Locorum Scriptura Sacra, written by Eusebius, bishop of Ceasarea, in the fourth century, in Greek, and translated by Jerome into Latin. Among the learned moderns who have cultivated this science, so important for the interpreter of the Holy Scriptures, are Bachnius, Wells, and the Dutchman Yastrand of Hamelsfeld. (See Geography.)

Bible Societies. A clergyman of Wales, whom the want of a Welsh Bible led to London, occasioned the establishment of the British and foreign Bible society, which was founded in London, March 7, 1804. It was called the Bible society, because its object was the distribution of the Bible; British, because its operations were first directed towards the poor of Great Britain; and foreign, because it proposed, as far as its means would permit, to send Bibles, in all languages, to all parts of the world. The Bibles distributed by the society were to be without additions and explanations, in order to give them a more universal circulation. In the same year, the first general meeting was held in London, which unanimously adopted the proposed plan. Lord Teignmouth was chosen president, and many bishops, lords and members of parliament accepted the office of vice-president. In 1815, 484 similar institutions had been formed in all parts of Great Britain, and connected with the former as a parent society, to support it with pecuniary contributions, and to receive, in return, a supply of Bibles. There are, besides, several Bible societies among the lower class of people, the members of which pay, weekly, a penny or a half-penny to provide themselves, their children or other poor persons with Bibles. In Germany, Switzerland, Holland, Russia, Sweden, Denmark, America, similar Bible societies have been formed, and are connected with the British. The 24th annual report of the British and foreign Bible society in London, 1828, gives a list of editions of the whole or parts of the Scriptures, printed for the society, in the following languages:-English, Welsh, Gaelic, Irish, Manx, French, Basque, Breton, Flemish, Spanish, Portuguese, Italian, Dutch, Danish, Hebrew, Swedish, German, Polish, Greek (ancient and modern), Armenian (ancient and modern), Arabic, Coptic, Indo-Portuguesse, Syriac, Carshun, Esgun, Mohawk, Ethiopeic, Malay, Turkish, Hindostanee, Yiddish, Armenian, Persian, Bohemian, Latin, Albian. The same report gives the following summary of languages and dialects, in which the distribution, printing or translation of the Scriptures, in whole or in part, has been promoted by the so-
BIBLE SOCIETIES.

iciety, directly or indirectly:—Reprints, 42; retranslations, 5; languages and dialects in which the Scriptures had never been printed before the institution of the society, 58; new translations commenced or completed, 38; total, 143. The society provides many translations of single books of the Bible, or of the New Testament, in numerous languages and dialects of the nations of Middle and Eastern Asia, at Calcutta and Madras; as well as in the languages of the Levant, North Africa, &c. (e. g., the Arabic, Tartar, Syriac, and two dialects of the Ethiopic), at Smyrna, Malta, and other depots of the Mediterranean; and aids all the Bible societies of the continent of Europe. It has agents in almost all parts of the inhabited globe, who travel at its expense, to discover the best means of diffusing the Bible, and to procure able translators and manuscripts of ancient translations for the use of the society. Pinkerton found, in Paris, translations of the Bible in the dialects of Northern Asia and Tibet, with the characters belonging to them, which had been brought to France, under Napoleon, from the archives of the propaganda at Rome. The most difficult translation was that into the Esquimaux language. According to the 24th report above-mentioned, published in 1828, there were issued in England, during the 24th year from the establishment of the society, Bibles, 137,162; Testaments, 815,834; total issued on account of the society, from its establishment, Bibles, 212,024; Testaments, 3,422,341; grand total, 3,637,563. In addition to this, the society has granted about £53,500 for distributing, in various parts of the European continent, French, German, Swedish and Danish Bibles and Testaments. The number of Bible societies throughout the world, given in the same report, is as follows:—In Great Britain and Ireland, connected with the British and Foreign Bible society, 262 auxiliaries, 350 branches, and 1433 associations; in Ireland, connected with the Hibernian Bible society, 70 auxiliaries, 38 branches, and 18 associations; on the European continent and in the Ionian islands, 54 societies; in Asia, 13; in Africa, 4; in America, 549 (there are, in fact, 631 societies in America, in the present year, 1829); total, 4293.—In Germany, the following were the chief Bible societies in 1817:—1 at Hanover, where an edition of the Bible, of 10,000 copies, has been completed; 1 at Berlin; 1 at Dresden, which, besides a stereotype edition of the German Bible, has also published an edition, in the Wendish tongue, for Lusatia; 1 at Frankfort on the Main. In Bavaria, the distribution of the Bible has been confined to the efforts of individuals. (180,000 copies of the Catholic translations of the New Testament, by Gossner and van Ess, had been distributed in Germany and Switzerland, up to 1821. Many of these reached the Austrian provinces, which at present are closed against German Bibles.) The society at Stuttgart has printed an edition of 10,000 Bibles and 2000 Testaments, which has already been taken up. Societies exist at Hamburg, Baden, Weimar, Bremen, Lübeck; at Schleswig-Holstein, Schwerin, Ratzeburg, Eutin, Brunswick, &c. (each of them having auxiliary societies). Protestant Switzerland has a Bible society of its own; so has the kingdom of the Netherlands, which provides its colonies with Bibles. In Paris, such a society was instituted, Dec. 6, 1818, for the Protestants in France. The means of this society were small (in 1820, not more than 58,212 francs had been received), and it had principally in view the supplying of schools, hospitals and prisons; but, as Catholics also have received the Bible, it has met with a strong opposition from the papal-jesuitical party in France. In Strasburg, an edition of 20,000 Bibles was printed for Alsace. In Sweden, the chief society in Stockholm have distributed a large number of Bibles and Testaments. In Norway and Denmark, editions have been published with the same view, and the Danish society has branches in Iceland and the West Indies. The Russian society in Petersburg has vied with the English, and some years since had printed the Bible in 31 languages and dialects spoken in the Russian dominions, among which is one in the modern Russian, since the translation of the church is in the Slavonic, and unintelligible to laymen. This new translation has been joyfully received by the country people, and shows them the errors and many superstitions which disfigure the ritual of the Greek church. On this account, it will probably give rise to contests, which can hardly be terminated without a gradual reformation of the Greek church. Part of the clergy are opposed to the distribution of the Bible, and persecutions against zealous readers of the sacred book have already taken place in the more distant governments. The Gospels in the
Calmuc language and the Persian New Testaments are much sought for. A translation of the Bible for the Booriiats, Mongol worshippers of the Lama, near Lake Baikal, is preparing, with the assistance of two young Booriiats of high birth, who embraced Christianity at Petersberg. Auxiliary societies have been formed at Irkutsk, Tobolsk, among the Kirghises, Georgians, and Cossacks of the Don. The word of God is carried from Odessa to the Levant. The bull of Pius VII, June 28, 1816, obtained by the archbishop of Gnesen, did not prevent the Poles from forming a society in Warsaw, under the protection of Alexander. In 1817, the distribution of the Bible by such societies was forbidden in Austria, and those already existing in Hungary were suppressed. Italy, Spain and Portugal have had, as yet, no Bible societies; France only one; but the English have provided them with Bibles in their own tongues.

In the U. States of America, the great American Bible society, formed in 1816, acts in concert with the auxiliary societies, of which, in 1829, there were 630. The management of the society is intrusted to a board of managers; stereotype plates have been procured, and Bibles are issued at a low price for the auxiliaries, and for gratuitous distribution among the poor. During the first year, 6,410 copies of Bibles and Testaments were distributed. In 1827, the number amounted to 134,000, and, during the first 8 months of 1828, to 145,000. The whole number issued since the organization of the society is about 700,000. These have been mostly in English, Spanish and French, from the society's plates. The managers have occasionally purchased Bibles in Europe, and issued them to applicants, in German, Dutch, Welsh, Gaelic, Portuguese, modern Greek, and some other European languages. They have also furnished money to print translations into pagan languages, by American missionaries. They have in operation 8 power-presses and 20 hand-presses, and copies are prepared at the rate of 300,000 a year. Many of the auxiliary societies have undertaken to discover the number of families in their vicinity destitute of the Bible, and to supply them. It is the object of the society to supply every family in the U. States, before devoting much attention to distribution abroad. Yet Spanish America and Ceylon, Greece and the Sandwich islands, have been furnished with Bibles by the society. The colonies also exert themselves in this cause. Hayti has offered her assistance, and even the Esquimaux already read the Acts of the Apostles in their own language. A similar zeal for the distribution of the Bible has been awakened in Southern Africa and in India, where Bibles are published in the languages of the country; even the islands on the eastern coast of Asia are not neglected. In the Netherlands, there is a fraternal union of different sects for this purpose, as is also the case in other countries containing various sects. Such associations excite among different sects a feeling of mutual sympathy, by a consideration of their mutual participation in the most important truths of Christianity—Such a general diffusion of the Bible is an event of great historical importance. Its translation into languages which have been hitherto destitute of all literature, and even of writing, must contribute greatly to the progress of intellectual cultivation throughout the earth, and must have an especial influence on the advancement of general philology. The Bible societies may be considered as assisting to pave the way for the introduction of European civilization into all the less enlightened regions of the earth. The societies adhere to the principle of publishing the Bible without notes, starting from the Protestant principle, that the Bible, and the Bible alone, is the foundation of Christian faith. Undoubtedly, the various sects of Christians, differing so greatly as they do, and always must, respecting certain points of faith and the interpretation of particular passages of the Scriptures, could not be made to co-operate with zeal in the distribution of the Bible, if the text were accompanied with commentaries. But now missionaries and ministers must supply, by verbal explanation, the place of notes, because it is clear to every body that the Bible cannot be understood without the explanation afforded by study. Thus the opinions of individuals, orally delivered, are substituted for the more precise and profound criticism of united commentators. It seems to us, that the friends of Bible societies and their opponents (a part of the Catholic clergy) have both run into extremes; the former by injudiciously distributing the Scriptures, in some cases, before people were fit to understand them; and the latter by an unequalled prohibition of the reading of the Bible by the laity. The order of the pope, that only certain editions and versions should be read by the Catholics, originated from views founded on the experience of all ages of Chris-
tainty, that men of pure intentions often fall into dreadful errors and absurdities from want of just direction in the study of the Bible. And it remains a fact not to be disputed by the most ardent defend­er of immediate and supernatural assistance to the reader of the Bible, that, being composed of parts extremely various in their character, written in times and countries very remote from us, often in metaphorical language, and intimately connected with the customs, views, his­tory and language of particular nations, and even individuals, its real meaning is not to be found without an extensive study of many different branches of science, the results of which may be used to assist the less informed reader. History shows us, that the blackest crimes and the most egregious follies have been defended by the misapplication of the text of the Sacred Scriptures. It must be left to time to show what will be the ultimate effect of Bible societies. Undoubtedly it will be found, that some portion of their efforts have been made in vain, as was, indeed, to be expected; and, in many instances, they appear to us to have been made injudiciously. The extension of the habit of reading through so many parts of the world, we imagine, will be one of the greatest and most lasting consequences of the exertions of these societies.

Biblical Archæology is the science which describes the political state, manners and customs of the Jewish nation, as well as the usages of the early Chris­tian church; consequently, the antiquities of the Bible. Civil relations, religious ceremonies, holy places, domestic customs and dress, modes of dress, and other external circumstances, form the subject of this science. The antiquities of the Bible are partly Jewish, partly Chris­tian. The sources of the former are the Old Testament, the works of Josephus and Philo, the Talmud, and the writings of the rabbins. The sources of Christian antiquities are the New Testament, the writings of the fathers, who lived and wrote soon after the age of the apostles. Without the knowledge of the manners and customs of a nation, many passages of their authors, which contain allusions to them, remain unintelligible, and, on this account, the knowledge of the antiquities of the Bible is necessary to the interpreter of the Holy Scriptures. Among the modern authors, who have written on Jewish antiquities, Voland, John Simonis, Ernst Aug. Schulz, George Lawrence Bauer, Warnkros de Wette and John Jahn particularly deserve to be mentioned. We may find information concerning Christian antiquities in the commentaries on the New Testament, and in the historians of the church. The Germans have particularly distinguished themselves in this department.

Bibliography (from βιβλιογραφία, a book, and γράφω, I describe) was originally a branch of archæography, or the art of de­scribing or explaining antiquities, and denoted skill in the perusing and judging of ancient manuscripts; but in its modern and more extended sense, it signifies the knowledge of books, in reference to the subjects discussed in them, their different degrees of rarity, curiosity, reputed and real value, the materials of which they are composed, and the rank which they ought to hold in the classification of a library. It is, therefore, divided into two branches, the first of which has reference to the contents of books, and may be called, for want of a better phrase, intellectual bibliography; the second treats of their external character, the history of particular copies, &c., and may be termed material bibliography. The object of the first kind is to acquaint literary men with the most valuable books in every depart­ment of study, either by means of cata­logues raisonnées simply, or by similar catalogues accompanied with critical remarks. Bibliography belongs to those sciences, the progress of which is de­pendent, in a great degree, on external circumstances. It has been and still is cultivated most successfully in France. This is owing not only to the riches of the great and daily increasing public libraries, liberally thrown open to the use of the public, the large number of fine private collections, and the familiarity of its numerous literary men with books of all ages and countries, but, in a great degree, to the practical spirit of the nation which induces their bibliographers to keep constantly in view the supply of existing wants. Brunet’s Manuel du Li­braire was the first important work which contained, in an alphabetical form, a list of the most valuable and costly books of all literatures; Barbier’s Dictionnaire des Ouvrages Anonymes, the first systematic and satisfactory treatise on this subject; Renouard’s Catalogue d’un Amateur, the first, and, for a long time, the best guide of the French collectors; the Bibliograp­hie de la France, the first work which showed how the yearly accumulation of literary works can be recorded in the

BIBLE SOCIETIES—BIBLIOGRAPHY.
most authentic manner. No less valuable are the works of Peignot, Petit Rudel, Remond on the Alcines (see Alcine Editions), and many others. English bibliography can boast of but one of the advantages of the French; that is, of rich public and private collections; but the use of them is allowed only to a limited degree, and the English bibliographers are far behind the French. The works of doctor Adam Clarke (Bibliographical Dictionary, 1820) and of Robert Watt (Bibliotheca Britannica, 1819) are compilations of little value; the undigested collections of Beke (Anecdotes of Literature, 1807), of Burdach's Dutch Bibliographer, 1816; Censura Literaria, 1805, of Savage (the Librarian, 1808), and others, are destitute of judicious selection, and often of correctness. Utley's Inquiry into the Origin and Early History of Engraving (1816), and Singer's Researches into the History of Playing Cards (1816), works which belong to very important points of bibliography, are deficient in correct criticism; and we are not dazzled by the type, the paper and the engravings of Dübián's productions (Typographical Antiquities, 1819; Bibliotheca Spenceriana, 1814; Bibliographical Decameron, 1817; Tour in France and Germany, 1821) we cannot be blind to the superficial requirements of the author. There is now publishing, in England, the Bibliographer's Manual, an imitation of Brunck's Manual above-mentioned. It is to be completed in 12 parts. The learned Germans, little assisted by public, almost entirely destitute of private collections, consulting only the real wants of the science, have actively endeavored to promote it. Eich is the founder of German bibliography. He gave it a truly scientific character by his extensive work, Allgemeines Repertorium der Literatur (Universal Repertory of Literature, 1788—1807), and by his Handbuch der Deutschen Literatur (Manual of German Literature). German bibliography is particularly rich in the literature of separate sciences; and the bibliography of the Greek and Latin literature, as well as the branch which treats of ancient editions, was founded by the Germans. The first attempt, in Germany, to prepare a universal bibliographical work, was made by Ebert (q. v.), who wrote, also, in the 10th number of Hermes, a review of the whole modern German bibliography. The booksellers' dictionary is a very valuable German bibliographical work. A supplement is published annually. The following are valuable German bibliographical works in particular departments of science and literature:—T. A. Nessel's Auwertung zur Kenntnis der besten allgemeinen Bücher in der Theologie, 4th ed. Leipzic, 1806, and the continuation of it by Simon, Leipzic, 1813; C. F. Burdach's Literatur der Heilwissenschaft, Gottinga, 1810, 2 vols.; W. G. Placequet's Literatur Medica, Tubingen, 1807, 4 vols.; T. G. Mann's Bibliothea Historica, Leipzic, 1792—1802, 11 vols. in 22 volumes, not finished; his Literatur der Statistik, Leipzic, 1816, 2 vols.; G. R. Böhmer's Bibliotheca Scriptorum Historiae Naturalis, Leipzic, 1785—93, 7 vols.; All. Haller's Bibliotheca Botanica, Zurich, 1771, 2 vols., 4to.; Anatomica, Zurich, 1774, 2 vols., 4to.; Chimurgica, Bern, 1774, 2 vols., 4to., and Medicina Practica, Bern, 1776 et seq., 4 vols., &c.—Fred. Blume has lately published the first volume of Juris Italicus, containing an account of the archives, inscriptions and libraries in the Sardinian and Austrian provinces. Italian bibliography is no longer what it was in the times of Mazzuchelli, Audiffredi and Tiraboschi. A great indifference is almost universal in regard to the public libraries; the private collections are becoming more and more scarce, and the precious ones of Count Cassano Serra and Melzi, in Naples and Milan, have been lately sold to England. The bibliographical works of Italy treat principally of the provincial libraries (one of the latest is Moretti's Bibliografra della Toscana, 1805); Gamba's Serie di Testi (1812) is a very valuable work. The Dutch, Spaniards and Portuguese have, of late years, done little for this science; but the learned Bentkowski's Polish Bibliography (1814) deserves the highest praise. The count Zечenyi, a Hungarian, published a catalogue of all Hungarian works, Pest, 1768—1807, 9 vols., 4to., and 1 vol., 4to. Russia has produced, in the department of bibliography, little more than catalogues. In regard to particular sciences, many useful catalogues exist, commonly called Bibliotheca. Well arranged and accurate catalogues of libraries, which are rich in particular departments, may be used with advantage by the bibliographer, as may, also, the annual catalogue of the book-fair at Leipzic. (See Books, Catalogues of)—Directions for the study of bibliography are contained in Achard's Cours de Bibliographie (Marseilles, 1807, 3 vols.), Th. Hartwell Horne's Introduction to the Study of Bibliography (London, 1814, 2 vols.), and Gabr. Peignot's Dictionnaire
BIBLIOGRAPHY—BIBLIOANIA.

raisonné de Bibliographie (Paris, 1802—4, 3 vols.)

Material Bibliography, often called, by way of eminence, bibliography, considers books in regard to their exterior, their history, &c., and has been principally cultivated in France and England. The different branches of material bibliography (see, also, Bibliomania) may here be mentioned—the knowledge of the ancient editions (incunabula, or, if classical authors, editiones princeps), some of the best works on which are, G. Wig. Pannz's Annales Typographici (Nuremberg, 1793—1803, 11 vols., 4to.), coming down to 1536; the Annales Typographici, by Muittaire (Hague, 1719 et seq., 11 vols., 4to.), which not only contains the titles, but investigates the subjects of works. More exact descriptions of particular ancient editions are found in Serna Salltanzer's Material Bibliography, which not only contains the titles, but investigates the subjects of works. The study of rare books, on account of the vague principles on which it rests, is more difficult than generally believed, and easily degenerates into superficial and capricious trifling. This has been more injured than promoted by I. Vog's Catalogus Librorum Rarioarum (Frankfort and Leipzig, 1738), and J. Jac. Bauer's Bibliotheca Libror. Rario. Universalis (Nuremberg, 1776—91, 12 vols.) We may also mention here the catalogues of the books prohibited by the Roman church (bulices Librorum Prohibitorum et Expurgatorum). For the discovery of the authors of anonymous and pseudonymous works, we may use Barbier's Dictionnaire des Ouvrages anonymes et pseudonymes (Paris 1806—9, 4 vols.), which is valuable for its accuracy (but it contains only French and Latin works). We need not observe, what an important source of information, in the department of bibliography, are literary journals. (See Bibliomania.)

BIBLIOANIA is a word lately formed from the Greek, and signifies a passion for possessing curious books. The true bibliomanist is determined in the purchase of books, less by the value of their contents, than by certain accidental circumstances attending them. To be valuable in his eyes, they must belong to particular classes, be made of singular materials, or have something remarkable in their history. Some books acquire the character of belonging to particular classes, from treating of a particular subject of interest to the bibliomanist; others from something peculiar in their mechanical execution, or from the circumstance of having issued from a press of uncommon eminence, or because they once belonged to the library of an eminent man. Some of these collections are of much intrinsic value. Among them are, various editions of the Bible (the most complete is at Stuttgart); collections of editions of single classics (e.g., those of Horace and Cicero, in the city library at Leipzig); the editions in usum Delphini and cum nodis variorum; the editions of Italian classics printed by the accademia della Crusca; works printed by the Elzevirs, by Aldus, Comino in Padua, and Bodoni (the most complete collection of Bodoni's editions is in the library of the duchess of Agde and Auxerre. But, in the 12th century, we find it employed as a mode of detecting heretics. In the Gallican church, it was long practised in the election of bishops; children being employed, on behalf of each candidate, to draw slips of paper with texts on them, and that which was thought most favorable decided the choice. A similar mode was pursued at the installation of abbots, and the reception of canons; and this custom is said to have continued in the cathedrals of Ypres, St. Omer and Boulogne, as late as the year 1744. In the Greek church, we read of the prevalence of this custom as early as the consecration of Athanasius, on whose behalf the presiding prelate, Carcalia, archbishop of Nicomedia, opened the Gospels at the words, "For the devil and his angels." Matt. xxv. 41. The bishop of Nice first saw them, and adroitly turned over the leaf to another verse, which was instantly read aloud: "The birds of the air came and lodged in the branches thereof." Matt. xxv. 42. But, this passage appearing irrelevant to the ceremony, the first became gradually known, and the church of Constantinople was violently agitated by the most fatal divisions during the patriarchate.

BIBLIOMANCY is divination performed by means of the Bible; also called sortes bibliica, or sortes sanctorum. It consisted in taking passages at hazard, and drawing indications thence concerning things future. It was much used at the consecration of bishops. It was a practice adopted from the heathens, who drew the same kind of prognostication from the works of Homer and Virgil. In 465, the council of Vannes condemned all who practised this art to be cast out of the communion of the church; as did the council of Agde and Auxerre.
d'Abrantes); the classics edited by Maittaire, Fouis, Barbon, Bradley, and others, and the celebrated lepont editions; with others.—It was more customary in former times than at present to make collections of books which have something remarkable in their history; e.g., books which have become very scarce, and such as have been prohibited. Of the first sort, the collections of Engel and Salamon were formerly among the most considerable. The one at Dresden is among the largest now existing. Books distinguished for remarkable mutilations have also been eagerly sought for. These which appeared in the infancy of typography, of its inaccuracy, from the Latin errors, a cradle, principally the first editions (editio principis) of the ancient classics, are still in general request. Much of the value of a book, in the eyes of bibliomanes, depends upon the material of which it is composed. An enormous price is frequently given for splendid proof impressions of copperplate engravings, and for colored impressions, for works adorned with miniatures and illuminated initial letters; likewise for such as are printed upon vellum. (The most considerable collection of vellum copies was sold at auction, in 1815, at the sale of McCarthy's books, in Paris. A bibliographical work upon this subject is now preparing by van Prat, in Paris.)—Works printed upon paper of uncommon materials (e.g., Oeuvres du Marquis de Villela, Lond. 1760, 4to.), or various substitutes for paper (e.g., E. Bruckmann's Natural History of Asbestos, upon paper made of asbestos, Brunswick, 1727, 4to.), have been much sought after; likewise those printed upon colored paper. In Italy, the color of books of this sort is commonly blue; in France, rose-color; in some ancient German books, the color is yellow; sometimes, though rarely, green. A list of books of this class is to be found in Paquin's Répertoire des Bibliothèques spéciales, Paris, 1810.—Other books, in high esteem among bibliomanes, are those which are printed on large paper, with very wide margins. True bibliomanes often measure the margin by inches and lines. In English advertisements of rare books, some one is often mentioned as particularly valuable on account of its being "a tall copy." If the leaves happen to be uncut, the value of the copy is much enhanced.—Other works, highly valued by bibliomanes, are those which are printed with letters of gold or silver, or ink of singular color; e.g., I. Patti Napoletani, Paris, 1814, 4to., a copy on blue vellum paper, with golden letters; 2. Magna Charta, London, Whitaker, 1816, 4to., three copies upon purple-colored vellum, with golden letters; also, books printed from copperplates. Catalogues of these have been made by Peignot and others.—In France and England, the bibliomania often extends to the binding. In France, the bindings of Deroze and Bozeuz are most valued; in England, those of Charles Lewis and Roger Payne, several specimens of whose skill are to be seen in the library of lord Spencer; among others, the Glasgow edition of Eschylus, 1755, the binding of which cost £16 12s. sterling. Payne is said to have sometimes received from 20 to 20 guineas for binding a single volume. This species of luxury is carried to such a height in London, that a copy of Maclin's Bible (4 vols. in folio), in red or blue morocco leather, costs 175 guineas, and Boydell's large edition of Shakespeare (9 vols. with large engravings) £132 sterling. Even the edges of books are often adorned with fine paintings. Many devices have been adopted to give a factitious value to bindings. Jeffery, a London bookseller, had Fox's History of King James II bound in fox-skin, in allusion to the name of the author; and the famous English bibliomaniac Askew even had a book bound in human skin. In the library of the castle of Königsberg are 20 books bound in silver (commonly called the silver library). These are richly adorned with large and beautifully engraved gold plates, in the middle and on the corners. To the exterior decorations of books belongs the bordering of the pages with single or double lines, drawn with the pen (exemplaire régle), commonly of red color—a custom which we find adopted in the early age of printing, in the works printed by Stephens. The custom of coloring engravings has been dropped, except in cases where the subject particularly requires it (for instance, in works on natural history, or the costumes of different nations), because the colors conceal the delicacy of the engraving. On this account, the colored copies of Durer's wood-cuts are esteemed less than those which are left uncolored. The other means of idle competition being almost all exhausted, the bibliomanes have lately hit upon the idea of enriching many works by the addition of engravings, illustrative indeed of the text of the book, but not particularly called for, and of preparing only single copies. Thus Longman, in London, offers an illustrated copy...
of the otherwise common Biographical Dictionary of all the Engravers, by John Strutt (London, 1785—86, 2 vols. 4to.), which is increased, in this way, to 27 large vols., in folio, and costs not less than £2000 sterling. The library of Dresden has a similar copy of Baddœus’s Historical Lexicon, of an earlier date. Among the auctions, where the bibliomania raged with the greatest fury, was that of the library of the duke of Roxburgh (q. v.), in London, 1812. Every work was bought at almost incredible prices. The first edition of Boccaccio, published by Valdarfer, in 1471, was sold for £2,000 sterling; to the memory of which a bibliomania-Roxburgh club was founded in the following year, of which lord Spencer is president. It meets yearly on the 13th of July, the anniversary of the sale of Boccaccio, in the St. Alban’s tavern. No further evidence is necessary to show that bibliomania, which flourished first in Holland (the seat likewise of the tulipomania), towards the end of the 17th century, prevails at present in England to a much greater extent than in France, Italy or Germany.

—Thomas F. Dibdin’s Bibliomania or Book-madness (London, 1811), and his Bibliographical Decameron (London, 1817, 3 vols.), contain many useful directions for the assistance of collectors of books. The modern bibliomania is very different from the spirit which led to the purchase of books, in the middle ages, at prices which appear to us enormous. External decorations, it is true, were then held in high esteem; but the main reason of the great sums then paid for books was their scarcity, and the difficulty of procuring perfect copies before the invention of the art of printing. There is sometimes found a rage for possessing books, without reference to the value of their contents, or the other circumstances which have been mentioned as influencing the bibliomaniac. A priest in Saxony is said to have murdered three persons, with a view of getting possession of their libraries. Those, however, he did not read.

Bicêtre; a castle and village in the neighborhood of Paris, situated on a hill, and commanding one of the finest prospects of Paris, and the course of the Seine, and of the environs. Louis XIII erected the castle for the residence of invalids. When Louis XIV afterwards erected the great hôtel royal des invalides, B became a great hospital, for which it is particularly adapted by its healthy situation: water only was wanting in its vicinity, to obtain which a well was dug in the rock (1738). B. contains also a house of correction (maison de force) for dissolute persons, swindlers, thieves, &c. Since the revolution, a prison for criminals condemned to the galleys has been erected here, from which they are transferred to the public slip-yards. In the prison and the house of correction are shops for the grinding of glass, and for other kinds of work, in which the prisoners are usefully employed. In the hospital of B., 2,000 beds are devoted to the reception of aged patients. No one is admitted under the age of 70 years. They are attended to with the greatest care, and fabricate neat little works of wood and bone, known in France by the name of Bicêtre works. A large hospital for incurable madmen has also been erected since the revolution.

Bidanosa, a boundary river between Spain and France, rises in the Spanish territory, becomes a boundary at Vera, and is navigable to Biscay at high tide. It forms the isle of Pheasants, or the island of Conference, where the peace of the Pyrenees was concluded (1659), and falls into the bay of Biscay, between Andays and Pontarabia. On the Spanish side of the river, on the margin of the valley through which it flows, is an advantageous position, near St. Marcel, which commands the great road to Bayonne, before which (Aug. 31, 1313) 2000 Spaniards repulsed a French force of double that number, who attempted to force this position in order to relieve St. Sebastian.

Biddle, John, a celebrated Socinian writer, was born in 1615, at Wotton-under-Edge, in Gloucestershire. He entered Magdalen college, Oxford, in his 19th year. He graduated as A. M. in 1641. Being led to doubt of the doctrine of the Trinity, he drew up 12 arguments on the subject; in consequence of which he was committed to jail by the parliamentary committee then sitting at Gloucester, but was liberated on security being given for his appearance when called for. About six months afterwards, he was examined before a committee of the parliament, to whom he readily acknowledged his opinion against the divinity of the Holy Ghost. His Twelve Arguments were now ordered to be burnt by the common hangman. He however persisted in his opinions, and, in 1643, published two tracts, containing his Confessions of Faith concerning the Holy Trinity, and The Testimonies of Irnmanus, Justin Martyr, and several other early writers on the same subject. These publications in
duced the assembly of divines to solicit parliament to decree the punishment of death against those who should impugn the established opinions respecting the Trinity and other doctrinal points, as well as to enact severe penalties for minor deviations. The parliament indulged these ministers in their intolerant request, which immediately exposed Biddle, who would neither consent nor recant, to the loss of life; but difference of opinion in the parliament itself, and the penalties to which this sweeping measure rendered oblivion, in 1651, restored him to liberty, opinions, both by reaching and by the publication of his Twofold Scripture Catechism. Some years in confinement, subjected to execution. He was, some time after, again remanded to prison, by the zeal of president Bradshaw, and remained for some years in confinement, subjected to the greatest privations. A general act of oblivion, in 1651, restored him to liberty, when he immediately disseminated his opinions, both by preaching and by the publication of his Twofold Scripture Catechism. A complaint being made to Cromwell's parliament against this book, he was confined in the gate-house for six months. Cromwell banished him to St. Mary's castle, Scilly, where he assigned him an annual subsistence of a hundred crowns. Here he remained three years, until the protector liberated him, in 1658. He then became pastor of an independent congregation, and continued to support his opinions, until fear of the Presbyterian parliament of Richard Cromwell induced him to retire into the country. On the dissolution of that parliament, he preached as before, until the restoration, which obliged him to confine his exertions to private preaching. He was, however, in June, 1662, apprehended at one of the private assemblies, and, upon process of law, fined £100, and ordered to lie in prison until it was paid. He fell a martyr to this sentence, by catching one of the dissenter's so common at that time in jail, and died in Sept. of this year, in the 47th year of his age, a martyr to religious intolerance. The private character of this courageous sectarian, like that of most of those who suffer from principle, was moral, benevolent and exemplary; and his learning and logical acuteness rendered him very fit to gain proselytes. He did not agree in all points with Socinus, but was apparently unsolicitous to establish a perfect agreement. Toulmin styles him the father of the modern Unitarians.

BUFFALO, (See Pippa.)

BIELEFELD; a town in the province of Westphalia, near Prussian Minden; lon.
of bigamy. The statute of James I has been adopted in most of the U. States as to the description of the crime, but the American laws generally differ from it as to the penalty, having assigned, heretofore, instead of death, as provided by the English statute, the punishment of whipping, setting on the gallows, &c., which latter is the punishment in France; but most, if not all of the U. States, have now dispensed with these corporal inflictions, some of them prescribing imprisonment and hard labor for a number of years, according to the discretion of the court; others leaving it to the verdict of the jury to fix the period of imprisonment.

Bia. (See Barley.)

Braven, Louis Edward, born 1771, at Mullellaye, department of Lower Seine, studied at Paris, in the college Lisleux. He approved the principles of the revolution in 1789, but was proscribed in 1793, because he opposed all violent measures. He therefore joined the army. In 1797, he entered on the diplomatic career. In Berlin, where the royal family of Prussia bestowed on him many marks of favor, he was, in 1801, secretary of legation, and, in 1802 and 1803, chargé d'affaires. From 1803 to 6, he was minister plenipotentiary at the court of Cassel, where, the day before the battle of Jena, he proposed to the elector a treaty of neutrality, which was declined. After the entry of the French troops into Berlin, he was appointed imperial commissary to the Prussian states. He was afterwards charged with the general administration of the domains and finances in the countries taken possession of until the end of 1808. He assents, that he has succeeded this difficult business with as much mildness as possible, and that he has since received many proofs of gratitude from the people among whom he acted. In 1809, he was minister plenipotentiary to the grand duke of Baden, when an imperial decree, dated Schönbrunn, appointed him administrator-general in Austria. He was afterwards entrusted with an important mission to Warsaw, with secret instructions; here he remained about three years. At the opening of the campaign in 1812, M. de Pradt succeeded him, and he was appointed imperial commissary at the provisional government in Wilna. After the retreat from Moscow, he took the place of M. de Pradt in the embassy at Warsaw, and, in conjunction with prince Poniatowski, succeeded in delaying for four months the retreat of the Austrian allied army under prince Schwarzenberg, afterwards under general Frimont, until the scattered Polish corps, of about 7000 men, were collected under Poniatowski in Cracow. This was increased to 20,000 men, and made its retreat, in May, through Austria into Saxony. B. now repaired to the French headquarters at Dresden, and remained there, with the other members of the diplomatic corps, during the siege, until the capitulation. As he had procured passports from the confederation of the Rhine for several foreign ministers, prince Schwarzenberg caused him to be escorted by one of his aides to the French out-posts at Strasburg. On his arrival in Paris, Dec. 7, 1813, he brought to the emperor the first information of the defection of Murat. He soon after retired into the country. On the restoration of the Bourbons, he wrote his Dépost comparatif de la Situation de la France et celle des principales Puissances de l'Europe, in which he showed great penetration, and also proved himself a true Frenchman of the school of Napoleon. During the "hundred days," Napo­leon appointed him under-secretary of state for foreign affairs, and, in 1820, several departments chose him their deputy. He spoke against the law of exception, and advocated the recall of the exiles, reminding the ministers of certain secret circumstances, on which he did not think proper to explain himself more fully. B. also advocated the law of election. In 1823, he wrote Des Proscrip­tions, in which he paints the struggle for liberty against every kind of tyranny. His latest writings on national disputes have attracted much notice; for instance, Coup d'Ét! sur les Démarches des Cour­ses de Babo et de Bade (1818), and particularly his work Du Congrès de Troppau (1821), his Lettre sur les Différends de la Maison d'énateau avec la Prusse, and his Les Cabinets et les Peuples (Paris, 1824).

Bija-pur, or Vida-pur: a city of Hindostan, formerly capital of the province of Bija­pore, called Vica­pore, by the European travellers of the three last centuries. The city is 300 miles N. Seringapatam, 38 4 N. Madras; lat. 73° 47' E.; lat. 16° 40' N. It is situated in a fertile plain, and is of very great extent, consisting of three towns within each other: the innermost is the citadel, a mile in circuit; the next a fort, eight miles in compass; and the exterior is environed with walls many miles in circuit. But a great proportion of the space is covered with ruins. It is thinly inhabited, but the population is unknown. The inhabitants affirm, that, according to au-
theotic records, it contained, in the time of its prosperity, 984,450 houses, and 1600 mosques; and travellers are of opinion that the latter number is not exaggerated. It was taken by Aurungzeb in 1632, when, as it is said, 15,000 cavalry could encamp between the fort and the city wall. It was one of the wealthiest cities of Asia. The fort is protected by high walls, with massive towers, and is surrounded by a ditch. It has seven gates, and contains several cannon of enormous dimensions, particularly one called the sovereign of the plains.

Bilbao. (See Bilbo.)

Bilbo, Bilbao, or Vizcaya, a Spanish province in Biscay. The capital, of the same name, is a seaport on the Ybua, in a plain surrounded with high mountains; lon. 3° 5' W.; lat. 43° 17' N.; population, 15,000. It contains about 1200 houses, part of which are built on piles. The harbor is good, and well frequented. Between 500 and 600 vessels visit this port annually; and the yearly export of wool is estimated at 50 or 60,000 sacks of 2 cwt. each. The air is healthy; the inhabitants are strong, robust, and live long. It is well supplied with water and provisions; fish are very abundant; and the environs are fertile in legumes and fruits. It contains 5 parishes and 12 religious houses. Among the laws peculiar to the town is one against ingratitude. Its commerce principally consists in wool and iron.

Bilderdyk, William, born at Amsterdam, 1730, lives at Leyden, and is now considered one of the greatest lawyers in Holland—a man of learning in the fullest extent of the word, and, according to the judgment of the Dutch critics, one of the greatest poets of the present age. He studied the classics at Leyden, chiefly under Rubach and Valkemaer. In 1770, he obtained from the learned society of Leyden, whose judgment was always respected, the first prize for a poem on the influence of poetry upon government. In the following year, he obtained from the same society two prizes for an ode and a didactic poem, On True Patriotism. Since that period, he has ranked, with Feith and Madame de Launoy, among the first Dutch poets. The present age is the epoch of the modern Dutch school of poetry, in which, besides B., Feith and Launoy, and particularly Bellamy, Helmers, Tolenis, Loots, van Hall, Kinker, Kyn and others are distinguished. B. introduced into Dutch poetry sonnets and hexameters, rather to show his talent for overcoming difficulties of all kinds than from preference to these measures, which, on the contrary, he declared not admissible into Dutch poetry. In 1790, he obtained a new prize for a poem, on the connexion of poetry and eloquence with philosophy. He added to this poem, some time afterwards, an important commentary, which showed him to be a man of learning and a philologer. B., besides, devoted himself to law, at the Hague, with great success. On the invasion of the Netherlands by the French, he left his country on account of his adherence to the hereditary stadtholder, and removed to Brunswick, where he studied the German language and poetry, and afterwards to London, where he delivered, in the French language, lectures on literature and poetry, which were numerously attended. After the new order of things was firmly established in Holland, he returned, in 1793, and soon afterwards published some of his principal works. Among these are a didactic poem on astronomy, and the sonnets of Delille's L'Homme des Champs, and Pope's Essay on Man. Louis Bonaparte, on his accession to the throne, appointed him his teacher of Dutch, and one of the first members of the national institute founded by him. After the incorporation of Holland into the French empire, B.'s muse was silent; but she rose the more vigorously after the deliverance of his country. Perhaps there is no poem of our time superior in fire, vigor and enthusiasm, to Holland's Verlossing, the joint composition of B. and his wife, who is a successful poetess. When Napoleon returned from Elba, B. produced a number of war-songs, which are considered among the best in Dutch poetry. He published his \textit{Mengelpoëzy} (Miscellaneous Poems, two small volumes, Rotterdam, 1828, second edition), which contains some ballads and imitations of Ossian. We may also mention that he is a bitter enemy of German literature.

Billge. (See Bilge.)

Bilge: a yellowish-green liquid substance, of a bitter taste. Man and many animals have, on the inferior surface of the liver, a peculiar bladder, in which the bile, formed by the liver from the blood, is preserved. It consists of water and several other substances. The water constitutes the greatest part, and keeps the other parts in a state of solution. The remaining ingredients are a yellow, very bitter, fusible resin, which contributes most to the taste of the bile; a small por-
tion of natron; some mineral alkaline salts; some oxyde of iron; a small quantity of a yellowish substance, which is only partly dissolved in the natron; and a considerable portion of albumen. Thou-

and Berzelius have done much to determine the ingredients of the bile. Its principal use seems to be, to separate the excrement from the chyle, after both have been formed, and to produce the evacuation of the excrement from the body. It is probable that these substances would remain mixed together, and they would, perhaps, even be partly absorbed together, were it not for the bile, which seems to combine with the excrement, and, by this combination, to facilitate its separation from the chyle, and thus to prevent its absorption. Fourcroy supposes that the bile, as soon as it is mixed with the contents of the intestinal canal, suffers a decomposition; that its alkali and saline ingredients combine with the chyle, and render it more liquid, while its albumen and resin combine with the excrementitious matter; and gradually render them less fluid. From the late experiments of Berzelius on fevers, it cannot be doubted that the constituents of the bile are to be found in the excrementitious matter; so that the ingenious theory of Fourcroy is so far probable. The bile also stimulates the intestinal canal, and causes it to evacuate its contents sooner than it otherwise would do; for when there is a deficiency of bile, the body is constantly costive.—Biliary calculi, or gall-stones, are sometimes found in the gall-bladders of men and animals. They are more rarely met with in the substance and body of the liver. Those that are found in the human subject consist, principally, of that peculiar substance, called, by Fourcroy, adipocire. They are of a white, grayish-brown, or black color. The calculi found in the gall-bladders of quadrupeds have been thought to consist almost entirely of inspissated bile; but, though much less complicated than the corresponding concretions in the human subject, they must contain something more than the inspissated fluid, since they are insoluble, both in alcohol and water.

Bile-Exchange (Bheladal Dsherid, country of dates); a country in Northern Africa, south of mount Atlas, bounded on the north by Tunisia, on the west by Algiers and the Sahara, on the east by Tripoli; supposed to be about 180 miles square. In the desert are cases (q.v.), which are cultivated and watered like gardens. At the foot of mount Atlas, the winds which come from these mountains alloy the heat of the climate. The chief products of the oases are barley of an excellent kind, used by the caravans, and dates, which are no where else so excellent. Much dew falls in the oases, rain but seldom. All the productions of the tropics, which can ripen without rain, grow here in abundance. The Berbers who live here, as likewise the Negroes and Arabs, carry on trade by means of caravans. A large proportion of the young men are destroyed by the change of climate to which they are thus exposed, as also by bad nourishment and epidemic fevers. Certain parts of this country, called Dura, Facilet and Segelianus, belong to Morocco; to Algiers belongs Wadriana, and to Tunis Tozer. Gademnes, Welid-Sidli and Messelem are independent. Little is known of the customs, laws &c., of the inhabitants of Bile-

Bills of Exchange is a written request or order to one person to pay a certain sum of money to another, or to his order, at all events; that is, without any qualification or condition. The person who makes the bill is called the drawer; the person to whom it is addressed, the drawee, and the person to whom, or whose order, on the face of the bill, it is payable, the payee. If the drawee accepts the bill, he thereby becomes the acceptor. A promissory note differs from a bill of exchange in being merely a promise to pay money by the maker, instead of being a request to another person to pay it, to the payee. The expression promissory note is not strictly confined to negotiable notes, or those payable "to bearer," or to the payee named in it, "or his order," but is more frequently used to denote such instruments; and we shall consider promissory notes in this sense in the present article, since the same rules and principles are, in a great degree, applicable to such notes and to bills of exchange. The maker of the note answers to the accepting of the bill, since he is the party promising to pay it; whereas the maker or drawer of a bill of exchange does not directly promise to pay it, but merely requests the drawee to do so: this is, however, construed to be a

Bills of Exchange.
virtual promise that the drawee, on the presentment of the bill for acceptance, and demand of payment according to its tenor, will pay it, and a condition virtual promise, that he, the drawer, will pay it, in case of the drawee's failing either to accept it on due presentment, or to pay it on due demand. Bank checks are of a character similar to promissory negotiable notes, as to the rules by which the liabilities and rights of the parties to them are determined, with this difference in their common form, that promissory notes are usually made payable to the payee or "his order," whereas checks, as also bank-notes, are usually made payable to the "bearer," and the right to demand and receive payment of them is transferred from one person to another by mere delivery, without any indorsement or written order by the original payee; while the transfer or assignment of promissory note or bill of exchange is made by the payee in writing, either by indorsement or otherwise. He usually merely writes his name on the back, whereby he becomes the indorser, and the person to whom it is thus indorsed or assigned, who is called the indorsee, has a right to fill up this blank indorsement by writing over it an order to pay the contents to himself or to any other person or his order, or to the bearer, is called the indorsee, who is called the indorser, has a right to fill up this blank indorsement by writing over it an order to pay the contents to himself or to any other person or his order, or to the bearer, is called the indorsee, who is called the indorser, has a right to fill up this blank indorsement by writing over it an order to pay the contents to himself or to any other person. A note or bill payable to the "bearer," merely by delivery of the instrument, is called a "bearer" note or bill. It is an essential quality of a negotiable bill, note or check, that it be a promise to a certain sum of money, or an absolute promise to pay to a particular person or his order, or to the bearer, that it be a bill payable in the kingdom, or foreign, that is, payable out of the kingdom. A similar distinction is made in the U. States, where, in most of the states, a bill payable in the state in which it is made is considered to be in-hand. The material distinction between foreign and inland bills is, that, on inland bills, a protest for non-acceptance or non-payment is not usually necessary, and that less damages can be claimed in consequence of the dishonor of the bill, if, indeed, any can be claimed. Generally, in fact, if not universally, only the face of the bill can, in such case, be recovered of the drawer or indorser. In one respect, foreign bills most generally, and inland bills and promissory notes in many places, differ in construction from the literal import of the terms of the instrument as to the credit or time of payment, being, in fact, payable three days after the time specified; these three days of additional credit being allowed under the name of grace: but this additional credit is often expressed in the instrument itself, thus, "Pay to A. B. or order, in sixty days and grace," which is equivalent to sixty-three days. Another mode of expression for the credit to be allowed on a bill is by the word usance. Thus a bill is drawn payable at one or two usances; and it is necessary, in order to ascertain the time of payment, to know what period is meant by a usance, and this will vary according to the place at which, and on which, the bill is drawn. Thus a bill drawn in Eng-
BILL OF EXCHANGE.

105

land, at one instance, on Amsterdam, Rotterdam, Altona, or any place in France, is payable in one calendar month from the date; on Cadiz, Madrid or Bilbao, in two; on Genoa, Leghorn or Venice, in three months.—If, on presentation of a bill of exchange to the drawer, he refuses to accept it according to its tenor, the holder has an immediate cause of action against the drawer and indorsers, and may, on giving them notice of the non-acceptance, forthwith demand the amount of the bill, though it was on a long credit, and, if it had been accepted, he must have waited three or six months for his money. This rule is perfectly equitable, since the drawer and indorsers implicitly agree that the draft shall be accepted on presentment, and, on its not being so, their promise is violated. But the holder must give notice to the drawer, and the other parties to whom he wishes to resort, of the non-acceptance or non-payment of the bill. In case of the dishonor of a bill, the holder has generally the right to recover of the parties liable to him, that is, the drawer and indorsers, not only the amount expressed on the face of the bill, together with the expenses of protest and interest, but something in addition, on account of his disappointment in not having funds at the place on which the bill is drawn, as he had a right to expect. The rate or amount of this damage must, as is evident, be very various, according to the distance of the places, the credit on which the bill was drawn (in case of protest for non-acceptance), and the rise or fall of exchange on the same place after the purchase of the bill. One rule of estimating the damages is the difference of exchange, or of another bill on the same place, with the addition of one, two, &c., up to twenty per cent. damages. In other places, no regard is had to exchange, but the holder recovers a certain per cent. over the face of the bill, by way of damage, and this rate is the same whether exchange may have risen or fallen from the time of purchasing the bill to that of its being returned dishonored.—Exchange appears to have been known anciently at Tyre, Carthage, Athens, Corinith, Syracuse and Alexandria. The first well-ascertained traces of it, in modern times, are found, subsequently to the 12th century, in some of the provinces of France, particularly at the fair of Champagne. It was brought to perfection in Italy. Its great utility and convenience consist in its negotiability. Suppose, for instance, a number of persons to have, severally, sums of money deposited in various countries. One, whose funds are in South America, wishes to make purchases at St. Petersburg; and one, who is entitled to the proceeds of a cargo at St. Petersburg, wishes to make a purchase at Canton; and another, having funds at Canton, desires to make an importation from South America. By merely making and delivering a slip of paper, each one will, in effect, transfer his funds quite across the globe. Another advantage of exchange is the facility it affords in adjusting balances. Its effect in this respect may be illustrated by the practice of banks and bankers in some particular cities. In London, for instance, the bankers meet at a certain hour every day, to pay and receive payment of each others' checks; but the amount actually paid will bear a very small proportion to the whole amount of the checks, since the greater part is settled by merely canceling the checks they hold against each other. So where all the banks of a city, as is the practice in many commercial towns, take indiscriminately each other's notes, and settle the balances every day, they all make an exchange of the notes which they hold against each other, and only pay over in specie the balances. Thus, by the payment in specie of a comparatively very small sum, some hundreds of thousands may circulate between these institutions and their respective customers and depositors. In the same manner the balances are adjusted between two commercial countries, or all the commercial countries of the world. Among the various merchants of the United States, for instance, some have sent goods to England, others to France, and others to Holland, and each one may wish to import goods from a country other than that where his funds lie. One, accordingly, sells exchange on Amsterdam, and buys exchange on London, or, which is the same thing in effect, as far as he is concerned, he orders his correspondent at Amsterdam to buy exchange on London, and remit it either for his (the merchant's) account. If the funds which some merchants have in each foreign place are exactly equal to what is wanted by others in the same place, the whole transaction is only a transfer among themselves of each other's claims, or exchange, and no balance remains; whereas, without this facility, one must order specie home from Amsterdam, which the other would purchase of him to ship it to London; a transaction involving much delay, besides the expense of freight and insur-
ance. But still, all the merchants of the country may wish to invest or pay greater sums abroad than the proceeds of all the exports already made or making from the country amount to, in which case the course of exchange is said to be against the country, and, in this case, as in all others where the quantity of an article wanted is greater than that offered in the market, the price will rise, and foreign exchange will be above par. So, if the quantity of exchange demanded on any particular country is greater than that offered, the rate of exchange, in respect to that particular country, is unfavorable, and rises. This has most generally been the case in the United States, in respect to England. So, vice versa, if the funds belonging to Americans, in any particular foreign country, are greater than the sum wanted by other Americans to make payments or investments there, the rate of exchange with that particular country is favorable, and the price of it falls. And it is to be observed, that what is called a favorable rate of exchange is, in fact, unfavorable to the person having funds abroad, who wishes to realize them at home; for he must, in that case, sell, at home, his foreign exchange, for a smaller sum than its nominal amount. It is to be borne in mind, therefore, that an unfavorable rate of exchange is not necessarily disadvantageous to a country. To follow out the inquiry, and determine in what circumstances it is actually disadvantageous or indifferent, or in fact advantageous, would occupy more space than we can give to the subject. But we perceive from this operation of the system of exchange, that it is only necessary, at most, to ship abroad, or import from abroad, in specie, the actual balance on the whole aggregate of debts and credits, all the items of which, as far as they affect each other, are adjusted by exchange; and it is by no means always the case that this aggregate balance is paid in specie; for the very circumstance of the rise of exchange on any particular country may make the trade more favorable, and induce shipments, the proceeds of which are drawn for as soon as the shipments are made; so that, in such a case, the unfavorable balance may be actually advantageous, by promoting trade.

Bill of Lading; a memorandum signed by masters of ships, acknowledging the receipt of goods intrusted to them for transportation. There are usually triplicate copies, one for the party sending, another for the party to whom the goods are sent, and the third for the captain.

Bill of Rights, or Declaration of Rights, is the assertion by a people, or recognition by its rulers, of that residuum of natural liberty, which is not required by the laws of society to be sacrificed to public convenience; or else those civil privileges, which society has engaged to provide, in lieu of those natural liberties so given up by individuals. The houses of lords and commons delivered to the prince of Orange a list of such rights and privileges, February 13, 1688, at the time of his succession to the British throne, concluding with the words "and they do claim, demand, and insist upon, all and singular the premises, as their undoubted rights and privileges." The declaration is usually called the bill of rights. A similar declaration was made in the act of settlement, whereby the crown was limited to the house of Hanover. Similar bills of rights are prefixed to some of the state constitutions in the United States. But the constitutions of all the states, as well as that of the United States, virtually include in themselves declarations of rights, since they expressly limit the powers of the government. The same is true of the constitutional charters of those European governments which have adopted constitutions, one of the objects of these being to guaranty certain rights and liberties to the people.

Bill in Equity, or Chancery, is the statement of the plaintiff's case in a court of equity, or chancery, corresponding to the declaration in a court of law, and the libel in an ecclesiastical court.

Billiards; a very interesting game, contributing also to health by affording the body moderate exercise. It was invented in France, and is now played by all European nations and their descendants. The rules for the different games of billiards are too numerous to be given here. They are also generally found in billiard rooms. We therefore omit them, although we usually give the rules of games, in order to furnish a means of reference in doubtful cases. They are to be found in Hoyle's Games.

Billington, Elizabeth; the most celebrated English female singer of her day. She was of German origin, but born in England, in 1770, her father, Mr. Weichsell, being a native of Saxony. At an early age, she studied the piano-forte under Schroeter, and attained to an extraordinary proficiency. At 14, she made her first appearance as a singer at Ox-
In 1700, she appeared at Venice, and after Mr. Billington, a performer on the double-bass, whom she accompanied to Dublin. She made her début there in the opera of Orpheus and Euridice. From Ireland she returned to London, where she appeared at Covent-garden, for the first time, as Rosetta, in Arne’s Love in a Village, with such success as to secure her an immediate engagement at what was then considered the enormous salary of £1000, for the remainder of the season, besides a benefit; the managers afterwards voluntarily giving her the profits of a second night. While in town, she continued to take lessons of Morellari, a celebrated Italian master, then in London, and, on the closing of the theatre, repaired to Paris, in order to profit by the instructions of Sacchini. In 1755, she returned to England, and appeared at the concerts of ancient music with madame Mara, whose brilliant performance she, to say the least, fully equalled. From this period till 1793, no music meeting, opera, or concert, of reputation, was considered complete without her. In the last named year, she visited Italy, and performed, accompanied by her brother C. Weigell, at the theatre of St. Carlos at Naples; Francis Bianchi composing expressly for her his celebrated opera Inez de Castro. Her engagement here met with an abrupt and melancholy interruption, her husband dying suddenly of apoplexy, just as she was preparing to set out for the theatre. In 1796, she appeared at Venice, and afterwards at Rome, being everywhere received with the loudest expressions of applause. In 1799, she married Mr. Felipent, whom she accompanied to Milan. In 1801, her wonderful powers being then in their meridian, she returned to the London stage, appearing alternately at either house, and astonish-197ing the whole musical world by her Mandana—a performance that has never since been equalled in English opera. Engagements now multiplied upon her, and continued incessantly till her final retirement from public life, which took place in 1809. The last exhibition of her powers was in aid of a charitable institution, at Whitehall chapel, the queen, the prince regent, and most of the branches of the royal family, being present. In 1817, she quitted England for ever, and died, after a short illness, at her villa of St. Arizien, an estate she had purchased in the Venetian territories.

Bingen; a town on the left shore of the Rhine, where the Nahe joins this river, opposite Rudesheim, famous for its excellent wine. Lon. 7° 48' E.; lat. 49° 57' N. Population, 3308. Near it the Rhine is compressed into a narrow channel, between rocks, so as to make the navigation difficult. This strait is called Bingen-loch (hole of Bingen). The famous Muttschium, or Tower of Mice, where the avaricious bishop Hatto is said to have been eaten by mice, as a punishment for usury, exercised in a time of famine, is situated in the vicinity.

Billington, the Garrick of the Dutch stage was born at Rotterdam, in 1755, of English parents in good circumstances. On leaving school, he was placed in a counting-house. It was not long, however, before he discovered an invincible inclination for the stage, and, at the age of 18, joined the company under the direction of the celebrated Corver, who was his first instructor. In 1773, in the 24th year of his age, he made his début on the stage of Amsterdam. The public odium was then excited against England, on account of its ships having captured vessels under the Dutch flag, without any previous declaration of war, and B. was unfavorably received on account of his English descent. But he soon conquered this prejudice by his performance of Achilles, in the tragedy of the same name; and from that time he continued to be the favorite of the public. He was, also, so well acquainted with the French language, as to appear successfully in the French theatres of Amsterdam and the Hague, by the side of the great French actors, who, while on their tours for the sake of improving themselves, used to visit the Netherlands. In 1798, he was director of a company of actors, who played principally at Rotterdam and the Hague, but, also, visited other cities of Holland. Meanwhile, he was always ready to perform at the theatre in Amsterdam, in such parts as could only be acted by himself. One of his last representations, in which he was assisted by the great actress Wattier Ziesenis, was the part of Farnese, in Lalain’s tragedy Maria, acted, in 1818, before the royal family. In the same year, he died at the Hague.

Binnacle, or Bittacle; a case or box, which contains the compass for steering a ship, and lights to show the compass at night. In ships steered by a wheel, it is common to have two binnacles, or a double binnacle, for the convenience of the steersman, on either side of the wheel; but, in this case, the compasses af-
fact each others' direction, and thus render the ship's course uncertain.

Binomial, in algebra, a quantity consisting of two terms, or members, connected by the sign + or −. Binomial coefficients are the numbers that indicate how often a given power of a binomial, for instance, of the form $a + b$, contains each of the products of its parts. The binomial theorem is that celebrated formula, which teaches to find any power of a given binomial $a + b$, by means of the two terms $a$ and $b$ and of the exponent of the power. This theorem, frequently called the Newtonian theorem, on which the system of analysis is principally founded, was known, as relates to integral positive exponents, to several mathematicians before Newton. But Newton was the first who taught its application to fractional and negative exponents; and this discovery, one of the most important of those made by that great man, is engraved upon his tomb-stone.

Bioerstael, James Jonas, a distinguished traveller, born at Rotarbo, in the Swedish province of SSærmanland, in 1731, studied at Upsal, afterwards entered the family of baron Rudbeck, as tutor, and travelled with his son to England and the continent of Europe. While residing in Paris, he studied the Oriental languages. On the return of his pupil to Sweden, B. was appointed, by Gustavus III, to make the tour of Greece, Syria and Egypt, receiving, at the same time, the title of professor at the university of Lund. He now went, at the king's expense, to Constantinople, in 1776, where he remained for some time, to learn the Turkish language. He then proceeded on his travels as far as Saloniki, where he died of the plague, 1779. B. had given an account of his travels, in the form of letters to his friend Goerwell, who, at first, published them separately in a journal, which appeared in Stockholm, but afterwards by themselves (1783). This work contains learned and profound researches on medals, manuscripts, rare books; and a great many anecdotes, of which the most interesting are those relating to Voltaire, whom B. had visited at Ferney. His remarks and opinions on morals, manners, religion and literature are often destitute of truth and justice. He was possessed of more learning than taste, of more memory than discernment and judgment. His health, naturally strong, and fortified by exercise, enabled him to support constant labor, and to endure the greatest hardships.

Biology and Botany. (See Life.)

Bion; born in Smyrna, or in its neighborhood; a Grecian pastoral poet, of whose life no account is to be found. The elegy, which Moschus, his friend and disciple, composed on the occasion of his death, seems to imply, that he was a contemporary of Theocritus, and died of poison. He probably lived in Sicily or Magna Grecia. Among the few poems written by him, which have descended to our times, his elegy on Adonis is considered as the best. The poems of B., together with those of Moschus, are generally found as an appendix to the idyls of Theocritus. They have been published separately by Fr. Jacobs, Goth. 1755; Gilbert Wakefield, London, 1793; and J. C. F. Maass, Lepsic, 1807.

Biot, Jean Baptiste, a natural philosopher and astronomer, member of many French, as well as foreign literary societies, and of the legion of honor, born at Paris, in 1774, studied in the college of Louis-le-Grand, then joined the army, and served in the artillery. His love of the sciences soon led him back to Paris, where he continued his studies in the polytechnic school, till he felt himself fit for a professorship at Beauvais. In 1800, he was made professor of physics in the college de France. In 1802, he was appointed a member of the first class of the institute. In 1804, he prevailed on the institute not to vote in favor of Bonaparte's elevation to the throne. In 1806, he was sent with Arago to Spain, to continue the measurement of an arc of the meridian, undertaken to establish the basis for the introduction of a new decimal system (q. v.) in France. Before he departed, he was appointed a member of the board of longitude. His mission was successful. He now devoted himself with unremitting zeal to his studies and lectures. In 1810, he was chosen editor of the department of mathematical science for the Journal des Sceans. His principal works are, Traité de Physique experimentale et mathematique (1810); the abridgment of the same, in a popular style; Précis élémentaire de Physique expérimentale, and Traité élémentaire d'Astronomie physique. In 1817, he visited the Orkney islands, and corrected some disputed astronomical observations, for the measurement of a degree. B. still communicates important articles to the literary journals, &c.

Birch (betula alba) is a forest-tree, easily known by the smooth appearance and silvery color of its bark; by its leaves be-
BIRCH—BIRD-ISLAND.

ing somewhat triangular, but acute, and small in comparison with those of other timber-trees, and by all the small branches being slender and flexible.—Although the birch is considered by no means a valuable timber-tree, yet its wood is used for numerous purposes. Being of white color, and firm and tough in texture, it is variously employed by leap-benders and wheelwrights. Turners use it for trencchers, bowls, ladles, and other wooden ware. Ox-yokes, small screws, women's shoe-heels, pattens, and, in France, wooden shoes, are made of it. The North American Indians use the bark of the birch-tree for canoes, boxes, buckets, baskets, kettles, and dishes, curiously joining it together with threads made of roots of the cedar-tree. Birch-trees are not unfrequently planted along with hazels, for the purpose of procuring wood to be converted into charcoal for forges. This charcoal is much esteemed; and the soot, which is formed on burning the wood, constitutes a good black substance for printers' ink. Nearly all the other parts are applicable to useful purposes. The inhabitants of Sweden employ the bark in the tanning of leather; and, after burning it to a certain degree, use it as a cement for broken china and earthen ware. The navigators of the river Volga construct of it portable boats, cradles, &c. It is serviceable in dyeing a yellow color. In Norway, it is dried, ground, mixed with meal, and boiled, with other food, for swine. — The houses of huts, in many parts of the north of Europe, are covered with the outward and thicker part of the bark, instead of slates or tiles. It is spun into a coarse thread made of roots of the cedar-tree. Birch-trees are not unfrequently planted together with hazels, for the purpose of procuring wood to be converted into charcoal for forges. This charcoal is much esteemed; and the soot, which is formed on burning the wood, constitutes a good black substance for printers' ink. Nearly all the other parts are applicable to useful purposes. The inhabitants of Sweden employ the bark in the tanning of leather; and, after burning it to a certain degree, use it as a cement for broken china and earthen ware. The navigators of the river Volga construct of it portable boats, cradles, &c. It is serviceable in dyeing a yellow color. In Norway, it is dried, ground, mixed with meal, and boiled, with other food, for swine. — The houses of huts, in many parts of the north of Europe, are covered with the outward and thicker part of the bark, instead of slates or tiles. It is spun into a coarse kind of ropes, woven into shoes and hats; and, in Kamtschatka, even made into drinking-cups. The Lappiards fasten together large pieces of it to keep off the rain. Abounding in resinous matter, slices of the bark are sometimes tied together, to make torches. During a scarcity of corn, it has in several instances been ground with bread corn, and successfully used as food for men. In most parts of England and America, the twigs of this tree are made into brooms. They are also made into the tops of fishing-rods; and, when smeared with bird-line, are used by bird-catchers. The Norwegians frequently employ them as fodder for their horses. The leaves afford a yellow dye.

Birch, Thomas; an industrious historian and biographer of the 18th century. He was born in London, in 1705; and his father, who was a Quaker, practised the occupation of a coffee-mill maker, to which the son, also, was destined. His early taste for reading induced him to prefer a literary life, which he was permitted to choose, on condition of supporting himself by his own exertions. He, accordingly, after some previous tuition, became usher in three different schools, and then went to Ireland with Deane Smadley. Having left the Quakers, he took orders in the church, in 1730, and obtained, in 1732, a living in Essex, through the patronage of the attorney-general, afterwards lord Hardwicke. In 1734, he engaged, with some coadjutors, in writing the General Historical and Critical Dictionary, founded on that of Bayle, and completed, in 10 vols. folio, in 1741. He subsequently obtained various preferments in the church. In January, 1765, he was killed by a fall from his horse, in the road between London and Hampstead. B. had formed very extensive manuscript collections, which, together with his library of printed books, he bequeathed to the British museum. He produced a large number of historical and biographical works in the course of his laborious life. B. was one of the pioneers of literature. He collected fully and faithfully, but without much discrimination, materials relating to the various subjects of his research, which are calculated to afford important assistance to writers possessed of more taste and judgment. Doctor Johnson was repeatedly obliged to B. for literary information; he bestowed on him a Greek epigram, and for many years corresponded with him. The literature of his country is much indebted to the activity and diligence of B. 

Bird, Edward (R. A.); an English painter, who died at Bristol, in Nov., 1810. He excelled in comic subjects. The marquis of Stafford patronised him. He was appointed historical painter to the princess Charlotte of Wales.

BIRD ISLAND; the name of a very large number of islands in almost all the parts of the world, of which we shall mention only the following:—B. Islands; a cluster near the N. E. coast of New Holland, so called by captain Cook. They are almost covered with birds.—B. L., in the S. Pacific ocean; lon. 210° 24' E.; lat. 17° 48' S.—B. L., in the gulf of St. Lawrence; lon. 60° 45' W.; lat. 47° 55' N.—Another, in the S. Pacific ocean; lon. 35° 25' W.; lat. 54° S.—One in the northern part of the same ocean; lon. 198° 9' E.; lat. 23° 6' N.—B. Islands; a
cluster of islands in the Caribbean sea; lon. 66° 59' W.; lat. 16° N. — The name Bird island is as common, and as vague, as that of Blue mountains, &c.

BIRDS. (See Ornithology.)

BIRD’S NEST. The Hirundo excedentia, or salangana, a species of swallow, the nests of which are used as an article of luxury among the Chinese, is found in the Indian seas. They are particularly abundant in Sumatra, especially about Crete, near the south end of the island. The nest has the shape of a common swallow’s nest; it is about the size of a goose’s egg, is found in caves, particularly on the sea-shore, and has the appearance of fibrous, imperfectly concocted isinglass. More or less of this substance is contained in the nests of all swallows of that region. The manner in which this substance is procured is not ascertained. The most probable suppositions are, that it is the spawn of fish gathered by the bird, or a secretion elaborated in the body of the animal. The Chinese collect the nests, and sell them to all parts of the world. Dissolved in broths, &c., they make a delicious jelly. The finest are those obtained before the nest has been contaminated by the young birds: they are pure white, and are scarce and valuable. The inferior ones are dark, streaked with blood, or mixed with feathers; they are chiefly converted into glue. Some of the caverns, in which they are built, are difficult of access, and dangerous to climb, so that none can collect the nests but persons accustomed to the trade from their youth.

BIRX, Ernst John von, duke of Courland, born in 1657, was, as is asserted, the grandson of a groom of James, duke of Courland, and the son of a Courlandish peasant, by the name of Biron. He studied at Königsberg, and endeavored to conceal the meaness of his origin by raising himself in the favor of the great. His agreeable person and cultivated mind procured him the highest favor of Anna, duchess of Courland, and niece of the emperor of Russia; but he was unsuccessful in his attempt to obtain admission among the Courlandish nobility. When Anna (q. v.) ascended the Russian throne (1730), B. was recalled, Dec. 20, 1741, and Miinch was obliged to occupy his prison. At Königsberg, the edicts met; the travellers recognised each other, and proceeded on their way without interchange of a word. The family of B. afterwards lived in a very respectable condition at Jaroslaw. — After a subsequent exile of 22 years, the duke, as well as Miinch, was recalled, in 1762, by Peter III. When Catharine II ascended the throne, the duchy of Courland was restored to B., in 1763. He governed with wisdom and lenity, transferred the government to his eldest son, Peter, 1769, and closed his restless life, Dec. 28, 1772.

BIRMAN EMPIRE. The great peninsula east of the bay of Bengal includes Assam, or Assum, and the Birman empire. The latter extends from 9° to 26° N. lat., is about 1000 miles long and 700 broad; pop-
BIRMAN EMPIRE.

Population, according to Symes, in 1730, about 17,000,000. The natives of the peninsula, a handier race of men than the Hindoos, though not so warlike and hospitable, have no mendicants among them, and reverence the aged. The Birman empire, according to the reports of missionaries, comprehends the kingdoms of Ava, Pegu, Arracan, and the adjacent states on the north. It is bounded on the north by Thibet, Assam and China; on the west, it is separated from the British possessions by a chain of high mountains and the river Naaf. In the 16th century, the Birmans in Ava made themselves independent of Pegu; but, in 1743, they were subjugated anew by this state. Alosepa, one of their leaders, however, with about 100 faithful adherents, almost immediately summoned the people again to arms, and, in 1733, conquered the city of Ava. Defeat and victory succeeded alternately, till Alamgir, in 1737, conquered the city of Pegu. This celebrated monarch died in 1760, at the age of 59 years. He labored to make his subjects happy by promoting agriculture, by restricting the arbitrary exercise of power on the part of his officers, and improving the public morals. Every act of the magistrates, in the Birman empire, was required to be public, and every decree to be made known: even commercial treaties, and all relations established with foreign countries, were registered among the laws of the state, and open to the inspection of every one. Nanodrog, his eldest son and successor, who died in 1764, inheriting his father's spirit, adopted from other nations whatever was of general utility to his own, and was anxious to do away abuses. Both father and son attended particularly to the administration of the East India company. Shembuan, the emperor's brother, became regent, as guardian for his nephew Morienh; but he usurped the throne himself, and conquered Siam. In 1771, however, this province recovered its independence, while the principal part of the Birman forces were engaged in a war with China. In this war they were victorious, and compelled the Chinese, whom they took prisoners, to internarrly with the Birman females, and to remain in their territory. Fortune continued to attend this prince; and, in 1776, he left his empire, much enlarged, to his son Chennanu. This prince lived in the unrestrained indulgence of every appetite, till, in 1782, he was deposed and put to death. In consequence of the revolution, Shembuan Menderau, the fourth son of Alonpa, ascended the throne. He ordered his nephew Morienh, who was a state prisoner, to be drowned, and, in 1783, subdued the kingdom of Arracan. He then engaged in a war with Siam, which continued till 1785, and finally compelled it to submission on certain conditions. About this period, some highway robbers fled from the Birman empire, and took refuge in the territory of the East India company. Shembuan demanded that they should be delivered up. His demands were not immediately complied with, and he marched, with a strong force, into the offending country. At the same time, he carried on a friendly negotiation with the government in Calcutta, which resulted in the surrender of the criminals, and the conclusion of a treaty of amity and commerce between the two governments, which agreed to afford each other mutual aid, in case of an invader from China. It was negotiated by captain Symes. Shembuan was succeeded, in 1819, by his grandson. The last victory of the Birmans was, in 1821, over the Sienne forces. The British government forthwith dismissed the insurgents, but refused to deliver them up or to drive them from the island of Shapuri, which they had occupied. The court at Umbegoor, therefore, attempted to set the Malabars and all Hindostan in arms against the English. At length, the monarch with the golden foot (one of the titles of the sovereign of Birman) demanded of the government at Calcutta the cession of Northern Bengal, as being a part of Ava; and, in January, 1824, the Birman forces marched into Kadschir, which had deposited its rulers, and put itself under British protection. Lord Amherst, as governor-general of the British East Indies, now declared war against Birman, and general Archibald Campbell prosecuted it so successfully, that, after the victory at Trome (Dec. 1–3, 1825), he obliged the monarch to conclude a very unequal peace at Pulations, Dec. 31, 1825. As the treaty was not ratified, on the part of Bon, the Birman emperor, by the time specified (Jan. 18, 1826), Campbell renewed the war, on the 19th, and stormed the fortress of Munn. Feb. 24, the peace was ratified, and the war concluded. The king of the white elephants ceded to the company the provinces of Arracan, Merguy, Tavoy and
Yen, and paid them a sum amounting to about $4,500,000. Assam was made more independent, and rajahs were appointed by the company to govern the northern provinces of Munnipoor, Assam, Kudchur and Yenlung. The important city of Rangoon was declared a free port. Thus all the western coast of the Birman empire was ceded to the East India company, and the most powerful of the East Indian states was divided and weakened.

Before the rains commence, the heat in the valleys of this, in most respects, healthy country is excessive. Though B. is in general fertile, it contains several vast deserts. In the northern part, it is mountainous, and abounds in gold, silver, precious stones and marble; also in iron, lead, tin, antimony, arsenic, sulphur and petroleum, which issues from the earth in abundance. In the southern districts, owing to the numerous rivers, the soil is marshy and extremely productive. Here grow rice, sugar-cane, fine tobacco, cotton, indigo, and all the tropical fruits. Land is cheap. Timber for ship-building, especially teak or Indian oak, which grows most luxuriantly in a wet soil, on the banks of rivers, is abundant. The price of labor is high. All but the lowest lands produce grain, or serve for pasture. Of manufactured goods, B. exports cotton and silk stuffs, glass, vinegar, powder, porcelain and marble images of Gaudama, to which the workmen in stone give an exquisite smoothness. The East India company builds vessels even of 1000 tons burthen in the Birman docks; and the shipwrights there (giants in comparison with the puny Hindoos) find constant employment. The Pegu ships, however, are not so well made as those built by the company, in their own territory.

The trade of the Birmans is very lively, especially with China, by means of the river Irrawaddy, which extends 1500 miles into the interior, and has populous cities all along its banks. From Rangoon, goods are conveyed through the interior to China, to which the Birmans send many commodities from the eastern archipelago of Asia. The government encourages the increase of the population by favoring the settlement of foreigners, tolerates the religion of every nation in the ports of Rangoon, Negrais and Mergui, and encourages the intermarriage of foreigners with Birman females. Instead of coin, silver and lead in bars are used, and their purity is strictly tested in trade. The forging and stamping of these bars forms a particular branch of business. Manderaghe removed the royal residence to the new city of Ummeccaool (180 leagues east of Calcutta), on a tongue of land which runs up into the lake of Toumzenah. Ava, once so magnificent a city, about four or five miles distant, now lies in ruins. The buildings among the Birmans are very slight, as the government requires them to be chiefly of wood or bamboo. There are well-organized fire-companies, for the protection of these combustible edifices. The Birman nobles are distinguished from the lower classes by their dress, houses and furniture, and are divided into several ranks. The price is absolute, but custom obliges him to ask the opinion of the nobility in important state matters: he is not bound, however, by their counsel. The Birmans are all fond of painting both their faces and hands. They slaughter no tame animals, and live simply; for the most part, on vegetables. No Birman can have more than one wife; but he may have as many mistresses as he will. The latter live in the same house with the wife, and are her servants. A foreigner and an adult male Birman may, at any time, leave the empire; but females and children are not allowed this privilege. Females cannot appear before a court of justice. The chief amusement of the Birmans is their theatre, where declamation, dancing and music alternate; the higher classes are fond of dramatic spectacles. The new year is celebrated with all sorts of purification. At this time, young women appear in public with water, and sprinkle every one they please. It is considered improper, however, to sprinkle females first, or those in a state of pregnancy at all. Among the Birmans, the distinguished dead are burned; the poor are interred; the richest are embalmed, commonly in the ancient simple mode, in honey. Every Birman learns arithmetic, reading and writing. The common people write on palm-leaves, with an iron style: the rich have libraries, with books the leaves of which are thin pieces of ivory, with gilt edges. The Birmans, in general, are fond of gilding every thing. Their materia medica is confined to herbs, spices and mercury; with vaccination they have long been acquainted. The English missionaries are tolerated, and serve the East India company as the outposts of their diplomatic system. The literary Birman translates from the English all important works of science, particularly on astronomy and law. The religion of the country is that of Buddha, whom the people
call Gawama. It enjoins no bloody sacrifices, and is extremely tolerant. The Birmans have no secular clergy, but only a kind of monks dwelling in convents. All the clergy practise celibacy, and eat but once a day. Every carnal indulgence is punished by a disgraceful and public removal from office. The clergy are literary men and highly esteemed for their piety and knowledge. They are permitted, however, to gild and paint. Formerly, there were priestesses; but this order has been abolished, because it was found injurious to the public health, and to the increase of population. The government has long been struggling to maintain its independence between the British dominions on the Ganges and the Chinese empire. No part of Eastern Asia seems to apprehend an excess of population, and hence no female in China is suffered to emigrate. The Birmans are skilful weavers, smiths, sculptors, workers in gold and silver, joiners, &c. Of this the citizens of London have had ocular evidence, in the great state carriage, decked and enamelled articles; brass work and japanned articles; soft-nail work of every description; swords and fire-arms; medals and coins of various kinds; copying machines and pneumatic apparatus; the more ponderous productions of the casting-furnace and rolling-mill; and, indeed, every hardware commodity that can be considered as curious, useful or ornamental. The manufactories are established upon the largest scale, and with the most astonishing ingenuity. A calking-mill was erected in 1785, which is now capable of striking between 30 and 40,000 pieces of money in an hour.

Before the close of the last war, no less than 14,500 stands of arms were delivered per week to the ordnance office. At the pin-works, it is said, 12,000 pins can be cut and pointed, and 50,000 pin-heads can be made from the wire, in an hour.—It is about two miles in length. The lower part of the town consists chiefly of old buildings, crowded with workshops and warehouses, and inhabited principally by manufacturers; but the upper part has a superior appearance, consisting of new and regular streets, and containing a number of elegant buildings. It contains three churches and five chapels of ease, and many places of worship belong—
BIRMINGHAM—BISCAV.

In the vicinity of Genoa, having reason to believe that the king would come to inspect the trenches, he sent word to the governor to dispose of harquebussiers so as to fire on him at a certain signal. At the decisive moment, however, he prevented the king from going to the fatal spot. In 1601, peace was made with Savoy. So many negotiations had not, however, escaped the eye of the king nor could he remain ignorant of their object. He therefore interrogated the marshal as to his design, with promises of pardon. B. made a partial confession, and continued his intrigues as before. Notwithstanding this, Henry sent him, in the same year, to queen Elizabeth of England, to inform her of his marriage with Maria of Medici. In the mean time, B.'s confidential Laffin, having become suspected by the count of Fuentes, and beginning to fear for himself, discovered the whole plot. A frank confession and repentance would have saved B., since Henry was inclined to forgive him. He, however, persevered in his denial, rejected the offers of pardon, and was, therefore, at the urgent entreaties of the queen, at last surrendered to the rigor of the laws. Upon leaving the king's room, he was arrested, carried to the Bastille, tried before the parliament, and beheaded, July 31, 1622.

BIRTH. (See Labor.)

BISCAV: a province in Spain, bounded N. by the bay of Biscay, E. by France and Navarre, S. by Burgos, including the three following subdivisions or provinces:

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B. Proper., 1375 112,731 Bilbao.

Guipuscoa., 633 104,479 St. Sebastian.

Vittoria., 1138 71,306 Alava.

St. Catherine, in the vicinity of

Cantabri, and preserve strong traces of the character of that high-spirited and independent people. They are robust, brave, active, industrious; at the same time, haughty and irritable; have open, animated countenances, and handsome persons. Their language is supposed to be
a dialect of the Celtic, and nearly allied
to the Armorican. (See Basques.)—B.
forms a kind of separate state, distinct
from the rest of Spain, governed accord­
ing to its ancient laws and usages. The
king of Spain, who is simply styled lord
of Biscay, has no right to impose taxes;
and no custom-houses were allowed, till
lately, within the province.

Biscay Proper is bounded N. by the
bay of Biscay, E. by Guipuscoa, S. by
Alava, and W. by Santander. The coast
is inhabited by seafaring people and fish­
ermen; in the interior, great quantities
of iron are extracted from the ore, and
wrought into different articles. The rich­
est mines are in the vicinity of Bilboa and
Somoa.

Biscay, bay of; that part of the Atlantic
which lies N. of the province of Biscay,
between the projecting coasts of France
and Spain, extending from Estani to cape
Finisterre.

Biscay, bay of; a large bay on the south
cost of Newfoundland, between cape
Race and cape Fine; lon. 53° 6' W.; lat.
46° 50'.

Biscay, New, or Durango; a province
in Mexico, bounded N. by New Mexico,
E. by New Leon, S. by Zacatecas, and
W. by Culiacan; 600 miles long, and 400
broad; pop. 150,000. The country is, in
general, mountainous, and watered by a
great number of rivers and brooks: it has
some mines of silver and lead. Durango
is the capital.

Borcherswerde, John Rudolph von,
a Prussian general and minister, born in
Saxony, in 1759, entered the university of
Halle, was admitted into the Prussian
service in 1769, and appointed major in
1779. In 1780, Frederic William II, he
exercised an unlimited influence at the
court of Berlin. The attachment which
he had shown Frederic William, while
yet crown-prince, procured him the lasting
affection of this short-sighted and prodi­
gal monarch. As plenipotentiary, he took
a great part in the congress at Sistova.
He afterwards effected the interview with
lord Elgin, at Pilnitz. After the king's
death, he was dismissed, and died at his
country-seat, in the neighborhood of Ber­
lin, 1803. His views, as a statesman and
a man, were very limited. His propensity
to mysticism had consequences in the
highest degree injurious. B. belonged to
the society of the Illuminati.

Bishop, in the New Testament, is the
instructor and spiritual superior of a Chris­
tian congregation. The bishops who were
installed by the apostles themselves, or,
according to the apostolic idea of the
office, chosen by the congregations, were
the assistants and successors of the apol­
ties in their labors for the propagation of
Christianity. They had the supervision
of the whole congregation, and its officers,
the presbyters and deacons, but without
claiming, in the first century, any preem­
nence or rights of diocesan, which they
afterwards acquired, as the church-gov­
ernment was gradually established. When
the system of ecclesiastical rule was ma­
tured, the almost absolute authority which
they exercised over the clergy of their
dioceses; their interference in the secular
concerns of governments, to which they
soon rendered themselves necessary, by
their superior information and their ele­
mentary education; they, in the middle ages,
attached to themselves particular vicars, called suflexi­
gens, bishops in partibus, or coadjutors,
for the performance even of these func­
tions, which they had reserved to them­
selves, and for the inspection of all that
concerned the church. Bishops who have
preached themselves, and attended to the
spiritual welfare of their congregations,
have been rare since the seventh century.
The Episcopal office being such as we
have described it, the nobility, and even
the sons of princes and kings, strove to
obtain a dignity which was as honourable
as it was profitable; and which, moreover,
permitted festivals and sensual enjoyments
of every description. These applications,
which were aided by rich donations made
to the churches, and, in the case of the
German bishops, by the influence of the
emperor, gave to the bishops of
Germany, particularly, a high degree of
dignity. The German bishops became
princes of the empire, and their influence
upon all public affairs was important. The
reformation, however, lessened their
number, and although, in some of the Protes­
tant countries of the north of Europe, the
higher clergy have retained the title of
bishop, yet they have lost the greater part
of their former revenues and privileges.

The Swedish bishops constitute one of
the estates of the kingdom, like the English, but have little influence. The English church has left to its bishops more authority than the rest, and, for this reason, has received the name of the Episcopal. In Protestant Germany,bishoprics were abolished by the reformation, but they have been restored in Prussia, within the last 10 years. The church of Rome early lost many bishoprics by the conquests of the Mohammedans; hence the great number of titular bishops, whose bishopric is partibus infidelium, that is, in countries in possession of the infidels. The Roman see, however, honors with this title only ecclesiastics of a high rank. In consequence of the cession of several German countries to France, 23 bishoprics were abolished; but, by particular agreements with the Roman court, they have been reestablished in several German states. (See Concordat, and German Church.) The former subjects of the German bishops remember their mild government with gratitude, and the proverb: "It is good to dwell under the crozier." It proves that the episcopal power was not prejudicial to the prosperity and happiness of those subject to it. (See Clergy, and Church of England.)

Bishop's Hood. (See Miter.)

Bisacruity. (See Cross.)

Bismarck, Frederic William, count; general of cavalry in the service of the king of Wurttemberg, and, since July 1851, his ambassador in Dresden, Berlin, Hanover; born at Winnbera, in Westphalia, in 1783. He is distinguished as a writer on cavalry, and also as a practical officer. He was esteemed by Napoleon. The reigning king of Wurttemberg, on his ascension to the throne, purposing an entirely new organization of his army, committed to count B. that of the cavalry. Here he established a new system. It must be confessed that the Wurttemberg cavalry required, from his rules, much facility in manoeuvring. The objections which have been made against his system are refuted by the practical demonstration which it has given of its utility in his regiment. His views on cavalry are explained at large in his Vorlesungen über die Taktik der Reiterei (Lectures on Cavalry Tactics), 1818, which is considered a standard work, and has been translated into French. Of his Figgentenlehrbuch für Schützen und Reiter (Instruction in the Field-service of Riflemen and Cavalry), four editions have been published within the space of two years. He has published, also, several other military works.

Bismuth is a metal called, by artists, tin glass, a name obviously derived from the French étain de glace. It is found both pure and mineralized by sulphur, oxygen, and arsenic. Native bismuth occurs in the veins of primitive mountains, and is accompanied by ores of lead, silver, and sometimes of cobalt and nickel. It exists in reticulated, lamellar, or amorphous masses; is soft, and of a white color, occasionally tinged with red. Specific gravity, 9. It is found in many countries—in France, England, Sweden, Bologna and the United States—but its chief locality is at Schoeneberg, in Saxony, from whence the supply of bismuth, in commerce, is principally derived. To procure the metal, the ore requires merely to be reduced to convenient fragments, and heated in furnaces, when the bismuth separates from the earthy matter in which it is engaged, and flows out into cast-iron moulds prepared for its reception. Bismuth, when pure, has a reddish-white color, is harder than lead, and is easily broken under the hammer, by which it may even be reduced to powder. It melts at 470° or 480°, and crystallizes, on cooling, with great regularity, in the form of cubes. When kept in a state of fusion, at a moderate heat, it is covered with an oxide of a greenish-gray or brown color; at a higher temperature, it enters into a delicate combustion, forming a yellow powder, called flowers of bismuth. It combines, by fusion, with a great number of metals, communicating to them brittleness and fusibility. The mixture discovered by Newton, and produced by melting together 8 oz. bismuth, 5 oz. lead and 3 oz. tin, fuses at 202°. From it are made toy spoons, which melt on being employed to stir very hot tea. A still more fusible compound was invented by Mr. Dalton, composed of 3 parts tin, 5 lead and 104 bismuth, which melts at 197°. The addition of a little mercury renders it even more fusible, and fits it to be used as a coating to the inside of glass globes. An alloy of equal parts of tin and bismuth melts at 260°; a less proportion of bismuth adds to the hardness of tin, and hence its use in the formation of pewter. Equal parts of tin, bismuth and mercury form the mosaic gold, used for various ornamental purposes. 1 part of bismuth, with 5 of lead and 3 of tin, forms plumbers' solder, a compound of great importance in the arts. Bismuth is also used by letter-founders in their best type-metal, to obtain a sharp and clear face for their letters. Bismuth combines
with sulphur, and forms a bluish-gray sulphuret, having a metallic lustre. The same compound is found native in small quantity, and is called, in mineralogy, bismuth glance.—Nitric acid dissolves bismuth with great readiness. The solution is decomposed on the addition of water, and a white substance, called magnoters of bismuth, is precipitated, which consists of a hydrated oxyde, united to a small proportion of nitric acid. This precipitation, by the addition of water, being a peculiarity of bismuth, serves as an excellent criterion of this metal. The magnoters of bismuth, from its whiteness, is sometimes employed against them. They were once employed against them. They were once employed to improve the condition of this metal. The magnoters of bismuth, formerly termed butter of bismuth, is formed by pouring bismuth, in fine powder, into chlorine gas, or by depriving the muriate of bismuth of its water of crystallization by heat.

**BISON (**see American, Gmel.); a species of ox found only in North America, peculiarly distinguished by a great hump or projection over its fore shoulders, and by the length and fineness of its woolly hair. The hump is oblong, diminishing in height posteriorly, and gives a considerable obliquity to the outline of the back. The hair over the head, neck and fore part of the body is long and shaggy, forming a beard beneath the lower jaw, and descending below the knee (wrist) in a tuft. The hair on the summit of the head rises in a dense mass nearly to the tips of the horns, and, directly on the front, is curled and matted strongly. The numbers of this species still existing are surprisingly great, when we consider the immense destruction annually occurring since European weapons have been employed against them. They were once extensively diffused over what is now the territory of the U. States, except that part lying east of Hudson's river and lake Champlain, and narrow strips of coast on the Atlantic and Pacific. At the present day, their range is very different. They are no longer found except in the remote, unsettled regions of the north and west, being rarely seen east of the Mississippi or south of the St. Lawrence. West of lake Winnipeg, they are found as far north as 52°; west of the Rocky mountains, it is probable they do not extend north of the Columbia river.—The bison, on his native plains, is of savage and formidable appearance, uniformly inspiring dread when beheld for the first time. His ponderous head, rendered terrific by his thick, shaggy hair and streaming beard, is supported upon a massive neck and shoulders, whose apparent strength is more imposing from the augmentation produced by the hump and the long fall of hair covering the anterior parts of the body. Nevertheless, the bison is not known to attack man, unless when wounded, and at bay. The difference between the summer and winter dress of the bison consists rather in the length than in other qualities of the hair. In summer, from the shoulders backwards, the surface is covered with hair, fine hair, smooth and soft as velvet. The tail is short, and tufted at the end. Except the long hair on the fore parts, which are, to a certain extent, of a rust color, or yellowish tinge, the color is a uniform dun. Varieties of color are so rare among this species, that the hunters and Indians always regard them as matters of special wonder.—The bison bull is poor, and his flesh disagreeable in the months of August and September. They are much more easily approached and killed than the cows, not being so vigilant, though the cows are preferred both on account of their finer skins and more tender flesh. The cow is much less than the bull, and has not so much of the long hair on the shoulders, &c.; her horns are not so large, nor so much covered by the hair. The sexual season begins towards the end of July, and lasts till near the beginning of September; after this time, the cows separate from the bulls in distinct herds. They calve in April; the calves seldom leave the mother until a year old; cows are sometimes seen with calves of three seasons following them.—Bison beef is rather coarser grained than that of the domestic ox, but is considered by hunters and travellers as superior in tenderness and flavor. The hump, which is highly celebrated for its richness and delicacy, is said, when properly cooked, to resemble marrow. The Indian museum of preparing this delicacy is the following:—The hump is cut off the shoulders, the bones removed, and a piece of skin is sewed over the denuded part. The hair is then singed off, and the whole is now ready for the oven. This is a hole in the earth, in and over which a fire has been
burned, and into this heated receptacle the lump is conveyed, and covered, about a foot deep, with earth and ashes. A strong fire is again built over the spot, and, supposing these preparations to be begun on the evening of one day, the lump will be ready for eating by the next day at noon. The tongues and udder bodies are regarded, by the connoisseurs, as next in excellence.—Huels, consisting of thousands of these fine animals, still roam over the far western prairies, led by the fiercest and most powerful of the bulls. During the sexual season, the noise of their roaring resembles thunder, and the males often fight desperate battles when they move forward in mass, which once fairly in motion, is scarcely to be turned. They swim large rivers, traverse the plains; and, when flying from pursuit, it is in vain for those in front to halt suddenly, as the rearward crowd madly forward, and force their leaders on. The Indians sometimes profit by this habit, for they have a herd to the vicinity of a precipice, and, setting the whole shouting and other artifices, to rush on to their inevitable destruction. Numerous tribes of Indians are almost wholly dependent on these animals for food, clothing, tents, utensils, &c. Vast multitudes of bisons are slaughtered annually; but it is to be deeply regretted, that the white hunters and traders are in the habit of destroying these valuable beasts in the most wanton and unnecessary manner. It is common for such persons to shoot bisons, even when they have abundance of food, for the sake of the tongue or udder alone, or even because the animals come so near as to present a fair aim. It is, therefore, not to be wondered, that, from all causes of diminution, the bison should become less numerous every year, and remove farther and farther from the haunts of men. The preference always given to the cows, which are too often shot while gravid, operates powerfully in diminishing their numbers. The skins of bisons, especially that of the cow, dressed in the Indian fashion, with the hair on, make admirable defences against the cold, and may be used for blankets, &c. They are called buffalo robes; the term buffalo being generally, but inaccurately, applied to the bison. The wool of the bison has been manufactured into hats, and has also been employed in making coarse cloth. The time cannot be very far distant, when this species, like the Indian tribes which hover near them, will have passed away, and the places which know them now shall know them no more.

Bissagos, or Bissaux, or Bissao; an island in the Atlantic ocean, near the western coast of Africa, and the principal of the cluster called Bisasgao, 100 miles in circumference; lon. 14° 10' W.; lat. 11° 24' N. The ground rises imperceptibly to the middle of the island. The soil is cultivated and fertile, abounding with several sorts of trees, particularly fine large orange and mangoes near the shore. The inhabitants are Portuguese and Negroes intermixed. The island is divided into 9 provinces, 8 of which are governed by officers appointed by the sovereign, each bearing the title of king.—There is another cluster of islands of the same name, lon. 12° W.; lat. 15° 59' N., 255 miles south of Cape Verdi.

Bisset, Robert; a native of Scotland, educated at Edinburgh, for the clerical profession. He took the degree of L.L. D., and became a schoolmaster at Chelsea; but, not succeeding in that occupation, he employed himself in writing for the press. His chief productions are, a History of the Reign of George III., 6 vols. 8vo.; the Life of Edmund Burke, 2 vols. 8vo.; and an edition of the Spectator, with lives of the authors, 6 vols. He died in 1805, aged 46.

BITAUBE, Paul Jeremiah; born in Königsberg, in Prussia, 1733, of French parentage. He translated Homer into French. In consequence of this translation, and the recommendation of D'Alembert, he was elected a member of the academy at Berlin. Frederic II., king of Prussia, favored him much, and allowed him to stay a long time in France, to finish several translations from the German into French. Among his translations is one of Goethe's Hermann and Dorothea. Napoleon conferred many of favor on him. He died in 1808. His works appeared in 9 vols. Paris, 1864.

BITHYNIA; a country in Asia Minor, lying on the Pontus Euxinus, the Thracian Bosporus and the Propontis, and bounded on the south by Phrygia. In early times, it was called Bebrycia, from the Bebrycians, who inhabited it. Before the time of Crassus, B. was an independent state, under its own prince. After the death of Prusias I, in the war against Crassus, it fell into the power of the Lydians, B.C. 560; into that of the Persians,
B. C. 553; and into that of Alexander, B. C. 334. The restorer of the Bithynian throne was Bias or Bas, a native prince, at the court of one of whose successors, Prusias II, Hamilcar took refuge, and where he ended his life by poison, 183 B. C. Nicomedes, the last king of this race, bequeathed his kingdom to the Romans, 75 B. C. The famous cities of Nicomedias, Nicea and Heraclea were in B. In the 11th century, B. was conquered by the Seljuks. In 1268, a new kingdom was founded there by the Ottoman Turks, of which, in 1327, Prusia was the capital.

Bresca; a city in the department of the Moselle, with 2300 inhabitants, and a citadel on a hill; by its situation and the art of Gauvain, one of the strongest places in France.

Bitumen. A name commonly applied to several species of heron; ardea, L. (See Heron.)

Bitumen; the name of a species in mineralogy, the individuals composing which have acquired several distinct names, from their diversity in appearance. This depends chiefly upon their state of aggregation, which forms an uninterrupted series from the perfectly fluid to the solid condition. -Naphtha, the most fluid variety, is nearly colorless or of a yellowish tinge, transparent, and emits a peculiar odor. It swells on water, its specific gravity being from 0.71 to 0.84. It burns with a bluish-white flame and thick smoke, and leaves no residue. It consists of carbon, 82.20, and hydrogen, 17.80; and, being the only fluid destitute of oxygen, it is used to preserve these new metals in, which were discovered by Sir H. Davy. It is found in Persia, in the peninsula of Anachor, upon the western shore of the Caspian sea, where it rises through a marly soil in the form of vapor, and, being made to flow through earthen tubes, is inflammable for the purpose of assaying in the preparation of food. It is collected by sinking pits several yards in depth, into which the naptha flows. It is burned in lamps, by the Persians, instead of oil. Near the village of Amman, in the state of Persia, there exists a spring which yields this substance in sufficient quantity to illuminate the city of Gaza, for which purpose it is employed. With certain vegetable oils, naptha is said to form a good varnish. -The variety petroleum is much thicker than naptha, resembling, in consistence, common tar. It has a strong, disagreeable odor, and a blackish or reddish-brown color. During combustion, it emits a thick, black smoke, and leaves a little residue in the form of a black coal. It is more abundant than the first mentioned variety, from which it does not appear to differ, except in being more insipidate. It occurs, oozing out of rocks, in the vicinity of beds of coal, or floating upon the surface of springs. In the Bithynian empire, near Rainauchong, is a hill containing coal, into which 520 pits have been sunk for the collection of petroleum; and the annual product of this mine is 400,000 hogsheads. It is used, by the inhabitants of that country, as a lamp-oil, and, when mingled with earth or ashes, as fuel. In the U. States, it is found abundantly in Kentucky, Ohio and New York, where it is known under the name of Seneca or Genesee oil. It is used as a substitute for tar, and as an external application for the remedy of rheumatism and chilblains. -Malta is a bitumen, still less fluid than petroleum, from which it differs in no other respect. Its principal locality is at Puy de la Pege, in France, where it renders the soil so viscous, that it adheres strongly to the foot of the traveler. It is also found in Persia and in the Hartz. It is employed, like tar and pitch, on cables and in calking vessels: it is used, as well as the petroleum, to protect iron from rusting, and sometimes forms an ingredient in black sealing-wax. -Elastic bitumen yields elasticity to pressure, is flexible and elastic. It emits a strong, bituminous odor, and is about the weight of water. On exposure to the air, it becomes hard, and loses its elasticity. It takes up the traces of caynons in the same manner as the caoutchouc, or Indian rubber, whence it has obtained the name of the mineral caoutchouc. It has hitherto been found only in the lead mines of Derbyshire.-Compact bitumen, or asphaltum, is of a shining black color, solid and brittle, with a conchoidal fracture; its specific gravity is from 1 to 1.6. Like the former varieties, it burns freely, and leaves but little residue. It is found in Judea, in the Palatinate, in France, in Switzerland, and in large deposits in sandstone in Albania; but no where so largely as in the island of Trinidad, where it forms a lake three miles in circumference, and of a thickness unknown. A gentle heat renders it ductile, and, when mixed with grease or common pitch, it is used for paying the bottoms of ships. It is supposed to protect them from the torr ree of the West Indian seas. The ancients employed bitumen in the construction of their buildings. The bricks of which the walls of Babylon were built
were, according to historians, cemented with hot bitumen, which imparted to them great solidity.

**Bivouack** (from the German Bivak); the name given to the modern system, by which the soldiers in service lie in the open air, without tents, in opposition to the old system of camps and cantonments. They remain dressed, in order to be ready, at a moment's warning, to take their places in order of battle. Tents being laid aside, on the continent of Europe, for the sake of diminishing the baggage of an army, large masses of troops are always obliged to bivouack, even if they are not near the enemy. The soldier, however, is permitted to build himself a hut of straw or branches, if circumstances allow it. Frequent bivouacking is very injurious to the health, and is also a great disadvantage to the countries in which it takes place.

**Black, Joseph**, a distinguished chemist, born at Aulps, in Provence (1728); served in La Vendee; accompanied Louis XVIII to Russia, and afterwards to England. On the restoration of the Bourbons, he was made minister of the king's household. After the second restoration, he was sent to Naples to negotiate the marriage of the duke de Berri. He was afterwards ambassador to Rome, where he concluded the famous concordat of 1815, so unpopular in France, that the government did not venture to propose it to the chambers. On the fall of the ultramontanists, he retired to Rome, and is said to have been secretly employed at the congress of Laybach. He has since been ambassador to Naples, where, as well as at Rome, he has declared himself the protector of the ultramontanists. B. is a thorough ultra-royalist.

**Black Art** (See Magic.)

**Blackbird**; a trivial name, applied to birds of different species, and distinct genera, but properly belonging to a species of the genus *icterus*, as restricted by Prince C. L. Bonaparte, di Musignano, the latest and most accurate writer on ornithological nomenclature. The true blackbirds are either of a rich, glossy black, showing metallic reflections, puple, or ferruginous; being altogether free from maculation. The birds improperly called blackbird, such as the reedling, cowbird, &c., have bright colors, and are species of *icterus* or *tropeol*.—All the blackbirds are gregarious and migratory, diffusing themselves in vast flocks from south to north; returning thence as the cold season approaches. They build their nests in trees, socially, and lay about five eggs. The young are unlike the adult birds.—Three species of blackbird are known in the United States; among these, the great cross-blackbird (*Q. major*) is the largest, and, as its name implies,
BLACKBIRD—BLACKFISH.

BLACKBIRD: a species of *ludus*, caught on various parts of the American coast, especially in the vicinity of Long Island, whence large supplies are obtained for the New York market. For the following particulars concerning this valuable article of food, we are indebted to doctor Mitchell's excellent paper on the fishes of New York, published in the Transactions of the Literary and Philosophical Society. The specific name given by the learned describer is *L. tautog*, in which he has preserved the designation used by the Moho-

strongly resembles, in all respects, the mischievous plunderer of our cornfields. The male is 16 inches long, having a most glossy black plumage; the tail is cuneiform, and, when the wings are folded, they extend nearly five inches beyond it. The female is of a light brown color, whitish beneath, and twelve and a half inches long. This species is found in the Southern States, principally along the sea-coast; it also inhabits Mexico, and is said to be common in the West Indies.—The rusty grackle, or blackbird, is nine inches long. Its breasts extend from the south, where it winters, to as far north as within the arctic circle, where it breeds. According to Pennant, they arrive in the vicinity of Hudson's bay about the beginning of June, when the ground is sufficiently thawed to allow them access to the grubs and worms, upon which they chiefly feed. They sing merrily until they have ceased laying, and when the young are fledged, they again resume their song. Their nests are formed of moss and grass, and placed in trees about eight feet from the ground. They pass through the Middle States, on their northern tour, early in April: in September, they collect in vast flocks, to seek their winter-quarters in the south.—The purple grackle, lesser or common crow-blackbird, (fr. versicolor, Vieill.), is the most notorious of these sable plunderers. On their first arrival in the Middle States from the south, which is in the latter part of March, they come in scattered flocks, and are most frequent in swamps, meadows, and recently ploughed ground. At this season, they consume an immense number of destructive insects, and, if they continued to feed on such food, they would be among the farmer's chief benefactors. Towards the beginning or middle of April, they begin to build upon the tall pines or cedars nearest to the fields whence they obtain their food. As many as 10 or 15 nests have been found on the same tree. The nests are about five inches in diameter, composed, externally, of long stalks and knotty grass-roots, and are lined with horse-hair, &c. The eggs are of a bluish olive hue, with large spots, and irregular streaks of dark brown. The period when the green blade of the young Indian corn begins to sprout above the surface of the ground is that in which the common crow-blackbird commences its ravages. Vast flocks, clattering and screaming, as if anticipating the pleasures of the feast, descend upon the soil, and pluck the swelling grain from its recess. In a few hours, the careful husbandman beholds his fair prospect of an ample harvest almost destroyed, and that, too, with but little chance of his being able to remedy the evil. It is true that the guns are commonly put in requisition, and a few volleys, fired among these insolent thieves, destroy a small part of their numbers. But they only change their quarters, and return ere long to renew the assault with increased activity. It is not until the month of November that they begin to collect their forces, now renovated and augmented, to seek the genial climate of the south for the winter. When we consider that a very ample quantity of corn is produced, notwithstanding the depredations of these and other birds, and recollect the vast number of insects they consume before their attacks upon the corn begin, we shall be inclined to agree with our great ornithologist, Wilson, that the service they render the cultivator by devouring the insects is quite an adequate compensation for the tax they levy upon the grain. If we extend our observation a little further, and remark that these birds destroy the insects before they have attained their perfect or breeding state, and that a single fly or bug is capable of laying thousands of eggs, the magnitude of the benefit they confer upon nature may be more accurately appreciated. Nevertheless, it is perfectly right, that, during their ravages upon the grain-field, they should be driven off and destroyed. The extermination of the species is as impossible as the wish to effect it would be ridiculous. If such an event could be brought about, we should speedily be convinced, that the supreme Author of nature had devised all things in wisdom, by discovering, that, without the aid of these seemingly useless creatures, the earth would be despoiled of its vegetation, and the habitations of man become lostsome from the multiplication of voracious and disgusting worms.

*VOL. II.*
BLACKFISH—BLACK FOREST.

gan Indians for this fish. The common name, blackfish, is bestowed on account of the color of its back and sakes, which are of a bluish or crow-black; the lips, lower jaw, neck and belly, especially in the males, are white. The mouth is rather small, the lips skinny or fleshy, and the teeth are about twelve in number in each jaw, the two front teeth being largest, and the rest of the respective rows gradually decreasing in size. Within the external ranges are the points of smaller teeth, inserted with rather less regularity: they are sharp, distinct, and covered by the lips. The tongue is white, smooth, lying close, but discoverable by raising; tail entire, and somewhat convex, the middle rays being somewhat more prominent than the upper and lower ones; gill covers smooth, neither scaly, serrated nor rough; extremities of the pectoral fins whitish; eyes rather small. The blackfish is plump in appearance, and is much esteemed for the table. It varies in size, from 2 or 3 to 10 or 12 pounds. Rocks, reefs and rough bottoms of the sea, in the neighborhood of the coasts, are the situations most frequented by the blackfish, which appear to be stationary inhabitants of the salt water, as they do not, like the salmon, herring, &c., desert their haunts to visit the fresh-water rivers. These fish are caught in abundance, along the whole of Long Island sound, Fisher's Island sound, and in Narragansett bay. They are also found in the southern bays of Long Island, and on the ocean banks off Sandy Hook. They were formerly carried ever land from Newport and Providence to Boston market, but are now caught in Massachusetts bay in sufficient numbers to render such importation unnecessary.—In catching blackfish, the hand line is generally used, though the angle rod may often be advantageous employed: they seize the bait greedily, at proper seasons, and pull strongly, in proportion to their size and weight. They are occasionally taken in seines. The bait commonly employed is the soft clam (mya), the soldier-crab or fiddler (ocypoda), or the large flanny worm of the salt-water beaches, called merez. As the warmth of spring comes on, the blackfish begin to acquire their appetite, which is suspended during the cold of winter, at which time a membrane is found to form over and close up the vent. They may be caught, as above stated, until the warm weather becomes well advanced, when such an abundance of food is to be procured as to render the bait of the fisherman no longer a temptation. The flowering of the common dog-wood (cornus florida) is considered an indication of the beginning of the fishing season; and where this tree is not to be seen, the vegetation of the chestnut-tree is regarded as a similar indication. These fish are brought to Philadelphia market in wagons, from Long Branch, &c., being packed in ice, and frozen as soon as caught.

BLACK FOREST (in German, Schwarzwald); a chain of mountains in the grand-duchy of Baden and the kingdom of Württemberg. It runs almost parallel with the Rhine, from south to north, often only from 15 to 20 miles distant from this river; is about 55 miles long, and, from east to west, in the southern part, about 30 miles wide; in the northern, about 18. The Danube rises in these mountains, as well as many other rivers. Those on the west side run into the Rhine, those on the east side into the Danube. The Black Forest is rather a chain of elevated plains, than of isolated peaks. The highest summit, the Feldberg, measures 4610 German feet. Except from June to September, these mountains are generally covered with snow, and even during this period, are not entirely free from it. Among the many valleys of this chain, the Murghal is particularly celebrated for its beautiful scenery. The whole chain consists of primitive mountains; its skeleton, throughout, is granite; its higher points are covered with sand-stone, and other layers of less consequence, and are surrounded by heights composed of felsit rocks. On the western side, at the foot, appears meoss. Porphyry and clay-slate are found on several heights, as, likewise, silver, lead, copper, iron, cobalt and mineral waters. The woods are abundant, and consist mostly of pines and similar species. The raising of cattle is the principal branch of husbandry carried on in this district. The ground is not fertile, and the inhabitants, scattered over the mountains, live extremely frugally, but are very industrious. Their manner of living, building their houses, and cultivating their lands, is very peculiar. Till the 17th century, there was no spirit of trade or industry among them; but the wars of that period developed it, and the manufactures of glass, straw hats, wooden clocks, and other wooden ware, are now very important. They make, annually, more than 180,000 wooden clocks, the value of which amounts to over half a million of guilders. Neusalt and Furtwangen are the central
points of this singular commerce, which embraces all Europe, and extends even to America. Large numbers of these clocks are sent to Spain and Portugal, from whence they go to South America. From the north of Germany, and from Havre, they are exported to the U. States. The chief current runs from the shallow sea of Azoph, from north to south, to the Thracian Bosporus and the Hellespont. The Black sea contains no islands; there is one, however, in the Cimmerian Bosporus. The fisheries in the sea of Azoph and the Black sea are not unimportant, various kinds of valuable fish, both large and small, being taken; among others, several species of sturgeon. Seines are used, in which 60,000 fishes are sometimes caught within six hours; but there are never many large ones among them. Caviare (q. v.) is also made on the coast, as well as salted fish, fish-oil, and fish-glue, fish-oil, and, from the spawn of the sea mullet, boturgo; the latter, however, only in small quantity. The salt and smoked mackerel form an important article of the commerce of the Crimea. Raoul-Rochette has published, in Paris, 1822, a work on the remarkable Greek antiquities on the northern shore of the Pontus, which has been corrected and completed by the Russian counsellor Peter von Kuppen, Vienna, 1823. Quite recently, Mr. von Blaramberg, director of the museum established at Odessa and at Kertch, has discovered many interesting remains in this quarter. (See Crimea.)

BLACKFRIARS' BRIDGE; one of the six fine bridges of London, over the Thames, built between 1760 and 1766, after a design of Mr. Robert Mylne, at an expense of £152,840. There are 9 arches, the centre one being 100 feet wide. The whole length is 995 feet. Over each pier is a recess, supported by Ionic pillars. The bridge is situated at about an equal distance from those of Southwark and Waterloo. It commands a very fine view of St. Paul's cathedral, as well as of both sides of the river, including the tower, the monument, Somerset house, Westminster abbey, and about 30 churches. The constant bustle on this and the London bridge is enormous, and beyond any thing of the kind to be met with in other cities.

BLACK FOREST-BLACKLOCK.

BLACKHEAD. (See Plumbago.)

BLACK ROCK. (See Buffalo.)

BLACKSEA; with the ancients, known by the name of Pontus Euxinus (q. v.); a sea which is situated between Europe and Asia, bounded on the west by Romania and Bulgaria, on the north by the Russian dominions, on the east by Mingrelia and Gurieel, on the south by Nodilia, being connected with the Mediterranean by the Bosporus, and, by the Cimmerian Bosporus, with the sea of Azoph (q. v.), which is, in fact, only a bay of the Black sea. The area of the Black sea and the sea of Azoph amounts to about 257,000 square miles. The water is not so clear as that of the Mediterranean, and, on account of the many large rivers which fall into it, the Danube, Duiserter, Dnieper, Don, and Cahan, being less salt, freezes more readily. The tempests on this sea are tremendous, as the land, which confines its agitated waters, gives them a kind of whirling motion. In the winter, it is so boisterous, particular-
neighborhood. At the age of 20, he lost his father, on which he was invited by doctor Stephenson, a physician in Edinburgh, to visit that metropolis, in order to pursue his studies at the university. He soon became a proficient in Latin, as also in French, which he chiefly acquired by conversation with a French lady, the wife of provost Alexander. He also, in the course of nearly 10 years' study at the university, made a considerable progress in the sciences. In 1754, he published a second edition of his poems, which gained him the patronage of Mr. Epenee, who published an account of his life, and of assistin'g them in their studies almost two generations, for Pope took up the quarrel which Dryden began. The work which produced him the greatest reputation was the Creation, a poem in seven books, which went through several editions, and was greatly applauded. Although recommended by authority, his poetry is easy, polished and harmonious; and he composed with considerable rapidity. The number of his images from visual objects will surprise those who are not aware of the uniform strain of imitation in common-place poetry. B. wrote, besides his poems, several prose works.

Blackmore, sir Richard, a physician and poet of notoriety, if not of eminence, was the son of an attorney in the county of Wilts. In 1688, he entered the university of Oxford. There he remained 13 years, and, for some time afterwards, appears to have followed the profession of a schoolmaster. At length he turned his attention to physic. In 1697, he had risen to so much eminence in his profession, as to be appointed physician to king William, who knighted him. The preceding year, he had made himself known, as a poet, by the publication of his heroic poem of Prince Arthur, which was soon followed by King Arthur; and, in 1700, he published a paraphrase of the book of Job, in folio; as also a poem entitled a Satire on Wit, being an attempt to retort on the wits by whom he had been very successfully assailed. By the strictness of his whiggish principles, he had incurred the resentment of the tory junto, composed of Swift, Pope, Arbuthnot and others; while something solemn in the complexion of his religion and morality, added to the real absurdity of starting epic after epic in quick succession, insured the raillery of all those to whom his gravity, perseverance and mediocrity afforded so much subject for ridicule. This worthy man and middling poet became the common butt of his day, and for almost two generations, for Pope took up the quarrel which Dryden began. The work which produced him the greatest reputation was the Creation, a poem in seven books, which went through several editions, and was greatly applauded, but is generally speaking, very tamely elaborate. In 1721, B. published a New Version of the Psalms of David, which, although recommended by authority, has never been adopted. He died, at an advanced age, in 1729, leaving behind him the character of a pious, well-meaning and respectable man, of limited genius and little taste. Besides the epics already mentioned, he wrote Eliza, in 10 books; the Redeemer, in 6 books; King Alfred, in 12 books, &c. He also composed a History of the Conspiracy against King William III, and several medical and theological treatises, especially against the Arians, all of which have quietly reached oblivion. As a physician, he was a strenuous opposer of the new system of inoculation for the small-pox.

Blackstone, sir William, knight and LL. D., a celebrated English lawyer, and the most popular writer on the laws and constitution of his country, was born in London, in 1723. He was the third son of Mr. Charles Blackstone, a silk-merchant, but, being left an orphan, was brought up by his maternal uncle, Mr. Thomas Bigg, surgeon, from whose kindness he received an education, which the narrow circumstances of his father could scarcely have supplied. He was educated on the
foundation of the charter-house, whence, in 1738, he was removed to Pembroke college, Oxford. He was much distinguished, both at school and at the university, and at an early age compiled a work for his own use, entitled the Elements of Architecture, which has been much praised. Having chosen the profession of the law, he was in due time entered at the Middle Temple, and on this occasion published the admired verses, called the Lawyer's Foundling to his home, which appeared in Dodsley's Miscellany. In 1743, he was elected fellow of All Souls' college, Oxford, and, in 1746, was called to the bar, and commenced the practice of law.

Regarding deficient in elocution, and not possessed of the popular talents of an advocate, his progress was slow. Having attended the courts of law at Westminster for seven years, without success, he determined to quit the practice of his profession, and retire to his fellowship at Oxford. The system of education in the English universities supplying no provision for teaching the laws and constitution of the country, B. undertook to remedy this defect, by a course of lectures on that important subject; and the manner in which he executed the task has conferred a lasting reputation on Oxford. His first course was delivered in 1753, and was repeated for a series of years with increasing effect and reputation. These lectures doubtless suggested to Mr. Viner the idea of founding, by his will, a liberal establishment in the university of Oxford for the study of the common law; and B. was, with great propriety, chosen the first Vinerian professor. His engagements at Oxford did not prevent his occasional practice as a provincial barrister, and, in 1754, being engaged as counsel in a contested election for the county of Oxford, he was led into considerations on the election franchise, which produced his work entitled Considerations on Copyholds. In this treatise he denied the right of copyholders to vote as freeholders; which led to a declaratory act of parliament in establishment of that narrow doctrine. In 1753, he published a new edition of the Great Charter and Charter of the Forest, with a historical preface; and, during the same year, the reputation whetted by his lectures induced him to resume his attendance at Westminster hall, when business and the honors of his profession soon crowded in upon him. In 1761, he was elected M. P. for Hindon, made king's counsel and solicitor-general to the queen.

About this time, he also married, and, thereby losing his fellowship, was appointed principal of New Inn hall; which office, with the Vinerian professorship, he resigned the next year. In 1763, he also published the first volume of his Commentaries on the Laws of England; a work of greater merit than any which had yet appeared on the subject. In this celebrated production, the author does not confine himself to the humble duty of an expositor, but aspires to the higher character of a philosophical writer on jurisprudence; and, having been preceded by no authors in the same line, his manner of accomplishing his task is entitled to great praise. It must not, however, be regarded as a philosophical investigation into the grounds and merits of the English laws and constitution, so much as an elegant exposition and defense of the existing system. Whatever he found instituted, it was his purpose to support and eulogise; and consequently we are rather made acquainted with the "legal reasons" of what is established, than instructed in the general principles of national legislation. This mode of treating the subject may, in some degree, be useful, by conveying a due notion of the grounds on which government and usage have proceeded, but, of course, will do little to advance the mind of a nation, and often a great deal to nurture prejudices and impede amelioration. Notwithstanding some passages against standing armies, and in exposition of the progress of the influence of the crown, B. is uniformly the advocate of prerogative, and very confined in his notions of toleration. On the latter ground, he was involved, on the publication of his Commentaries, in a controversy with Priestley; and, some years afterwards, his political principles were assailed, with much acuteness, in a publication entitled a Fragment on Government, now known to be the work of Mr. Jeremy Bentham. In the debates which took place on the Middlesex election, in relation to the re-eligibility of an expelled member, he was led to language in parliament, against the tenor of which Mr. James Grenville, with great adroitness, quoted his own book, and he was also warmly attacked for the same inconsistency by Jukes. The real merit and talents of B., backed by political tendencies, which are generally favorable to advancement, now made him an object of ministerial favor, and he was offered the post of solicitor-general, in 1770, and, declining it, was made one of the justices of
common pleas, which station he held until his death, in February, 1780, in his 57th year. The private character of B. was exceedingly mild, benevolent and amiable; and he was a most active and intelligent man of business, in which, indeed, he all his life delighted. He left in MS. two volumes of reports, which have been published since his death, and are deemed inadequate to his reputation.

Blackstone Canal leads from Providence, in the state of Rhode Island, to Worcester, in Massachusetts. It is 45 miles in length, and follows, in the greatest part of its course, the valley of the Blackstone or Pawtucket river, from which it is supplied with water. The fall from the summit, at Worcester, to tide-water at Providence, is 451 feet. There are 48 locks, which are built of hammerd stone, laid in water lime, each 80 feet long and 10 feet wide. The canal is 34 feet wide at the surface of the water: 18 feet at the bottom, and 4 feet deep. It was built by an incorporated company, under charter from the legislatures of Rhode Island and Massachusetts, at a cost of about $600,000. It was finished in the autumn of 1828.

Bladensburg: a post-town in Prince George's county, Maryland, on the eastern branch of the Potomac, 6 miles N. E. Washington; lon. 76° 57' W.; lat. 38° 56' N. It contains about 100 houses. A battle was fought here, Aug. 24, 1814, between the English and Americans, in which the latter were defeated. This success of the British led the way to the conquest and burning of Washington.

Blair, Hugh; a pulpit orator and author, a grandson of Robert B., who, under Charles I, boldly defended the rights of the Presbyterian church, was born at Edinburgh, in 1699. His teachers, struck by an essay on the Beautiful, encouraged his inclination for belles-lettres. He was made preacher of the high church of Edinburgh in 1728. The office was regarded as the highest dignity of the Presbyterian church of Scotland. About the same time, his literary reputation also commenced. In 1730, he began a course of public lectures on composition, which he delivered with so much reputation, that, in 1762, the king founded a professorship of rhetoric and belles-lettres, which was committed to his charge. We know his theory of rhetoric from his Lectures on Rhetoric and Belles-Lettres (1725, 4, 2 vols.), which have been translated into German. The credit of Macpherson's Ossian was zealously supported by Blair, in a dissertation which gained him much reputation. His sermons were considered as models of English pulpit eloquence. Careful and scrupulous as he was in writing them, he only published the best. They are distinguished by a polished style, and a clear, easy and methodical exposition. The first volume of his sermons was not published until his 60th year (1777); the 10th edition was called for in the following year. He subsequently published another collection, which was also often reprinted. B. gave weight to his doctrines by his own example. He labored for the welfare of his church, and was always ready to give counsel and assistance. He was a kind father, an affectionate friend and husband, and, by his tranquil and contented temper, as well as by his simple and regular manner of living, enjoyed the highest degree of human happiness to a great age. He died in 1800.

Blair, John; an eminent chronologist and geographer, a native of Scotland, which country he quitted for London about the middle of the last century. Though he had received a good classical education at Edinburgh, he thought himself fortunate in obtaining the situation of usher in a school in Hedge lane, London. In 1754, the publication of a work in folio, entitled the Chronology and History of the World, from the Creation to A. D. 1753, gained him great reputation. In the composition of this book, he is said to have been materially assisted by his relation, doctor Hugh Blair. In it, he illustrates his subject by 56 tables, 4 of which are introductory, containing the centuries which precede the first Olympiad. He dedicated his work to the lord chancellor Hardwicke, and, in 1757, was appointed chaplain to the princess dowager of Wales, and mathematical tutor to the duke of York, whom he accompanied, in 1763, on a tour to the continent, having already received several ecclesiastical preferments. On his return to England, he published, in 1768, a new edition of his Chronological Tables, with 14 maps of ancient and modern geography annexed. He died June 24, 1782, of an attack of influenza. After his death were published his Course of Lectures on the Canon of the Old Testament, and a duodecimo volume, entitled the History of Geography.

Blair, Robert; a Scottish clergyman and poet, born at Edinburgh, in 1699. He is the author of The Grave, first
BLAIR—BLAKE.

printed at London, in 1743. He died in 1749.

Blake, Robert, a celebrated British admiral, was the eldest son of a merchant in the Spanish trade, settled at Bridgewater, where B. was born, in 1599 After attending the grammar-school of his native place, he was sent to Wadham college, Oxford, where he took the degree of B. A. in 1617. On his return to Bridgewater, he lived for some time, in a private manner, on the fortune left him by his father, and was led by the gravity of his own condition, and by his family connections, to embrace the principles of the Puritans, by whose interest he was elected member for Bridgewater, in the parliament of 1640. This being soon dissolved, he lost his election for the next, and immediately sought to advance the cause, in a military capacity, in the war which then broke out between the king and parliament. He soon distinguished himself by his activity. In 1643, in the manner of those times, when military men often served on shipboard, he was sent to command the fleet, in conjunction with colonels Deane and Popham, and thus commenced the naval career which has given him so distinguished a place in British history. He immediately sailed to Kinsale in quest of prince Rupert, whom he attempted to block up in that port. The prince, contriving to get his fleet out, escaped to Lisbon, where B. followed him; and, being refused permission to attack him in the Tagus, by the king of Portugal, he took several rich prizes from the Portuguese (against whom the parliament declared war), and followed Rupert to Malaga, where, without asking permission of Spain, he attacked him, and nearly destroyed the whole of his fleet. On his return to England, he was made warden of the Cinque Ports, and soon after reduced the islands of Scilly and Guernsey. In 1659, on the prospect of a Dutch war, he was made sole admiral, and, on the 19th of May, was attacked in the Downs by van Tromp, with a fleet of 45 sail, the force of B. amounting only to 23. He, however, fought so bravely, that van Tromp was obliged to retreat. He then continued his cruise, took a number of Dutch merchantmen, and, after several partial actions, drove the enemy into their harbor, and returned to the Downs. May 25, he was again attacked by van Tromp, whose fleet was now increased to 80 sail. B., who could not bear the thought of a retreat, engaged this vast force with a very inferior number, and an unfavorable wind; but, after every possible exertion, was obliged to retreat into the Thames, on which van Tromp was so much elated, that he sailed through the channel with a broom at his mast head, to signify that he had swept the sea of British ships. In the February following, B., having with great diligence repaired his fleet, put to sea with 60 sail, and soon after met the Dutch admiral, who had 70 sail, and 300 merchantmen under convoy. During three days, a furious running fight up the channel was maintained with obstinate valor on both sides; the result was, the loss of 11 men-of-war and 30 merchant-ships by the Dutch, while that of the English was only one man-of-war. It was in April, this year, that Cromwell assumed the sovereignty, and his brother admirals issued a declaration, that, notwithstanding this change, they resolved to persist in faithfully performing their duty to the nation. “It is not for us (said B. to his officers) to mind state affairs, but to keep the foreigners from fooling us.” June 3, he again engaged van Tromp with dubious success; but, renewing the action the next day, he forced the Dutch to retire, with a considerable loss in ships and men, into their own harbors. On his return, he was received by Cromwell with great respect, and returned member in the new parliament for Bridgewater. Aware of his affection for a republican government, the protector was not displeased at having occasion to send him, with a strong fleet, to enforce a due respect to the English flag in the Mediterranean. He sailed first to Algiers, which submitted, and then demolished the castles of Goletta and Porto Ferino, at Tunis, because the dey refused to deliver up the English captives. A squadron of his ships also blocked up Cadiz, and intercepted a Spanish plate fleet. Being now very sick, he resolved to do one more service to his country before his death, and sailed, with 21 ships, to Santa Cruz in Teneriffe; and, notwithstanding the strength of the place, burnt the ships of another Spanish plate fleet, which had taken shelter there; and, by a fortunate change of wind, came up the English channel was maintained with obstinate valor on both sides; the result was, the loss of 11 men-of-war and 30 merchant-ships by the Dutch, while that of the English was only one man-of-war. 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honored with a magnificent public funeral, and interred in Henry VIII's chapel, whence it was pitifully removed at the restoration, and buried in St. Margaret's church-yard.—The foregoing detail sufficiently evinces the bravery and talents of this able commander, who first deviated from the old practice of keeping ships and men as much out of danger as possible, and gave the example of bold and spirited achievement. So disinterested was he that, after all his rich captures and high posts, he scarcely left behind him £500 of acquired property, freely sharing all with his friends and seamen, into whom he infused that intrepidity and spirit of enterprise, by which the British navy has been ever since so highly distinguished.

BLAKELEY, Johnston, a captain in the U. S. Navy during the late war, was born in Ireland, in October, 1781. Two years after, his father, Mr. John Blakeley, emigrated to the U. States, and settled in Wilmington, North Carolina. Young B. was placed, in 1785, at the university of North Carolina, being intended for the law. His father died the year after. In the year 1799, circumstances having deprived B. of the means of support, he left college, and, the next year, obtained a midshipman's warrant. In 1813, he was made a master-commandant, and soon after appointed to the command of the Wasp. In this vessel, he fell in with his Britannic majesty's ship Reindeer, in lat. 48° 30'. This ship he took, after an action of 19 minutes. The loss of the Americans was 21 killed and wounded; that of the enemy, 67. The Reindeer was cut to pieces in such a manner as to render it impossible to save her; and she was accordingly set on fire. After this, the Wasp put into L'Orient; from which port she sailed August 27, and, four days afterwards, falling in with 10 sail of merchantmen, under convoy of a ship of the line, she succeeded in cutting off one of the vessels.—The evening of the first of September, 1814, she fell in with four sail, two on each bow, but at considerable distances from each other. The first was the brig-of-war Avon, which struck after a severe action; but captain B. could not take possession, as another enemy was approaching. This enemy, it seems, however, was called off to the assistance of the Avon, which was now sinking. The enemy reported that they had sunk the Wasp by the first broadside; but she was afterwards spoken by a vessel off the Western Isles. After this, we hear of her no more.—In his person, captain B. was rather below the middle stature; his eyes black and expressive, his manners mild, manly and unassuming. Among his brother officers, he was considered as a man of uncommon intellect, courage, and professional skill. He was married, in December, 1813, to a lady of New York; and left an only daughter, who received one of the most affecting tributes of public gratitude, which have occurred in the history of the U. States. The legislature of North Carolina, December 27, 1816, after prescribing the destination of the sword they had voted to captain B., "Resolved, unanimously, that captain Blakeley's child be educated at the expense of this state; and that Mrs. Blakeley be requested to draw on the treasurer of this state, from time to time, for such sums of money as shall be required for the education of the said child."

BLANC, Mont. (See Mont Blanc.)

BLANCHARD, François, one of the first aeronauts, born at Andelys, in the department of the Eure, in 1738, was fond of mechanics from his youth, and, in his 16th year, invented a self-moving carriage, in which he rode a distance of 18 miles. This invention, which he improved in 1775, recommended him to the court of Versailles. He displayed equal ingenuity, by the invention of a hydraulic machine, in the 19th year of his age, and, afterwards, in the construction of a flying ship, which, by means of a counterpoise of six pounds, was raised to more than 50 feet from the ground. He eagerly availed himself of the discoveries of the brothers Mongolfier, and the improvements of the same by professor Charles and Robert in Paris. After having made his first aeronautic voyage, March 4, 1784, he crossed the channel from Dover to Calais, 1785, with doctor Jeffries, a gentleman of Boston, in the U. States. For this exploit, he was rewarded, by the king of France, with a present of 12,000 francs, and a pension of 1200. In the same year, at London, he first made use of a parachute, invented by him, or, according to others, by Eusene Mongolfier. After having performed many aeronautic voyages in foreign countries also, he was accused of propagating revolutionary principles, and imprisoned, 1788, in the fortress of Kufstein, in the Tyrol. Having obtained his liberty, he made his 48th ascent in the city of New York, 1796. In 1798, he ascended, with 16 persons, in a large balloon, at Rouen, and descended at a place 15 miles distant. In 1807, his aeronautic
voyages amounted to more than 66. He died in 1809. Madame Blanchard continued to make aerial voyages. In 1811, she ascended in Rome, and, after going a distance of 69 miles, she rose again to proceed to Naples. In June, 1819, having ascended from Tivoli, in Paris, her balloon took fire, at a considerable height, owing to some fire-works which she carried with her. The gondola fell down in the rue de Provence, and the helpless servant was dashed to pieces.

Blank Verse, in modern poetry; verses without rhyme; e.g., Milton's Paradise Lost. Only those languages which distinguish long and short syllables can employ it. (See Verse.)

BLANGINI, Giuseppe Marco Maria Felice, born at Turin, 1781, studied under the abbot Ottani, chapel-master in the cathedral there. In his 12th or 13th year, he accompanied the choir of this church on the organ. At the age of 14 years, he executed a mass, with a complete orchestra. In 1799, he went to Paris, gave lessons in singing, and was soon employed as a composer. The completion of the False Daunna, an opera, left unfinished by Della Maria, was intrusted to him; and soon after appeared his Zelte and Terrile, Nephelid, and other operas, in effect, master of concerts; and, in 1806, after the departure of Reichardt, the king of Westphalia invited him, in the same capacity, to Cassel. After the expulsion of the Westphalian court, he lived in Munich, where he composed and performed his Trajan in Dacia. Some time after, he went to Paris, where he is still living. Besides many comic and heroic operas, we have a collection of pleasing ballads, aetithrums, Italian airs, and charming duets, composed by him. In Italy, he is called the Auteur of music.

BLANCHARD—BLASPHEMY.
BLASPHEMY—BLEMMYES.

Christians, openly and habitually inculcated in their public assemblies, would be violations of it. This was, no doubt, the reason of omitting the part of the statute above referred to. The early legislation of the American colonies followed that of the mother country, and, in some of them, the crime of blasphemy was punished with death; but the penalty was mitigated before the establishment of the independence of the states, and imprisonment, whipping, setting on the gallows, or in the pillory, having the tongue bored with a red-hot iron, &c. were substituted. The statutory provisions of the different states on this subject are very various. In some of them, the offence of blasphemy is distinguished from that of profane swearing; in others, blasphemy is not mentioned as a distinct offence. Several penalties against blasphemy are to be found in the laws of some of the New England States; according to which it is provided that, if any persons shall blaspheme, by denying, cursing, or contumeliously reproaching God, his creation, government, or final judging of the world, or by cursing or reproaching Jesus Christ or the Holy Ghost, or contumeliously reproaching the word of God, consisting of the commonly received books of the Old and New Testament, he is liable to imprisonment for a term not exceeding five years. But the most direct and public violations of these laws are passed over without punishment or prosecution. In many, and, we believe, the greater number of the states, the offence of blasphemy, not being a subject of special statutory provision, is only punishable either as an offence at common law, or a violation of the statute laws against profane swearing. The offence, considered only as a violation of positive statutes, would be liable to a great diversity of punishment in the different states, from a fine of two shillings and six pence, in some, to an imprisonment not exceeding a period of five years in others. Viewing this subject in a philosophical, religious or political view, it would be difficult to lay down any general principles applicable to different states of society; but the prevailing principle on this subject in the U. States, and to which the laws and opinions of other countries are strongly tending, is, that any one may profess or oppose any doctrine, provided he inculcates his principles, whether orally or in writing, in such manner as not to commit a flagrant violation of decorum: what acts or words will constitute such an outrage must evidently depend upon the state of the society.

BLASTING; the technical term for splitting any object by means of gunpowder.

BLAZONING, or BLAZONRY, in heraldry; the deciphering of coats of arms, from the German blauen, to blow, because the herald blew a trumpet, and called out the arms of a knight, when he entered the lists at a tournament. (See Heraldry.)

BLEACHING is the art of whitening linen, wool, cotton, silk, wax, also the materials of which paper is made, and other things. It is shown, by experience, that organic bodies, after being deprived of life, and becoming solid and dry, lose their color, and become white by the influence of the air and the sun-beams. Upon this fact, the manner of bleaching, which was formerly in use, is grounded: since, however, the bleaching in the sun commonly requires a whole summer, Berthollet, in the year 1786, first proposed the use of chlorine. This, it is known, has so little corrosive power, that, if diluted, it may be taken inwardly in a considerable quantity. This method has since been much improved, principally by Watt. It has been found, however, that linen certainly may suffer, if too much acid is applied.

In England, this acid, when used to bleach linen, is mixed with one half of muriate of lime dissolved in water. The quantity of this salt requisite for bleaching is very different, according to the different quality of linen. Commonly, the 12th or 20th part of the weight of the linen is employed. In manufactories of linen and cotton goods, the yarn or cloth passes through a number of successive processes, the principal of which are the steeping, in which the goods are fermented in an ascendent liquid, at a temperature of about 100 degrees Fahr.; the bucking and boiling, in which a hot alkaline lie is made to percolate through the stuff for some time; the souring, performed with diluted sulphuric acid; the bleaching with chlorine, in which the stuff is exposed to the action of some compound of that substance, usually chloride of lime, called bleaching salt. Various mechanical operations, washings and repetitions of the processes are commonly practised to complete the discharge of the color. The fibers of wool and silk are not bleached by chlorine, but, after being deprived of the saponaceous or gummy matter which adheres to them, are exposed to the flames of burning sulphur to discharge their color.

BLENOPYES, or BLEMMYES; a fabulous people of Ethiopia, without heads, their eyes, mouths, &c. being placed in their breasts. A barbarous tribe of this name...
FOUNDED, Aug. 13, 1704, the famous battle of the Egyptians against Diocletian. With a view of opposing to the B. a suitable adversary, Diocletian persuaded the Nubit, a people of Nubia, to remove from their ancient habitations in the deserts of Libya, and resided to them an extensive but unprofitable territory, above Syene and the cataracts of the Nile.

BLENHEIM. (See Zinc.)

Blenheim; a village situated in the circle of the Upper Danube, in Bavaria, on the Danube. Here was fought, Aug. 13, 1704, the famous battle of Blenheim, or, as it is more commonly called on the European continent, the battle of Hochstadt, from another village of this name in the vicinity. Louis XIV, in the war of the Spanish succession, had to contend with Holland, England, Austria, Savoy, Portugal and the German empire. The elector of Bavaria was his only ally; but, as the territories of this prince were contiguous to Austria, which, on that side, was unprotected, he was the more to be feared, especially as he was an active and warlike prince, who took the field himself, and, in case of success, could open the way to Vienna for the French, which was on their right flank. Here was posted, under the command of Tallard, l'Emir, the imperial general Styrum, and took the fortress of Passau. But his dissensions with the upright and upholding French marshal Villars prevented him from reaping, in the same year, all the fruits which this victory might otherwise have afforded him. Villars was ordered to cede the chief command to marshal Tallard, who overcame, on the Rhine, near Spire, the margrave Louis of Baden, and rendered the situation of the hereditary states of Austria very dangerous. Marlborough, however, the soul of the whole war, in the field and in the cabinet, formed the plan of deciding the fate of the contest on the Danube. Italy, Flanders and the Lower Rhine were to be defended only; but the decisive blow was to be struck in the south of Germany, whether the best imperial troops marched, under Eugene, from the Rhine. Marlborough attacked the Bavarian intrenchments, July 2, after a violent combat on the Schellenberg, and made his way over the Danube, in order to be able to occupy the territory of the elector of Bavaria, if circumstances required it. But, for this latter purpose, the gaining of a decisive battle was indispensable, since, without it, the invasion of Bavaria would have been a hazardous enterprise, and a long delay, after the manner of carrying on war in those times, required well-filled and secure magazines. The French and Bavarian armies were drawn into an engagement, Aug. 13, 1704, under the most unfavorable circumstances. Both these armies were posted, under the command of Tallard, Marsin, and the elector of Bavaria himself, between the village of B. and that of K Zion, behind the Nebelbach, near the Neberbach, behind the Nebelbach, which was on their right flank. They amounted to 50,000 men, whilst the forces of Marlborough and Eugene were about 52,000. The first had thrown their troops chiefly into the two villages, which they considered as points of support for their wings, though they were at too great a distance in front of their main position. A large proportion of cavalry was in the centre, since each army, the Bavarian as well as the French, had their horse on their wings, and in this way those of two wings must necessarily join each other. Both the commanders would undoubtedly have perceived and corrected this mistake, as Tallard had in B. alone, 27 battalions of infantry; but they expected so little to be attacked, that when the line of the allies began to move, Aug. 13, at 2 o'clock in the morning, they supposed them to be marching off. The greatest part of their cavalry was sent to forage. Even at 7 o'clock, when the heads of the eight columns, with which Eugene and Marlborough advanced towards the Nebelbach, were to be seen, Tallard thought the whole of them a movement intended to cover the retreat; but he soon saw his error. The dispersed troops were recalled in the greatest hurry, and the cannon were drawn up in line. The French and Bavarians made every exertion to prevent the passage of the enemy over the Nebelbach, and the capture of the two villages, the conquest of which was considered, by Marlborough and Eugene, as decisive. Their line of attack was unusually long, about 4½ miles. Marlborough, in order to secure his right wing, attacked B., but without success: he then changed his plan, and threw himself, with his principal forces, into the wide interval between the right wing and the centre of the enemy, leaving only as many troops before B. as were necessary to check the body which occupied this position. At 5 o'clock in the afternoon, he succeeded, after great efforts, in passing the Nebelbach, by which his victory was decided.
The French, in the centre, were obliged to retreat; their example was followed by the Bavarians on the left wing, who, for a long time, had resisted the impetuous attacks of prince Eugene. Marlborough, instead of pursuing the retreating enemy, placed himself between the line of retreat and the position of B, guarded by 18,000 men, who were thus cut off from assistance, and forced to surrender. The cavalry was routed by the fire of the English cannon and musketry; and a large part of the defeated army remained dead on the field of battle (which was covered with more than 11,000 corpses), or were made prisoners. Tallard himself was among the prisoners; his son was killed. The consequences of the battle were decisive. Bavaria, as Marlborough had anticipated, fell into the power of Austria. Fortune deserted the battle of Leipsic, and, though he was able to continue the war for almost 10 years longer, it was owing to the dissensions among the allies themselves, who contended about the best use of the victory till the opportunity to use it was lost. (See Marlborough.)

Blessing, or Benediction. The expression of wishing one well soon gave rise, in early ages, to a solemn act, accompanied, like other solemnities of those periods, by symbolic signs; this was the blessing or benediction. In the patriarchal times, when the authority of the head of a family included that of the priest and the civil ruler, the blessing of course pertained chiefly to him, on account of his venerable character, and, when the priest began to form a separate class, became, in certain cases, a prerogative of theirs. As the authority of the father, in the infancy of every nation, is extremely great, the idea soon sprung up, that his prayers, invoking the favor of the Deity, were more effectual than those of others, and that whatever he blessed would be likely to receive the flavor of God. The same importance was soon attributed to blessings conferred by a priest. The heathens, the Jews, and many Christian sects, have cherished this idea. By the Jewish institutions, certain benedictions were reserved to the priest; the same is the case in the Catholic church, in which different benedictions are appropriated to different degrees of the clergy. We shall mention only a few of them. The Catholic bishops alone can confer those benedictions which are connected with unction, and are called consecrations, as, for instance, the consecration of kings and queens, of the cup and paten, the church and altar. To them, also, is conferred the benediction of abbots and abbes, of knights, and the holy oil. For the benediction of the holy vestments, &c., they may employ a substitute. Every Catholic clergyman may confer the benediction fianciale (that of betrothment); also, the marriage benediction; may bless the fruits of the earth, and the holy water.

The benediction of a bishop is eagerly sought for by a faithful Catholic, as contributing peculiarly to his spiritual welfare; and the Catholic clergy, in general, use the benediction as a salutation, or reward for a service, &c. When a pape rides or walks out, the Catholics kneel to receive his blessing, which he gives by a motion of his hand. In his antechamber are often seen things of different kinds, rosaries, &c., in large quantities, which he blesses in passing by. The Catholic church blesses things animate and inanimate, and this is believed by many to preserve them from sickness, injury, &c. (See Agnes, St.) Among several Protestant sects, the benediction, at the close of the sermon, is in the form given by Moses. This is the case with the Lutheraus. Catholics, in many cases, use the consecrated water in giving the benediction. Bright; a general name for various distempers incident to corn and fruit-trees. The term has been used in a very vague and indefinite manner. The origin of the disease has been variously accounted for. There appear to be at least three distinct species of it. The first originates in cold and frosty winds, in spring, which nip and destroy the tender shoots of the plant, by stopping the current of the juices. The leaves wither and fall; the juices burst the vessels, and become the food of numerous insects, which are often mistaken for the cause of the disease, while they are really an effect of it. The second species originates in a sultry and pestilential vapor, and happens in summer, when the grain has attained its full growth. The third originates in fungi, which attack the leaves or stem of herbaceous and woody plants; but more generally grasses, and particularly the most useful grains. It generally assumes the appearance of a rusty-looking powder, which soils the finger when touched. There are several sorts of these fungi, known to farmers under the names of red rust, red gum, &c. The only means of preventing the effect of bright is proper
culture. Palliatives are to be found in topical applications.

Blind, the; such as are deprived of their sight. The loss of the noblest sense, by means of which man receives an idea of the world that surrounds him, clothed in light and color, is an event as melancholy as it is frequent. Blindness is different, 1. in its degrees, some persons being partially blind, retaining a slight perception of light, with the power of distinguishing very brilliant colors, and the general outlines of bodies; others being entirely deprived of the faculty of seeing; 2. in its causes: some men are blind from their birth; others have become blind by local diseases of the eyes, such as are deprived of their sight, imagined that all the objects which he saw were in contact with his eyes: he could not distinguish objects, although of very different forms. Those with which he was already familiar by the touch, he examined with great attention, in order to recognise them another time; but, having too many things to notice at once, he soon forgot all that he had observed. He wondered that those persons whom he loved most were not handomer than others. Before he received his sight, he had expressed a great desire to obtain this sense. The other senses of persons, who have been blind for a long time, become more exquisite, perhaps, because they are not subject to the distraction produced by the sight of so many objects. The blind, therefore, are often distinguished for a remarkable mental activity, and a wonderful development of the intellectual powers. Their touch and hearing, particularly, become very acute. Thus it is related of a blind man, who lived at Puisaux, in France, and was a chemist and musician, that he could accurately estimate the proportions of objects, could judge of the distance of fire by the degree of heat, determine the quantity of fluid in vessels by the sound it produced while running from one vessel into another, and the proximity of objects by the effect of the air upon his face. He determined very accurately the weights of bodies and the capacities of vessels. The celebrated Saunderson, professor of mathematics at Cambridge, lost his sight in his early youth. He invented several processes to facilitate his studies in arithmetic and geometry. His sense of touch was so acute, that he distinguished spurious coins merely by letting them pass through his fingers, though they were so well executed, that even skilful judges were deceived by them.

Institutions for the. In the case of persons destitute of sight, it is necessary to have recourse to the other senses to supply the want of the eye. If, for instance, we wish to teach them the arts of reading and writing, letters must be prepared, which will be palpable to the touch, and the hand guided until they are able to copy them. If we wish to communicate to them a knowledge of the surface of the earth, globes and maps must be prepared with the divisions, &c., in relief. Knowledge obtained in this way must, of course, be acquired much
more slowly than that received by the sight. The senses of touch and of sight differ in this respect, that the former ascends by degrees from the perception of parts to the perception of the whole, whilst the latter views the whole at a single glance. It is, therefore, evident, that the blind cannot be instructed in the common schools destined for those who see: in the first place, because the means of instruction by the touch are wanting; and secondly, because the progress of the other children would be retarded by the slow apprehension of the blind pupils. For these reasons, and as the blind form no small part of the population of every country, particular institutions have, in many places, been established for their instruction. In Prussia, they amount to more than 13,000 souls. Zeune, in his Belisar (1821, p. 12 et seq.), has laid down, as a general law, deduced from observation, that the proportion of blind persons decreases from the equator towards the poles. In Egypt, he says, it is as 1 to 100, while in Norway the proportion is 1 to 1000. The instruction given in the schools for the blind aims, first, at a general cultivation of their intellectual faculties. They are afterwards taught some art which may enable them to provide for their own subsistence. These arts are of two kinds—mechanical employments and music. The instruction of the blind, therefore, embraces three branches—1. mechanical labors; 2. the fine arts; 3. science; because it is impossible to determine, without trial, the peculiar genius of the pupils, whether, for instance, they should be instructed as mechanics, musicians, or mathematicians. The German institutions for the blind, as well as those in Paris, have this comprehensive character, whilst the English aim, more exclusively, to impart instruction in mechanical trades. The first idea of such an institution for blind persons was conceived by Valentin Haüy, brother of the celebrated mineralogist; it was suggested to him by his acquaintance with a blind German lady, the baroness von Paradis, of Vienna, who visited Paris in 1780, and performed on the organ with general applause. Haüy repeatedly visited this ingenious lady, and was much surprised to find in her apartments several contrivances for the instruction of the blind; for instance, embroidered maps and a pocket printing-apparatus, by means of which she corresponded with von Kempelen, in Vienna (the inventor of the chess-player and speaking automaton), and with a learned blind gentleman, named Weissenburg, at Mannheim. Haüy compared the high cultivation of these two Germans with the degraded state of the blind in France, where, at the annual fair of St. Ovide, an innkeeper had collected 10 poor blind persons, attired in a ridiculous manner, and decorated with asses' ears, peacocks' tails, and spectacles without glasses, to perform a burlesque concert. Nor did the great institution for the blind, or the hospital of the 300 (commonly called les quinze-vingt, founded, in 1330, by St. Louis, after his crusade to Egypt, during which so many soldiers became blind by the ophthalmia, prevailing in that country), present to the philanthropic Haüy a pleasing picture of intellectual cultivation; rather a scene of dulness and moral corruption. He, therefore, resolved to do for the blind in France what the abbe de l'Epee had done for the deaf and dumb. In 1784, he opened an institution, in which they were instructed, not only in appropriate mechanical employments, as spinning, knitting, making ropes or fringes, and working in paste-board, but also in music, in reading, writing, ciphering, geography and the sciences. For this purpose, he invented particular means of instruction, resembling those with which he had become acquainted by his intercourse with the two blind Germans Paradis and Weissenburg. For instruction in reading, he procured raised letters of metal, from which, also, impressions may be taken on paper: for writing, he used particular writing-cases, in which a frame, with wires to separate the lines, could be fastened upon the paper: for ciphering, there were movable figures of metal and ciphering-boards, in which the figures could be fixed: for teaching geography, maps were prepared, upon which mountains, rivers, cities, and the borders of countries, were embroidered in various ways, &c. In the beginning, the philanthropic society paid the expenses of 12 blind persons; afterwards, in 1791, the institution was taken under the protection of the state, and united to that for the deaf and dumb; but, as this was found inconvenient, it was, in 1795, separated from the latter, and, in 1801, united to the hospital of the quinze-vingt. The mingling of young blind persons here with old soldiers being found very prejudicial to the former, Haüy, full of indignation, went to Petersburg, in 1806, in order to establish a similar institution there. After the restoration, in 1815, the establishment was put upon its original footing, and the
physician, doctor Guilié appointed its director. — Next to France, the first institutions for the blind were established in Great Britain, where, however, they are supported only by the contributions of private individuals. In 1790, an institution of this sort was established at Liverpool, in which both males and females are instructed in manual labors, in singing hymns, and playing on the organ. In 1791, a second one was established in Edinburgh, in which the making of baskets and ropes is the principal occupation. Similar institutions have since arisen in other places; one at London, in 1800; also at Dublin, Bristol and Norwich. — In Germany, the first public institution for the blind was established by the king of Prussia at Berlin, in 1806, when Hanü passed through this city. Zeune was appointed director of it. He invented many instruments more simple than those which had formerly been used, and which answered the purpose very well. Among other things, he brought to great perfection maps and globes, destined for the use of the blind; which, in many parts of Europe, are used for the instruction of others also, since they present, by means of elevations and depressions of the surface, proportional elevations and pictures, which strike the mind forcibly. In arithmetic, he directed his attention almost exclusively to mental calculations. The first institutions for the blind in Germany, after that in Berlin, were established in Vienna and Prague, both in 1808, and, in the same year, that in Amsterdam, founded by free-masons. In 1800, the institution in Dresden sprang up—a branch of that in Berlin. In 1810, the institution in Zurich was founded by the auxiliary society. In 1811, a similar establishment was instituted in Copenhagen, after the plan of professor Bironson, by the society of the chain, as it is called, (Verein der Kette). After the great war for liberty, from 1813 to 15, when the Egyptian ophtalmia raged so dreadfully among the European armies, several institutions for blind soldiers were established, on Zeune's plan, in Prussia. Their object was to instruct soldiers who had become blind, and unable to exercise their former business, in useful labors. These schools were, at first, intended to continue only till all the soldiers received in them had thoroughly learned some trade: two of them, however, those at Breslau and Königsberg, have been put upon a permanent footing. The institution for the blind in Petersburg, which was established by Hanü, but was never in a very prosperous state, seems to have declined greatly, after its founder's return to France, in 1816. The name of its present director is Martin Pilazki. Whether the institution projected at Barcelona, in 1820, has been established, or whether it survived the political storms of that year, or the yellow fever of the succeeding, we do not know. Institutions for the blind are confined almost entirely to Europe, and they appear to be peculiar to Germany, Switzerland, Holland, Denmark, France, England and Russia. Further Charlevoix, indeed, says, that, in Japan, the records of the empire are committed to the memory of the blind. Golovnin estimates their number in the gigantic city of Jeddo, alone, at 36,000; but neither of them mentions that there is any institution established for them. The director of the institution in Vienna, F. W. Klein, has published a good Lehrbuch zum Unterrichte der Blinden, &c., um sie zu bürgerlicher Brauchbarkeit zu bilden (Elementary Work for the Instruction of the Blind, &c., to render them useful Citizens). — The first, and, as yet, the only institution of the kind in America, was commenced in Boston, in the year 1829. In the beginning of that year, an act of incorporation was granted, by the legislature of Massachusetts, to several gentlemen, authorizing them to establish the New England Asylum for the Blind, for the purpose of educating blind persons. This institution will go into operation as soon as the necessary funds shall be obtained.

Blinds, in operations against fortresses; the name of all preparations which tend to intercept the view of the enemy. There are several species:—1. A fascine placed across the embrasures, to prevent the enemy from observing what passes near the cannon.—2. Blinds before port-holes are shutters made of strong planks, which are placed before the port-holes, as soon as the guns are discharged, to obstruct the enemy's view.—3. Single and double blinds. The former consist of three strong, perpendicular posts, 5 feet in height, between which are planks covered with iron plates on the outside, and thus made shot-proof. This screen is furnished with rollers, to enable the laborers in the trenches to push it before them. The latter consist of large wooden chests, on four block-wheels, which are filled with earth, or bags of sand, and serve likewise in the trenches, &c., to cover the soldiers from the fire of the enemy.—4. Another kind
of blinds used to protect the workmen in the trenches, are the chandeliers. Two square beams of timber are placed parallel, and at a distance of six feet, on the ground, and fastened by two cross beams. Upon the ends, perpendicular posts are erected, and the interval is filled up with fascines, at least to a height of five feet.—

5. Blind is also the name given to coverings placed over the most exposed parts in the saps or the fortress. These are made of beams, over which hurdles or fascines are spread, that finally receive a sufficiently thick layer of earth as a cover.

Blister: a topical application, which, when applied to the skin, raises the cuticle in the form of a vesicle, filled with a serous fluid. The powder of the cantharids, or Spanish fly, operates with most certainty and expedition, and is now invariably used for this purpose. Morbid action may often be removed from the system by inducing an action of a different kind in the same or a neighboring part; hence the utility of blisters in local inflammation and spasmodic action. Exciting one pain often relieves another; hence the use of blisters in tooth-ache, and some other painful affections. Lastly, blisters communicate a stimulus to the whole system, and raise the vigor of the circulation; hence, in part, their utility in fevers of the typhoid kind, though, in such cases, they are used with still more advantage to obviate or remove local inflammation.

Bloch, Marcus Eliezer; a naturalist of Jewish descent, born at Anspach, in 1723, of poor parents. In the 17th year of his age, he understood neither German nor Latin, nor had he, with the exception of some rabbinical writings, read any thing. Nevertheless, he became tutor in the house of a Jewish surgeon in Hamburg. Here he learned German and Latin, and, besides, acquired some knowledge of anatomy. His principal work is the *Naturgeschichte der Fische* (Natural History of Fishes), fol., 1783–1799, which is adorned with many colored plates. He enjoyed a well-deserved reputation, and died in 1799.

Blockade is the interception by one belligerent of communication with a place occupied by another. National sovereignty confers the right of declaring war, and the right which nations at war have of destroying or capturing each other’s subjects or goods, imposes on neutral nations the obligation not to interfere with the exercise of this right within the rules and limits prescribed by the law of nations. In order to render the communication with a place unlawful to a neutral, a blockading or besieging force must be actually present, investing it, and sufficiently powerful to render a communication with it dangerous to a neutral, and expose him to seizure by the blockading or besieging force. A declaration of siege or blockade is an act of sovereignty, but does not require, in all cases, a direct declaration by the sovereign authority of the besieging belligerent; for its officers may be invested, either expressly, or by implication, with authority to institute such siege or blockade. It must, however, in order to be lawful and obligatory on neutrals, be declared, or sanctioned, either expressly, or by implication, by the sovereign power. It must also be declared or made public, so that neutrals may have notice of it. If a blockade is instituted by a sufficient authority, and maintained by a sufficient force, a neutral is so far affected by it, that, if he attempts to trade with the place invested, either by carrying goods to it or bringing them away, the property so attempted to be carried to, or from the place, is liable to be seized by the investing party, and, in case of being seized, is forfeited.

Blockhouse, in fortification; a house made of beams, joined together crosswise, and often doubled, with a covering and loopholes, large enough for 25–100 men. In addition to this, it is commonly covered with earth, to render it entirely bomb and fire-proof. It is usually sunk several feet into the ground. Some forts of this kind contain two stories; and they are often fitted up to receive cannon. Blockhouses are generally built in the form of a square or a cross. Their use is to afford a feeble garrison of an important place, which is very much exposed, an opportunity of holding out against the cannonade and assault of the enemy till they are relieved. They also serve for bomb-proof guard-houses, and places of last resort, in the interior of intrenchments, and in the covered passages of fortresses, where the cannon are stationed.

Blocks are pieces of wood in which sheaves or pulleys are placed, for the purpose of forming tackle, purchases, &c., in various operations in naval tactics and architectural constructions. The mechanical power is described in the article *Pulley* (q. v.). Blocks are single, double, triple, and quire, according as the number of sheaves is one, two, three or four. The sheaves are grooved to receive the rope, and have in their centre a
blocks—BLOOMFIELD.

sois, once the abode of the kings of France.

That the block are called checks.

A running block is attached to the object to be moved; a standing block is fixed to some permanent support. Blocks also receive different denominations from their shape, purpose and mode of application, which cannot well be explained without the use of figures. No less than 200 different sorts and sizes are made at Portsmouth, England, for the royal navy, besides which there are various sorts used only in the merchant-ships. The machinery for supplying the royal navy with blocks is the invention of Mr. Brunel, an American artist. It enables 4 men, in a given time, to complete the shells of as many blocks as 50 men could do by the old method.

BLOETF, sometimes also Blom, Abraham, a Dutch painter, born at Gorcum, in 1603, died at Utrecht, in 1677. His paintings are reproached with various faults, yet he is distinguished by the brilliancy of his coloring and the richness of his invention. In the representation of the chiaro oscuro, he may be called great. He painted all sorts of objects; but his landscapes are the most esteemed. He had four sons, of whom the youngest, Cornelius, is the most distinguished. He was born at Utrecht, in 1638, and died at Rome, in 1680. He was an engraver, and his engravings are distinguished for purity, elegance and softness. He was the founder of a new school, from which proceeded Baudot, Poilly, Chasteau, Speler, Rouillet, &c.

Blais (anciently, Blesse, and Castrum Blesense); a city of France, and capital of Blesse, and of the Diocese of Blesse; 55 miles E. of Paris, on the River Blesse. A city of great antiquity, B. is of great importance.

Before the revolution, it was a bishop's see, the seat of a lieutenant-general, a grand bailiwick, and capital of the Blaisse, once the abode of the kings of France. B. has been several times conspicuous in French history. There are several fountains in different parts of the town, supplied by an aqueduct, supposed to have been erected by the Romans.

BLOOMFIELD, Charles James; doctor of philology, born at Bury St. Edmund's, in Suffolk, in 1786. In 1804, he entered Trinity college, Cambridge, where he distinguished himself, not only in the usual examinations, but also in the public disputations. The university, therefore, granted him, in 1806, one of the scholarships, founded by lord Craven—a high academical honor. In 1808, when he received the bachelor's degree, he was declared third wrangler, and obtained the first medal for a prize poem. Not long after, he published a new edition of the Prometheus of Eschylus, and, in 1809, was chosen fellow of his college. His literary reputation soon spread; and, in 1810, lord Bristol conferred on him the living of Harrington, in Lincolnshire. Lord Spencer, one of the first patrons of literature in England, also voluntarily presented him with another at Dunton. There he remained seven years, during which time he published editions of several of the plays of Eschylus, among them the Prometheus (which he had printed once before), the Seven before Thebes, the Perses and Alcestis. Also a new edition of Callimachus, and, afterwards, in connexion with T. Remue, the Minos Cantabrigienses. In 1812, he edited, with professor Monk, the Posthumous Tracts of Porson. He likewise published, in 1814, the Adversaria Porsoni. These works gained him such a reputation, that lord Bristol conferred on him the livings of Great and Little Chesterford, in Essex, on which account, with the permission of his patron, he exchanged his cure at Dunton for that of Tuddenham, in Suffolk. To the fame which his philological and theological studies procured him, he was also indebted, in 1819, for the office of chaplain to the bishop of London—a choice which always falls on a man of acknowledged ability, it being his duty to examine the candidates, previously to their ordination in this diocese. Places of this sort generally lead to high promotions in the church, and B. soon after received the living of St. Botolph's. Since that time, he has lived in London, visits in the first circles, and supports an establishment suitable to his income, which is said to amount to £5000. Among his latest literary labors, the continuation of his edition of Thebais is the most important.

BLOOMFIELD, Edward Valentine, brother of the former, born in 1788, studied in Cairns college, at Cambridge, and excited the highest expectations. Among several prizes which he received, we may mention the medal assigned him, in 1809, for his beautiful ode, In Desiderium Porsoni. In 1812, a fellowship in Emmanuel college was conferred on him. In 1813, he visited Germany, where he obtained a good knowledge of the German language, and became acquainted with Wolf in Berlin, and Schneider in Breslau. After his return, he wrote in the Museum criticism, or Cambridge Classical Researches (Pt. 2),
remarks on German literature, which were received with approbation. The university of Cambridge appointed him one of the preachers at St. Mary's church. He began a translation of Schneider's Griechisch-deutsches Lexicon, but did not live to finish it. Mühle's Griechische Grammatik, however, he translated completely. His translation was published by his brother, and every where well received. He was in Switzerland, in 1816, with his pupil, a young nobleman, and, in his haste to return to Cambridge, on hearing that he was appointed proctor for the following year, the fatigue of rapid travelling occasioned a sickness, of which he died in October, 1816.

Blondel, a confidential servant and instructor in music of Richard Cœur de Lion of England, about the year 1190. While his master was the prisoner of the duke of Austria, B. went through Palestine, and all parts of Germany, in search of him. He understood, it is said, that a prisoner of rank was confined in Lowenstein castle, and hastened thither. Placing himself under a grated tower, he began to sing one of the French lays which he had formerly composed for Richard. Scarcely had he finished the first stanza, when a voice from the dungeon of the tower responded. Thus he discovered his king, delivered him, and gained the name of the faithful Blondel. Gray's fine opera, Richard Cœur de Lion, is founded on this anecdote.

Blood, Thomas (commonly called colonel Blood), was a disbanded officer of Oliver Cromwell. He took part in the revolution in various ways, and made an attempt to steal the crown and regalia from the Tower, in which he almost succeeded. Being, however, taken, he confessed his purpose, without showing the least fear of death. Charles II, from idle curiosity, went to see him, and B. persuaded the monarch to pardon him. Charles even bestowed an estate with £500 a year upon him, whilst poor Edwards, the keeper of the jewel-office, who valiantly defended the crown, and was wounded, lived forgotten.

Blood is the red fluid contained in the blood-vessels (q.v.) of animal bodies. It is found in the mammalia, in birds, in reptiles and in fishes. In the last two classes of animals, the temperature of the blood is much lower than in the former, for which reason they are distinguished by the name cold-blooded, while the others are termed warm-blooded animals. Insects and worms, instead of red blood, have a juice of a whitish color, which is called white blood. In the blood, two different substances are contained, which are separated by coagulation—the serum, a fluid like the white of an egg, and a thick matter, to which the red color properly belongs, which is much heavier than the former, and is called the coagulata. The last may be divided again into two different parts—into the corpus, or that part of the blood which is intrinsically red, and coagulable, and lymph or fibrine, to which the coagulation of the blood must be ascribed. The fibrine, in young animals, is much whiter than in older and stronger ones. The blood of the latter contains much more azote than that of the former. If the nourishment of animals is changed, we also find an alteration in the constituent parts of their blood. It is also changed by diseases. In animals that are hunted to death, or killed by lightning, the blood does not coagulate. The blood of birds is more highly colored, and warmer, than that of viviparous animals, and coagulates more easily in the air. That of reptiles and fishes coagulates with difficulty. Aided by magnifying glasses of a strong power, one may observe, in examining the blood of the living animal, or in blood which is newly drawn, that it consists, especially the corpus, of little globular bubbles, the globules of the blood, as they are called, the diameter of which amounts to about the three hundredth part of a line. In blood that has been drawn some time, although this time may be very short, they are not to be discovered. They are the effect of the life that pervades the blood. The more robust and healthy an animal is, the more globules are perceived. They show, as it were, the transition from the formless liquid to the original form of the first organized matter. The blood is of the greatest importance to the life of an animal, and may be considered as the source of life. As long as the body is living, the blood is in perpetual motion. When it is taken out of the body, a remarkable change soon follows: it begins to coagulate, and then undergoes, first an acetonous and, after a few days, a putrid fermentation. All the blood takes its origin from the chyle, and deposita, by degrees, the nourishing particles requisite to the preservation and growth of the body, by a multitude of vessels adapted thereto. This is done while it is driven from the heart into the remotest parts of the body, and from thence back. The circulation of the blood is, as it were, the principle and first
of fainting, suffocation, &c., life ceases. The heart, the centre of the circulation of the blood, has a two-fold motion, of contraction and dilatation, which constantly alternate. With the heart two kinds of vessels are connected—the arteries and the veins. (See Blood-Vessels.) The circulation of the blood proceeds with an astonishing rapidity; did it flow at an equal rate in a straight line, it would run, in the space of one minute, through 143 feet. This swiftness, however, exists only in the larger vessels near the heart; the further the blood recedes from the heart, the slower its motion becomes. In a grown-up person, in good health, we may reckon on the mass of blood at 24–30 pounds.

Veins are the tubes or vessels in which the blood circulates. They are divided into two classes, arteries and veins, which have two points of union or connection—the first in the heart, from which they both originate, and the other in the minute vessels or network, in which they terminate. The arteries arise from the heart, and convey the blood to all parts of the body; the veins return it to the heart. The arteries distribute throughout the body a pure, red blood, for the purposes of nourishment; while the veins return to the heart a dark-colored blood, more or less loaded with impurities, and deprived of some of its valuable properties. But this is not returned again to the body in the same state. For the heart is wisely divided into two portions or sides, a right and left, one of which receives the impure blood from the veins, and sends it to the lungs to be defecated and freshly supplied with oxygen or vital air, while the other receives the pure red blood from the lungs, and circulates it anew through the arteries. The arteries arise from the left ventricle of the heart by one large trunk, nearly an inch in diameter, which is gradually subdivided into smaller ones, as it proceeds towards the limbs, till they terminate, at last, in vessels so small as to be almost invisible, and in a fine network of cells, extending through the whole body, in which the blood is poured out, and nutrition or the increase of the body takes place, and from which the residue is taken up by the small veins, to be returned to the heart. The arteries and veins are widely different in their structure, as well as their uses. The former are composed of very strong, firm, elastic coats or membranes, which are four in number. The external covering and the internal lining of the arteries, although belonging to different classes of membranes, are both very thin and soft. The second coat is very thick, tough and elastic, being that which chiefly gives the peculiar appearance to the arteries. The third is formed of fibres, apparently muscular, arranged in circular rings around the tube of the vessels. It is well known that the pulse of the heart is felt in the arteries alone, although, in the bleeding of a vein, we sometimes see the blood start as if in unison with the beating of the heart. The pulse is produced by the wave or stream of blood, which is driven by the heart through the arteries, distending and slightly elevating them, after which they instantly contract from their elasticity, and thus force the blood into the smaller vessels. The pulse varies in its character with the general state of the health. (See Pulse.) When arteries are cut or wounded, the firmness of their coats prevents their closing, and hence arises the fatal nature of wounds of large vessels, which will remain open till they are tied up, or till death is produced. The veins commence in small capillary tubes in every part of the body, which will remain open till death is produced. The veins commence in small capillary tubes in every part of the body, which will remain open till death is produced. The veins commence in small capillary tubes in every part of the body, which will remain open till death is produced. The veins commence in small capillary tubes in every part of the body, which will remain open till death is produced. The veins commence in small capillary tubes in every part of the body, which will remain open till death is produced.
it returns to the heart, and the latter, the pulmonary veins, convey red blood from the lungs to the heart. (For an account of the circulation of the blood, see Heart.) It should also be mentioned, that the large vein, which brings back the blood from the lower part of the body, receives the chyle from the bowels, which supplies the waste of the blood and nourishes the body, and the serous and other watery fluids which are taken up by the absorbents in all parts of the body.

Bloodhound: a variety of the common dog, called C. sager by Linnaeus, chien courant by Buffon, remarkable for the perfection of its sense of smell. Owing to this circumstance, these hounds were formerly much employed in pursuing criminals escaped from justice, or in tracing out robbers or enemies, whose course was inevitably discovered, when once the bloodhound was placed upon their trail. In the border country of Scotland, they were formerly much employed for such uses, but at present the race has become almost forgotten. In the countries of South America, the Spaniards employed fierce dogs to aid them in conquering the Indians, but it is not certain that the dogs, trained by them to this cruel business, belonged to the present variety. All the varieties of hound, however, have much sagacity, and most of the larger and stronger breeds have great acuteness of scent, and might, without much difficulty, be trained to act as bloodhounds.

Bloomfield, Robert, an English poet, born at Honington, in 1766, the son of a tailor, learned to read at the village school, and, in 1781, was sent to learn the trade of a shoemaker with his brother in London. The visiting of several places of worship, of a debating society, of Covent garden theatre, and the reading of sundry books, called forth his faculties, and he became, almost unconsciously, a poet. Hearing him one day repeat a song which he had composed, his astonished brother prevailed on him to offer it to the London Magazine, and it was accepted. The poem was called the Milk Maid. A second, the Sailor's Return, likewise found a place in that journal. Thomson's Seasons, the Paradise Lost, and other works of this kind, now became the subjects of his constant study. In the country, where he resided for a short time, in 1786, he first conceived the idea of his poem, the Farmer's Boy, which is characterized by a spirit of rural simplicity and innocence. It was written, under the most unfavorable circumstances, by a journeyman shoemaker in a garret. It was first shown to Capel Lofft, in 1798, who was so much pleased with it, that, in conjunction with his friend Hill, he had it printed in 1800. It derives its principal value from its strict adherence to truth and nature. The writer, in fact, has drawn his own portrait in the Farmer's Boy, and described the scenes and events which he actually witnessed. Hence there is a degree of spirit and originality in the poem, which stamps it with the impress of genius, and renders it very pleasing. The versification is uncommonly smooth and correct. B. also wrote a volume entitled Wild Flowers, containing a collection of poetical tales, which was well received, and was not unworthy of his reputation. His latest production was Hazelwood Hall, a village drama, which appeared shortly before his decease, a work of not much merit. B. was patronised by the duke of Grafton, who bestowed on him a small annuity, and made him an under-keeper in the seal-office. This situation he was forced to resign on account of ill health. He then worked again at his trade, as a shoemaker, and employed himself in constructing Aeolian harps. Engaging in the book trade, he became a bankrupt, and, in the latter part of his life, was afflicted with violent head-aches, and became nearly blind. He was gradually reduced to such a state of nervous irritability, that apprehensions were entertained of his becoming insane. These fears were terminated by his death, which took place in August, 1823.

Blowing-Machines; the larger instruments or contrivances for producing a strong and continued current of air, such as is necessary in melting-houses, in large smitheries, &c. (See Bellows.)

Blowpipe is the name applied to an instrument, by means of which the flame of a candle or lamp is made to produce an intense heat, capable of being applied to a variety of useful purposes. Its most simple form is that of a tapering tube, about eight inches in length, and curved nearly at right angles, within two inches of its smaller extremity. At its larger end, it is nearly a quarter of an inch in diameter, and at the smaller, only large enough to admit a common-sized pin. It is made of brass or white iron. In using it, the flame of a lamp or candle is turned aside from its vertical to a horizontal direction, by a stream of air impelled upon
it, either from the lungs, or from a double bellows. The flame, in its new direction, assumes a conical shape, and consists of two parts, visible by their different colors; the outer being reddish-brown, and the inner blue. The heat at the apex of the inner cone is the most intense, and is equal to that produced in the best furnaces. It is employed by the jeweller and goldsmith in the operation of soldering, and by other artists who fabricate small objects in metal; by the glass-blower in making thermometers, barometers, and other glass instruments; by the enameller, and, indeed, wherever it is required to subject a small body to a strong heat. The common blowpipe has undergone a variety of improvements in the hands of the chemist, to whose researches it is indebted for its excellence and utility. These consist, principally, in providing its stem with a bowl, or enlargement, where the moisture of the breath may be condensed and detained; in fitting the smaller end so as to receive a variety of little caps, or hollow cones, with oriﬁces of different diameters, so as to be changed according as a flame is required more or less strong; and in rendering the instrument more portable, by constructing it of several pieces, capable of being taken apart and packed up in the space of a pencil-case. With a part, or with the whole of these improvements, it is used by the chemist to make an examination of any doubtful mineral substance, artificial alloy, or pharmaceutical preparation. This he is capable of conducting (with the aid of a charcoal support, and, occasionally, a little borax) in a moment's time, and with the loss of the smallest imaginable quantity of the substance. To the analytical chemist its use is indispensable for enabling him to discover the principal ingredients in a substance, previous to his subsequent operations for ascertaining their relative proportion. (For an account of the blowpipe in which oxygen and hydrogen gases are employed, see Compound Blowpipe.)

Blucher, Lebrecht von, of the family of Grossen-Rensow, in Mecklenburg, prince of Wahlstatt, field-marshall of the king of Prussia, and knight of almost all the distinguished military orders of Europe, was born at Rostock, Dec. 16, 1742. When he was 14 years of age, his father, a captain of horse in the service of Hesse-Cassel, sent him to an island of Hohenlohe. Here the sight of some Swedish hussars excited in him the desire of becoming a soldier. His parents and relations in vain attempted to dissuade him from this step; he took service in a Swedish regiment of hussars in the capacity of a cornet. His first campaign was against the Prussians, and he was taken prisoner by the same regiment of hussars, which he afterwards commanded with so much honor. The commander of this regiment, colonel von Belling, induced him to enter into the Prussian service. An exchange was agreed upon with the Swedes, and B. was made lieutenant in Belling's regiment. Discontented at the promotion of other officers over his head, he left the army, devoted himself to agriculture, and, by industry and prudence, acquired an estate. After the death of Frederic II, he became a major in his former regiment, which he commanded with distinction on the Rhine, in 1793 and 1794. Orchies, Luxemburg, Frankenstein, Oppenheim (Jan. 16, 1794), Kirweiler and Edlesheim in the Palatinate, bear witness to his achievements. After the battle of Leystadt, Sept. 18, 1794, which added greatly to his reputation, he was appointed major-general of the army of observation stationed on the Lower Rhine. In 1802, in the name of the king of Prussia, he took possession of Erfurt and Muchhausen. Oct. 14, 1806, he fought at the battle of Auerstädt. He then, with the greater part of the cavalry, followed the retreat of the prince of Hohenlohe to Pomerania. His squadron, moving on the left of the main army, became separated from it so far that a junction was possible only by means of forced marches, both in the day time and at night. The latter, it thought himself not authorized to venture upon, and the prince of Hohenlohe was forced to surrender at Preusslittau. B., cut off from Stettin by this accident, threw himself into Mecklenburg, where he joined, at Danbeck, the corps of the duke of Würmhar, commanded by prince William of Brunswick-Oels. All the troops, however, were too much fatigued to undertake any enterprise. Having the grand-duke of Berg on his left flank, the prince of Ponte-Corvo in his front, and marshal Soult on his right, B. was obliged to take post behind the Trave, in order to draw off the three great divisions of the French forces from the Oder as long as possible. With this view, he entered into the territory of the free city of Lübeck. This city was soon stormed by the overwhelming power of the French. Although B., with some troops, escaped out of the city, yet, being deprived of all means of defending him-
self, or continuing his flight, he was obliged to surrender at Rastau, on the 6th of November. This, however, he would not do, until permission had been granted him to add the following clause to the instrument, that "the capitulation was offered to him by the prince of Pontecorvo, and that he accepted it only from want of ammunition, provisions and forage."

B. was now a prisoner of war; but he was soon exchanged for the French general Victor, and, immediately after his arrival at Königsberg, placed at the head of a corps, and sent by water to Swedish Pomerania, to share in the defence of Stralsund, and to assist the efforts of the Swedes. After the peace of Tilsit, he labored in the department of war at Königsberg and Berlin. He then received the chief military command in Pomerania, but, at the instigation of Napoleon, was afterwards, with several other distinguished men, dismissed from the service. In the campaign of 1812, when the Prussians assisted the French, he took no part; but no sooner did Prussia rise against her oppressors, than B., already 70 years old, engaged in the cause with all his former activity. He was appointed commander in chief of the Prussians and the Russian corps under general Winzingerode, which, at a later period, was separated from him. His heroism in the battle of Lützen (May 2, 1813) was rewarded by the emperor Alexander with the order of St. George. The battles of Bautzen and Haynau, those on the Kutzbach (see Wahlstadt) and at Leipzig, added to his glory. On the Kutzbach, B. defeated the army of marshal Macdonald, and delivered all Silesia. His army now received the name of the Silesian. Napoleon himself endeavored in vain to check the old general of hussars, as he called him. Oct. 3, B., crossed the Elbe at Wartenburg. This bold step compelled the great Bohemian army under Schwarzenberg, and the northern army under the crown-prince of Sweden, to act with more spirit. The great battle of Leipzig approached. Oct. 16, he gained a signal advantage over marshal Marmont, at Mockern, forcing his way as far as the suburbs of Leipzig. On the 18th, in connexion with the crown-prince of Sweden, he contributed greatly to the defeat of the enemy, and, on the 19th, his troops made the first assault upon Leipzig. His prudence and peculiar manner of attacking had already, in the beginning of the campaign, procured him from the Russians the name of marshal Forward.

From that time it became his name of honor throughout the whole German territory. Jan. 1, 1814, with the Silesian army, which now consisted of two Prussian, two Russian, one Hessian and one mixed corps, he crossed the Rhine at Kaub, took possession of Nancy on the 17th, gained, Feb. 1, the battle of La Rothière, and pushed forward towards Paris. His detached corps were, however, checked by Napoleon; yet B., though with a great loss, effected his retreat towards Chalons. He then crossed the Aisne at Soissons, joined the northern army, obtained, March 9, a victory over Napoleon at Leaul, and, in connexion with Schwarzenberg, at the close of the month, pressed forward to Paris. The day of Montmartre crowned this campaign, and, March 31, B. entered the capital of France. His king, in remembrance of the victory which he had gained near Wahlstadt, made him prince of Wahlstadt, with a suitable income. In England, whither he followed the allied monarchs, in June of the same year, he was received by the people with enthusiasm. The university of Oxford conferred on him the degree of doctor of laws. He afterwards lived on his estates in Silesia till 1815, when the chief command was again committed to him, and he led his army into the Netherlands. June 15, Napoleon threw himself upon him, and B., on the 16th, was defeated at Ligny. In this engagement, his horse was killed, and he was thrown under his body. After this unfortunate, yet honorable day, the true greatness of the field-marshal and his army became apparent. In the battle of the 18th, B. arrived, His heroism at the most decisive moment, upon the ground, and, taking Napoleon in the rear and flank, gained, in union with Wellington, the great victory of Belle Alliance, or Waterloo. (q. v.)

He refused the proffered armistice, and forced Paris to surrender; opposing with energy, on this second conquest of the capital, the system of forbearance practised on the former occasion. As he was already a knight of all the military orders of Europe, the king of Prussia, to reward his new services, created a new order expressly for him. After the peace of Paris, the prince retired to his estates. Aug. 26, 1819, the anniversary of the battle on the Kutzbach, the hero received at Rostock, his native place, an honor which is seldom bestowed in Germany. The whole body of his countrymen, the inhabitants of Mecklenburg, united to erect a monument commemorating his glory.
executed by Schadow in Berlin. B. died, after a short illness, at his estate of Krieb­lewitz, in Silesia, Sept. 12, 1819, aged almost 77 years. June 18, 1826, a statue of bronze was erected to him, in Berlin, 12 feet in height, modelled by Rauch, and cast by Le Quine and Reisinger.—H. was not so eminent for military science as for ability in action. He himself often acknowledged this, when he was praising the merits of Gneisenau, to whose assistance he was greatly indebted. In battle, however, he had the eye of a falcon. His simplicity, good-nature and bravery endeared him to his soldiers, who loved him like a father. His ad­dresses and proclamations are dis­tinguished for their brevity, precision and simplicity, forming a striking contrast to the high-sounding French proclama­tions of the time. (See Bluecher’s Lebens­schreibung (Bluecher’s Life), by Varnhagen von Ense, Berlin, 1827.)

Blue, Prussian; a coloring matter, of a pure dark-blue color, a dull fracture, inodorous and insipid, insoluble in water, spirits of wine or ether; it is soluble only by the action of corrosive alkalies. The discovery of this color was accidentally made, in 1704, by Diesbach, a manu­facturer of colors, who, with the intention of precipitating the coloring matter from cochineal, with which alum and vitriol of iron were dissolved, procured some alkali from the laboratory of Dippel. This alkali, which Dippel had been heating with some animal matter, produced a beautiful blue precipitate. Dippel, discovering that the alkali had acquired this power of forming a blue precipitate of iron on account of its mixture with animal oil, soon learned to prepare it in a more simple way, since all animal substances, and even all vegetables, which contain much azote, will give the same result. It is, however, necessary, that all the materials should be perfectly pure, since the purifi­cation would be too expensive. The addition of alum gives to this blue more body and a brighter color. This blue substance is a prussiate of iron (52 parts red oxide of iron, and 48 of prussic acid). The alumine added amounts to from 20 to 80 per cent; but the greater the quantity, the poorer is the quality of the blue.

Bluebird (SYLIA SIALIS, Wils.; SYLICO­la sialis, Bonparte). This beautiful little bird is one of the earliest messengers of spring, and is occasionally seen as early as the month of February, in mild seasons. The middle of March is the ordinary time of mating, when the male bluebird is observed to be extremely devoted to the female, and shows the order of his attachment by every attention in his power, by the rapturous animation of his song, and the angry jealousy with which he repels the approaches of a rival. The nest of the former year is then repaired, and the female begins to lay her eggs, usually five, sometimes six, of a pale-blue color. Two or three broods are raised in a season, the youngest of which are taken care of by the male, while the mother is still attending to the nest. The principal food of this species is insects, especially large beetles, and other hard-winged coleo­ptereous bugs, to be found about dead or rot­ting trees, berries, persimmon, and the seeds of various plants, are also discovered in their stomachs. Large and numerous tape-worms infest their bowels, and they are also exceedingly annoyed by vermin externally. Wilson says, that, in this respect, they are more plagued than any other bird, except the woodcock. The spring and summer song of the bluebird is a soft and often-repeated warble: in the month of October, his song changes to a single plaintive note. About the middle of November, the bluebirds disappear, though, occasionally, one or two may be seen during the winter, in mild weather. The manners of this species are so gentle, and they render so much service by the destruction of insects, that they are always regarded with favor by the farmer. The male bluebird is six inches and three quarters long, with very ful and broad wings. All the upper parts are of a rich sky-blue, with purple reflections: the bill and legs are black. The female is easily known by the dullest cast of the plumage on the back, and by the red on the breast descending so low as in the male, and being much fainter. The bluebird inhabits the whole of the U. States, also Mexico, Brazil, Guiana and the Bahama islands.—Wilson states that “nothing is more common, in Pennsylvania, than to see large flocks of these birds, in the spring and fall, passing at considerable heights in the air, from the south in the former, and from the north in the latter season. I have seen, in the month of October, about an hour after sunset, 10 or 15 of them descend from a great height, and settle on the top of a tall, detached tree, appearing, from their silence and sedateness, to be strangers and fatigued. After a pause of a few minutes, they began to dress and arrange their plumage, and continued so employ-
ed for 10 or 15 minutes more; then, on a few warning notes being given, perhaps by the leader of the party, the whole re-mounted to a vast height, steering in a direct line for the south-west.

Blue Ridge; one of the ranges of the Alleghany or Appalachian mountains, which extends from the river Hudson to Georgia, and intersects the state of Virginia into N. E. to S. W., dividing it into two parts, nearly equal. The great limestone valley extends along the N. W. side of this range. The most elevated summits of the Blue Ridge are the peak of Otter, in Bedford county, Virginia.

Blue-Stocking; a pedantic female; one who sacrifices the characteristic excellences of her sex to learning. The origin of this name, in England, is thus given by Boswell, in his Life of Johnson: "About this time (1780), it was much the fashion for several ladies to have evening assemblies, where the fair sex might participate in conversation with literary and ingenious men, animated with a desire to please. These societies were denominated blue-stocking clubs, the origin of which name was as follows:—One of the most eminent members of these societies was Mr. Stillingfleet, who always wore blue stockings. Such was the excellence of his conversation, that his absence was felt as a great loss, and it used to be said, "We can do nothing without the blue stockings; and thus, by degrees, the title was established."—In Germany, blue-stocking (blau-strumpfe) signifies a traitor, a slanderer, an infamous lover, &c., and the term, in that country, is said to be derived from the blue stockings formerly worn by procurers.

Blue-Maize, Aloysius, a poet, and famous parodist, born at Steyr, in Austria, above the Enns, in 1755, studied in his native city, entered (1772) into the order of the Jesuits in Vienna, lived there privately, after the abolition of his order, till he was appointed censor, which place he resigned in 1793, and took the establishment of the book-seller Graefler, in which he had been concerned since 1783. He died in 1798. By his wit and talent, he distinguished himself as a burlesque poet. It is a poetical farce, rich in burlesque wit and droll contrasts. These qualities are also to be found in several others of his numerous poems. Some of them are full of animation, and are written in a pure, manly style. At times, his wit is vulgar, his language incorrect and prosaic. A collection of his works appeared at Leipzig, 1801—3, 8 vols.

Blumenbach, John Frederic, doctor. This profound naturalist is, at present, one of the first ornaments of the university at Gottingen, where he has lectured for 50 years, with unabated industry, on natural history, physiology, osteology, comparative anatomy, pathology, and the history of medical literature, to very numerous audiences. He has written on almost all these sciences with acuteness, method and precision. His works bear the stamp of his peculiar genius, and some of them have been several times published. His masterly, but, at present, somewhat antiquated Handbuch der Naturgeschichte (Compendium of Natural History) was published, in 1825, for the 11th time. Of his Handbuch der Physiologie (Compendium of Physiology) there is an English translation, the second edition of which (1818) is also remarkable for being the first book ever printed by mechanical power.—B. was born at Gottingen, May 11, 1752; studied in Jena and Gottingen, where he received his degree of doctor of medicine, Sept. 19, 1775. In 1776, he was appointed director of the cabinet of natural curiosities belonging to the university, and professor extraordinary of medicine, and, in 1778, ordinary professor of the same. In 1783, he undertook a literary journey to Switzerland, and, at a later period, one to England, where the attentions of the celebrated Sir Joseph Banks were particularly serviceable to him. He possesses an excellent collection of books and engravings illustrating natural history, and numerous specimens of natural curiosities. The collection of skulls is not, perhaps, equalled in the world. On this collection is founded his Collectio Craniorum divers. gener. illustr., with engravings, of which six numbers (Gottingen, 1790—80) have appeared. Schindler called a newly-discovered species of plants after his name, Blumenbachia insignis. The 50th anniversary of his professorship in the university of Gottingen was celebrated Feb. 26, 1836.

Boa; the name of a genus of reptiles belonging to Cuvier's tribe of serpents proper; having the tympanic bone or pedicle of the lower jaw movable, which is itself almost always suspended to another bone analogous to the mastoid, attached to the skull by muscles and ligaments, which contribute to its mobility. The branches of this jaw are not united, and those of the upper jaw are attached to the intermaxillary bone only by ligaments, so that these animals can dilate...
the mouth sufficiently to swallow bodies larger than themselves. Their palatal arches partake of this mobility. In the species of this tribe not possessed of venom, the branches of the upper and lower jaw, throughout their entire length, as well as the palate bones, are armed with pointed, recurved, solid and permanent teeth, forming four nearly equal rows above, and two below.—The genus boa comprises all those serpents which, in addition to the preceding characters, have the scuta on the under part of the tail single; a hook on each side of the vent; the tail prehensile; the body compressed and largest in the middle, and with small scales, at least on the posterior part of the head.—The species properly belonging to this genus are among the largest of the serpent tribe, some of them, when full grown, being 30 and even 40 feet long. Though destitute of fangs and venom, nature has endowed them with a degree of muscular power which renders them terrible. Happily, they are not common in situations much frequented by mankind, but are chiefly found in the vast marshy regions of Guiana, and other hot parts of the American continent. Although sufficiently active when fasting or hungry, they become very sluggish and inert after having gorged their prey, at which time they are most easily destroyed. In order to obtain their food, the boa of largest size attach themselves to the trunk or branches of a tree, in a situation likely to be visited by quadrupeds for the sake of pasture or water. There the serpent swings about in the air, as if a branch or pendent of the tree, until some luckless animal approaches; then, suddenly relinquishing its position, swiftly as lightning he seizes the victim, and coils his body spirally round its throat and chest, until, after a few ineffectual cries and struggles, the animal is suffocated, and expires. In producing this effect, the serpent does not merely wringe itself around its prey, but places fold over fold, as if desirous of adding as much weight as possible to the muscular effort: these folds are then gradually tightened with enormous force, and speedily induce death. The animals thus destroyed by the larger boas are deer, dogs, and even bullocks. The prey is then prepared for being swallowed, which the creature accomplishes by lifting the limbs into the most convenient position, and then covering the surface with a glutinous saliva. The reptile commences the act of deglutition by taking the muzzles of the prey into its mouth, which is capable of vast extension; and, by a succession of wonderful muscular contractions, the rest of the body is gradually drawn in, with a steady and regular motion. As the mass advances in the gullet, the parts through which it has passed resume their former dimensions, though its immediate situation is always betrayed by external protuberance.—As already mentioned, the species of boa are peculiar to the hot parts of South America, though nothing is more common than the error of confounding the great serpents of India, Africa, &c., with the proper boa. According to the researches of Cuvier, all the boas, at present well determined, are natives of the new continent. The great serpents of the old continent belong to the genus python (Daud.,) and will be treated of under that title. It is nevertheless true, that Pliny has spoken of the huge serpents of India, and afterwards of large serpents of Italy, which were called boas, thus named from the circumstance of their being at first fed with cow's milk.—Among the most celebrated species is the boa constrictor (L.), distinguished by a large chain, formed alternately of large, blackish, irregular hexagonal spots, with pale, oval spots, reached at their two extremities, along the back. This is the largest species, and is usually confounded, by casual observers, with the python Tigris of the old world. The B. constrictor (L.), and the B. scutulata, or musina (L.), attain to nearly an equal size with the constrictor (from 20 to 30 feet long), and are all natives of the torrid and marshy regions of America. The other species are of smaller size, and some do not much exceed that of the largest common snakes. We cannot reflect upon the natural history of these great reptiles, without being struck with their peculiar adaptation to the situations in which they are commonly most abundant. In regions bordering on great rivers, which, like the Orinoco, &c., annually inundate vast tracts of country, these serpents live securely among the trees with which the soil is covered, and are capable of enduring very protracted hunger without much apparent suffering or diminution of vigor. Noxious as such districts are to human life, they teem with a gigantic and luxuriant vegetation, and are the favorite haunts of numerous animals, preyed upon, and, to a certain degree, restricted in their increase, by the boa. As their prey come within their reach, they require no deadly apparatus of poison to produce their destruction, since nature has endowed them with
musc1lar strength surpassing that of almost every other creature, in proportion to their size. Once fairly involved in the crushing folds of the <i>contrictor</i>, the strength of the strongest man would not prove of the slightest avail; indeed, from the ease with which larger and more powerful creatures are put to death by these serpents, it is evident that any number of unarmed men would act very unwisely to provoke a contest with enemies endowed with powers of such dreadful energy.

<i>Boadicea</i>; queen of the Iceni, in Britain, during the reign of Nero. Having been treated in the most ignominious manner by the Romans, she headed a general insurrection of the Britons, attacked the Roman settlements, reduced London to ashes, and put to the sword all strangers, to the number of 70,000. Subsequently, the Roman general, defeated her in a decisive battle, and B., rather than fall into the hands of her enemies, put an end to her own life by poison.

<i>Boat</i>; properly, a vessel propelled by oars. In a more extensive sense, the word is applied to other small vessels, which differ in construction and name, according to the services in which they are employed. Thus they are light or strong, sharp or flat-bottomed, open or decked, &c., according as they are intended for swiftness or burden, deep or shallow water, &c.—The <i>barge</i> is a long, light, narrow boat, employed in harbors, but unfit for sea.—The <i>long-boat</i> is the largest boat belonging to a ship, generally furnished with sails, and is employed for cruising short distances, bringing heavy articles on board, &c.—The <i>launch</i> is more flat-bottomed than the long-boat, which it has generally superseded.—The <i>pinnace</i> resembles a barge, but is smaller.—The <i>cutters</i> of a ship are broader and deeper than the barge or pinnace, and are employed in carrying light articles, passengers, &c. on board.—<i>Yachts</i> are used for similar purposes, and are smaller than cutters.—A <i>gig</i> is a long, narrow boat, used for expedition, and rowed with six or eight oars.—The <i>jolly-boat</i> is smaller than a yawl, and is used for going on shore.—A merchant-ship seldom has more than two boats, a long-boat and a yawl.—A <i>punter</i> is a light, sharp boat, used in a river or harbor, for transporting passengers.—A <i>punt</i> is a flat-bottomed boat, chiefly used for one person to go on shore from small vessels.—A <i>skiff</i> is a small boat, like a yawl, used for passing rivers.—A <i>Mosse</i> is a flat-bottomed boat, used in the West Indies for carrying hogsheads from the shore to ships in the roads.—A <i>friacca</i> is a large passage-boat, used in the Mediterranean, with from 10 to 16 banks of oars.—<i>Scow</i> is an American word, signifying a large, flat-bottomed, heavy boat, about 30 feet long, and 12 wide. In some parts of the U. States, it is called a gondola. (See Canoe, <i>Galley</i>, &c.)

BOCCACCIO, Giovanni, whose name alone, as Mazzucchelli justly says, is equivalent to a thousand encomiums, was the son of a Florentine merchant. His family came, originally, from Certaldo, a village in Tuscany; whence he gives himself the appellation <i>da Certaldo</i>. He was the offspring of an illicit connexion which his father formed, while on a visit of business at Paris, and was born in that city, 1313. He early removed to Florence, where he began his studies, and, even in childhood, discovered a decided fondness for poetry. In his 10th year, his father put him under the care of a merchant, to be educated in his business. With him he returned to Paris, and remained there six years, without acquiring any fondness for his profession. His residence of eight years at Naples was equally ineffectual to this purpose. Instead of attending to trade, he formed the closest intimacy with several learned men of Florence and Naples, who had been drawn thither by the patron of the arts, king Robert. There is nothing to prove that he shared in the favor of the prince; but he enjoyed the particular affection of a natural daughter of his, for whom he composed many pieces in prose and verse, and to whom he often pays homage under the name of Fiammetta. Placed in fortunate circumstances, with a lively and cheerful disposition, a soft and pleasing address, the favored lover of a king's daughter, he regarded with more aversion than ever the station for which he had been intended. The fondness of the princess for poetry; his own intimacy with scientific and literary men; the tomb of Virgil, near Naples, which he used to visit in his walks; the presence of Petrarch, who was received with the highest distinction at the court of Naples, and who went from that city to Rome, to be crowned with the poetic laurel; the intimacy which had arisen between the two poets; all operated powerfully on B., to strengthen and fix his natural inclination for poetry and literature. After living two years at Florence with his father, he returned to Naples, where he was very graciously received by the queen Joanna. It is thought that
it was no less to gratify the young queen, than his Fiammetta, that he wrote his Decameron, which has raised him to the rank of the first Italian prose-writer. On the death of his father, becoming master of his own inclinations, he settled at Florence, where his first work was a description of the plague, which forms the opening of the Decameron. He afterwards wrote the life of Dante. He was chosen to inform Petrarch, at Padua, of his recall from exile, and the restoration of the property belonging to his father, who had died during his absence. The friendship of these two men of genius continued for life. When B., some years after, had exhausted his fortune in the purchase of costly books, and in expensive pleasures, he found in Petrarch the most generous assistance: the wise counsel of his friend was now as beneficial to his morals as they had been to his writings; in fact, to him he was indebted for the change which took place in his character. A dying Carthusian had persuaded him to raffle all the pleasures of the world: Petrarch softened his determination, and brought him back to that proper medium which marks the truly wise man. New troubles in Florence induced him to retire to Certaldo, where he owned a small estate. There he prosecuted his labors in tranquillity. He now composed several historical works in Latin. Among these is the first modern work which contains, in a collected form, the mythological notices which are scattered in the writings of the ancients. He was well versed in Greek, and, at his own expense, brought Leontius Pilatus of Thessalonica from Greece to Florence, and maintained him three years at his house, in order to learn Greek of him, and to have his assistance in explaining the poems of Homer, and translating them into Latin. He was the first who procured copies of the Iliad and Odyssey from Greece, at his own expense, and spared neither cost nor trouble to obtain good Greek and Latin manuscripts. At the same time, he used all his influence to excite his contemporaries to learn the Greek language, and substitute the study of the ancients for that of the scholastic philosophy. The reputation which he had gained twice procured for him important missions to pope Urban V. Having fulfilled these, he returned to Certaldo, and resumed his studies. Here he was attacked by a severe and lingering disorder, which finally left him in a state of debility as painful as the disease itself. Upon his recovery, he was charged with a difficult, but very flattering trust. Dante had always been the object of his highest admiration. The Florentines, who had once persecuted and banished that illustrious poet, but now did justice to his merits, had resolved, by way of atonement to his memory, to establish a public professorship for the illustration of his poems, which were every day becoming more obscure, as the distance of the time when they were written became greater. This new professorship was conferred upon B., who devoted himself to it with so much ardor, that his health could never be firmly reestablished. This received a further shock from the death of his instructor and dearest friend Petrarch. He survived him not much more than a year, and died at Certaldo, Dec. 21, 1375. On his tomb was placed this inscription, composed by himself,
by some to be spurious);  *L'Amato ossia Nimfa de Amato*, a mixed composition, partly in prose, and partly in verse;  *Il Corbaccio, ossia Laberinto d'Amore*, a pungent satire against a lady who had offended him; and, finally,  *Origine, vita e Costumi di Dante Alighieri*, a work interesting for the characteristic traits which it records; and his Commento sopra la Commedia di Dante, which, however, is carried no farther than the 17th canto of Dante's Hell. His Latin works are,  *De Genealogia Deorum, Libri xv*;  *De Montium, Locorum, Silvarum, Fluviorum, Stagiarum et Mariarum Nominibus Liber*;  *De Cassibus Flororum et Feminarum illustrium, Libri iv*;  *De claris Mulieribus*; and  *Elogia*.—A new critical edition of the  *Decamerone*, with a historical literary commentary, and the life of B., was published at Paris, 1823, in 5 vols.—In the ducal library at Florence, among the manuscripts collected by the celebrated Margiluccchi, prof Ciampi lately discovered a memorandum-book of B., containing a record of his studies, and some curious circumstances relating to himself and a number of his distinguished contemporaries. It has been published.

**BOCCACE, Marie Anne du**, a celebrated French poetess, member of the academies of Rome, Bologna, Padua, Lyons and Rouen, was born in Rouen, 1710, died 1802. She was educated in Paris, in a nunnery, where she discovered a love of poetry. She became the wife of a receiver of taxes in Dieppe, who died soon after the marriage, leaving her a youthful widow. She concealed her talents, however, till the charms of youth were past, and first published her productions in 1746. The first was a poem on the mutual influence of the fine arts and sciences. This gained the prize from the academy of Rouen. She next attempted an imitation of Paradise Lost, in six cantos; then, of the Death of Abel; next, a tragedy, the Amazons; and a poem in 10 cantos, called the  *Columbiad*. Madame du Boccage was praised by her contemporaries with an extravagance, for which only her sex and the charms of her person can account. *Forma Venus, arte Minerva*, was the motto of her admirers, among whom were Voltaire, Fontenelle, and Clairaut. She was always surrounded by distinguished men, and extolled in a multitude of poems, which, if collected, would fill several volumes. There is a great deal of entertaining matter in the letters which she wrote on her travels in England and Holland, and in which one may plainly see the impression she made upon her contemporaries. Her works have been translated into English, Spanish, German and Italian.

**Boccherini, Luigi**, a celebrated composer of instrumental music, was born in 1740, at Lucca, and received from the abbot Vanucci, music-master of the archbishop, his first instruction in music and on the violoncello. He further improved himself in the art at Rome, and afterwards went, with Filippo Mundredi, his friend and countryman, to Spain, where he was loaded with honors and presents by the king, and was appointed by the academy to furnish nine pieces of his composition annually, which he continued to do till his death, in 1805. The king of Prussia, Frederic William II, who was a great lover of the violoncello, and admired B.'s compositions, settled upon him a considerable pension, on condition of his sending him yearly some of his quartets and quintets. The compositions which B. has published himself consist of symphonies, sextets, quintets, quartos, trios, duos and sonatas for the violin, violoncello and piano-forte. He never composed anything for the theatre, and of church compositions we find but one, his  *Stabat Mater*. The adagios of B. excited the admiration of the connoisseurs, and the despair of the composers of his time. He may be regarded as the precursor of Haydn, as he was the first who wrote instrumental quartets, of which all the parts are obliged, and determined the true character of this species of music. His melodies are more highly esteemed in France and Spain than in Germany.

**Boccetta, a narrow pass of the Apen­"
pac, prided herself in thwarting her husband's beneficent purposes. Making the river of Bogota to overflow by magic, she deluged the whole valley, and reduced the inhabitants to the necessity of fleeing to the mountains for safety. Hereupon Bochica expelled the malevolent Chia from the earth, and she became the moon. The inhabitants of this people very strikingly resembled those of the Incas, and perhaps had a common origin; but, at the time of the conquest of South America, they constituted a distinct people, and possessed a distinct religion. (See Bogota, Condinamarca, Maissa; Compagnoni, American, xix, 107.)

Bochica, Augustus, one of the greatest philologists of our times, was born at Carlsruhe, 1785, studied at Halle, and, in 1811, became professor of classical literature at Berlin. Two works will immortalize the name of B, with the students of ancient literature; first, his edition of Pindar, which he announced to the public by his Spectacum Emendationum in Pindarum Carnatione (1810), and by Observationes Critice in Pindar. Prim., Olymp., Carm. (1811; the large Leipsic edition, 1811—1831, is in 3 vols., 4to.). A new arrangement of the Pindaric measures is here proposed, founded on deep and extensive researches into the music of the Greeks. Even those who entirely reject the hypothesis of the phiologist cannot but acknowledge his erudition, and admire his acuteness. The other work, to which we have alluded, is on the Political Economy of the Athenians (4 books, Berlin, 1817, 2 vols.). No work has hitherto appeared in Germany, which throws so much light on the political life and public administration of any ancient people, as this of B. It has furnished new means for illustrating the Attic orators and historians. B. has added to this work 21 inscriptions. Of late years, he has been busily engaged in preparing a work under the patronage of the Berlin academy of science, of which he is a member, called Corpus Inscriptionum Grearum, of which the first volume appeared, in 1823, at Berlin, in folio. The smaller writings of this author relate chiefly to Plato (of whose works he promised, some time since, to give a new edition), and to the Platonic philosophers.

Boox, Jean Elert, an astronomer, born at Hamburg, 1747, early discovered an inclination for mathematical science, in which his father, and, afterwards, the famous J. G. Büsch, instructed him. He gave the first public proof of his knowledge by a short work on the solar eclipse of Aug. 5, 1763. The approbation which this received encouraged him to greater labors, and in 1788 appeared his Introduction to the Knowledge of the Sun and Heavens (9th ed. 1822); a familiar treatise on astronomy, which has done much for the extension of correct views upon the subject, and continues to do so, as it has kept pace, in its successive editions, with the progress of the science. In 1772, the Berlin academy chose him their astronomer, and, ten years afterwards, he was made a member of that institution. His best works are his Astronomical Almanac (commencing 1774)—a work indispensable to every astronomer; and his large Celestial Atlas (Himmelsatlas), in 50 sheets, in which the industrious editor has given a catalogue of 17,240 stars (12,000 more than in any former charts). B. was released in 1825, at his own wish, from his duties in the academy of science, and the observatory in Berlin. His place was filled by professor Encke, formerly astronomer at Gotha.

Bodin, Jean, a political writer of the 16th century, was born in 1530 or 1529, at Angers; studied law at Toulouse; delivered lectures on jurisprudence there, and afterwards went to Paris and practised. Being unsuccessful in his profession, he turned his talents to literary labors; was invited by Henry III to his court; and afterwards travelled with the king’s brother Francis, duke of Alençon and Anjou, to Flanders and England, where he had the gratification of hearing lectures, in Cambridge, on his work De la République (originally written in French, but afterwards translated, by B. himself, into Latin). When the duke died, he went to Laon, married there, obtained a judicial office, and was sent, by the third estate in Vermandois, 1576, as deputy, to the estates of Blois. Here he defended the rights of the people, and the liberty of conscience. His conduct made him many enemies at court. He also prevailed on the city of Laon to declare itself for the league, in 1583, representing to the people, that the rising of so many towns and parliaments, in favor of the duke of Guise, was not a rebellion, but rather a powerful
political revolution. He afterwards, however, submitted to Henry IV. He died, 1596, at Laon, of the plague. His great work is that entitled *De la République*, in which he gave the first complete essay towards a scientific treatise on politics, and, guided by his own experience, sought to strike out a middle course between the advocates of monarchy and democracy. His *De demonomanie*, and his *Theatrum Universae Naturae* (Lyons, 1590), show how superstition and learning were united in his character; but the charge of atheism, which is grounded particularly on a work entitled *Hecatomberon*, proceeds from the religious indifferency which was noticed in him by his contemporaries.

Bodleian Library. (See Libraries.)

Bodley, sir Thomas; the founder of the Bodleian library at Oxford. He was born at Exeter, in 1542, and educated partly at Geneva, whither his parents, who were Protestants, had retired in the reign of queen Mary. On the accession of Elizabeth, they returned home, and he completed his studies at Magdalene college, Oxford. He afterwards became a fellow of Merton college, and read lectures on the Greek language and philosophy. He went to the continent in 1576, and spent four years in travelling. He was afterwards employed in various embassies to Denmark, Germany, France and Holland. In 1597, he returned home, and dedicated the remainder of his life to the reestablishment and augmentation of the public library at Oxford. This he accomplished, procuring books and manuscripts himself, both at home and abroad, at a great expense, and, by his influence and persuasions, inducing his friends and acquaintances to assist in his undertaking. Sir Robert Cotton, sir Henry Savile, and Thomas Allen, the mathematician, were among the principal contributors on this occasion. The library was so much augmented, that sir Thomas B., who was knighted at the accession of James I, was induced to erect an additional structure for the reception of the increasing quantity of valuable books and manuscripts. He died in London, 1615, and was interred in the chapel of Merton college, in the university. He bequeathed nearly the whole of his property to the support and augmentation of the library, which has been so much enriched by subsequent benefactions, that it is, at present, one of the most magnificent institutions of the kind in Europe. (See *Reliquia Bodleiana*, London, 1703.)

Bodoni, John Jacob; a celebrated German poet and scholar, born at Greifensee, near Zurich, July 19, 1698. Although he produced nothing remarkable of his own in poetry, he helped to open the way for the new German literature in this department. He was the antagonist of Gottsched, in Leipzig, who aspired to be the literary dictator of the day, and had embraced the French theory of taste, while Bodoni, inclined to the English. He has the honor of having had Klopstock and Wieland among his scholars. B., was, for a long time, professor of history in Switzerland. He was a copious and indefatigable writer, entertained many incorrect views, but was of service, as we have already said, to the German literature, which was then in a low and barbarous state. He died at Zurich, 1783.
BOEHME—BOEOTIA.

Boëtz. (See Boethius.)

Boëme, or Boehm, Jacob; one of the most renowned mystics of modern times; born, in 1575, at Alseidenberg, a village in Upper Lusatia, near Görlitz; was the son of poor peasants; remained to his 10th year without instruction, and employed in tending cattle. The beautiful and sublime objects of nature kindled his imagination, and inspired him with a profound piety. Raised by contemplation above his circumstances, and disturbed by exterior influences, a strong sense of the spiritual, particularly of the mysterious, was awakened in him, and he saw in all the workings of nature upon his mind a revelation of God, and even imagined himself favored by divine inspirations. The education which he received at school, though very imperfect, consisting only of writing, spelling and reading the Bible, supplied new food for the excited mind of the boy. He became afterwards a shoemaker; and this sedentary life seems to have strengthened his contemplative habits. He was much interested in the disputes which prevailed on the subject of Cryptocalvinism in Saxony; though he never took a personal part in sectarian controversies, and knew no higher delight than to elevate himself, undisturbed, to the contemplation of the infinite. B. withdrew himself more and more from the world. If we take into view his retirement, his piety, his rich and lively imagination, his imperfect education, his philosophical desire for truth, together with his abundance of ideas, and his delusion in considering many of those ideas as immediate communications of the Deity, we have the sources of his doctrine and his works. His writings contain profound and lofty ideas, mingled with many absurd and confused notions. He died, after several prosecutions and acquittals, in 1624. Abraham von Frankenbery (who died in 1692), his biographer and admirer, has also published and explained his writings. The first collection of them was made in Holland, in 1575, by Henry Beike; a more complete one, in 1628, by Gichtel (10 vols., Amsterdam); from whom the followers of B., a religious sect highly valued for their silent, virtuous and benevolent life, have received the name Gichtelians. Another edition appeared in Amsterdam, in 1730, under the title Theologia reseleta, 2 vols. 4to.; the most complete, in 6 vols. In England, also, B.'s writings have found many admirers. William Law published an English translation of them, 2 vols. 4to. A sect, taking their name from B., was likewise formed in England, and in 1637, Jane Leade, an enthusiastic admirer of his, established a religious society for the explanation of his writings, under the name of the Philadelphia. It is said that such a society still exists.

Boeotia; a country of ancient Greece, bounded N. by Phocias and the country of the Opuntian Locrians; E. by the Euporus, or strait of Euboea; S. by Aetia and Megaris; and W. by the Acheronian sea and Phocis; but the boundaries were not always the same. In the north, it is mountainous and cold, and the air is pure and healthy, but the soil is less fertile than that of the other portion, which, however, is infested by unhealthy vapors. The mountainous part in the north was called, in earlier times, Jonia. Among its mountains are several remarkable in history and mythology: Helicon (now Siga), the mountain of the Sphinx, the Taumessus, Libethrus and Petrachus.—The chief occupation of the inhabitants was agriculture and the raising of cattle. It was first occupied by Pelasgian tribes. In the time of Bonotus (son of Iotus and grandson of Amphictyon, from whom it is said to have derived its name), these were subject to the Hellenes. It was divided into small states, until Calusmus the Pharnæian founded the government of Thebes. In later times, all Greece worshipped the Hercules of Thebes. After the death of the Theban king Xanthus, most of the cities of B. formed a kind of republic, of which Thebes was the chief city. Epaminondas and Pelopidas wished to unite Thebes, for a short time, to the rank of the most powerful states of Greece. In B. are several celebrated ancient battle-
fields, the former glory of which has been increased by late events, namely, Plataea (now the village Koklo), where Pausanias and Aristides established the liberty of Greece by their victory over the 300,000 Persians under Mardonius; Leuctra (now the village Paragonia), where Epaminondas checked the ambitious Spartans; Coronea, where the Spartan Agesilaus defeated the Thebans; and Chaeronea (now Caprona), where Philip founded the Macedonian greatness on the ruins of Grecian liberty. Near Tanagra, the birthplace of Corinth (q. v.), the best wine was produced; here, also, cocks were bred, of remarkable size, beauty and courage, with which the Grecian cities, passionately fond of cock-fighting, were supplied. Refinement and cultivation of mind never made such progress in B. as in Attica. The Boeotians were vigorous, but slow and heavy. Several Thebans, however, were worthy disciples of Socrates, and Epaminondas distinguished himself as much in philosophy as by his military talents. The people were particularly fond of music, and excelled in it. They had also some great poets and artists. Hesiod, Pindar, the poetess Corinna, and Plutarch, were Boeotians.

Boerhaave, Hermann, one of the most celebrated physicians of the 18th century, was born, Dec. 13, 1668, at Voorhout, near Leyden, and received from his father a liberal education. Before he was 11 years old, he was well acquainted with Latin and Greek. An obstinate ulcer on his left thigh, which, for 7 years, resisted all medical remedies, was the means of directing his thoughts and inclinations to the study of medicine. In 1682, he was sent to Leyden to study theology. Here he gave, at the age of 20, the first public proof of his learning and eloquence. He pronounced an academic oration before Gronovius, with whom he studied Greek, Qua probatur, bene intellectam a Cicerrone, et confutatione Secessium Epicuri de somno Bono (Leyden, 1693, 4to.). In this, B. attacked the doctrine of Spinoza with so much talent, that the city rewarded him with a gold medal. In 1689, he received the degree of doctor of philosophy, and maintained an inaugural dissertation, De Distinctione Mentis a Corpore (Leyden, 1690). He now commenced, at the age of 22, the study of medicine. Drelincourt was his first and only teacher. From him he received only a little instruction; and it is worthy of notice, that B. learned by his own solitary study a science on which he was afterwards to exert so important an influence. He first studied anatomy, but rather in the works then in vogue, of Vesale, Bartholin, &c., than in the dissecting room. He was present, indeed, at most of the dissections of Nuck, but still the want of a practical study of anatomy is evident in all his writings. The influence which he had in improving anatomy, notwithstanding the defect we have noticed, must be traced to the close connexion of this mechanical science with physiology and medicine. As, in these last, he made use of mechanical illustrations, his example induced the anatomists to apply themselves to an accurate study of the forms of the organs, and all the anatomy of that time—Santorini, Morgagni, Val-salva, Winslow, Albins, &c. After this preliminary study, which, in fact, is the groundwork of medical science, B. read all the works, ancient and modern, on medicine, in the order of time, proceeding from his contemporaries to Hippocrates, with whose superior excellence and correct method he was forcibly struck in this course of reading. He also studied botany and chemistry, and, although still preparing himself for the clerical profession, was made, in 1693, doctor of medicine at Harderwick. His dissertation was De Utilitate explorandorum Excremen-torum in Agris, ut Signorum. After his return to Leyden, some doubts being raised as to his orthodoxy, he finally determined to follow the profession of medicine. In 1701, the university of Leyden chose him, on the death of Drelincourt, to deliver lectures on the theory of medicine; on which occasion, he pronounced his dissertation De commendo Stwlio Hippocratico. In this, with an enthusiasm excited by the study of Hippocrates, he demonstrates the correctness of the method pursued by that great man, and establishes its exclusive superiority: it had been well if he himself had never deviated from it. B. now began to develop those great and peculiar excellences, which make him a pattern to all who undertake the office of instruction. Pupils crowded from all quarters to hear him. In 1703, he delivered another dissertation, De Usu Ratiocinii mechanici in Medecina, Leyden, 1703. In this, he began to deviate from the Hippocratic method, and to introduce the first principles of a defective system, to which his eminent talents gave afterwards exclusive currency. In 1709, the university of Leyden was at length enabled to reward
him for his services, by appointing him professor of medicine and botany in Hot- 
ton's place. It is remarkable, that, on this occasion, he delivered a dissertation, Qua- 
repurgata Medicus Jacilis asseritur Sim- 
pliciis, which deserves to be placed by 
the side of those in which he recom- 
mends the study of Hippocrates. In this 
dissertation, he is for carrying back the 
science to its original simplicity—to obser- 
vation and experience—quite contrary to 
the spirit which guided his own system. 
The course of instruction, to which B. 
was now devoted, induced him to pub- 
lish two works, on which his fame still 
rests, viz. Institutiones Medicæ in Usus 
anuuus Exercitationum domestican; and 
Aphorismi de cognoscendis et curandis 
Morbis in Usus Doctrina Medicinæ. In 
the former, which is a model of compe- 
rensive erudition and clear method, he 
unfolds his system in its full extent: in 
the latter, he undertakes the classification 
of diseases, and discourses separately on 
their causes, nature and treatment. 
The professorship of botany, which he also 
filled, contributed no less to his reputa- 
tion. He rendered essential services to 
botany by his two catalogues of plants in 
the garden of Leyden, the number of 
which he had very much increased. We 
are indebted to him for the description 
and delineation of several new species, 
and the introduction of some new spe- 
cies. In 1714, he was made rector of the 
university, and, at the close of his term of 
of ice, delivered an oration, De compa- 
rando certo in Physicis, one of his best 
pieces. At the end of this year, he took 
Boileau's place in the office of practical 
instruction, in which he was employed 
more than 10 years. Anticipating the 
great advantages of clinical institutions, 
and wishing to become better acquainted 
with them, he opened an hospital, where he lectured 
to his pupils twice a week, on the history 
of the diseases before them, confining 
himself to the particular phenomena in 
each case presented to their observation. 
Curiously occupied as he already was, the 
university conferred on him, at the death 
of Lemort, the professorship of chemistry, 
which science he had taught since 1703. 
On this occasion he delivered his disser- 
tation De Chemia suaus Errores expur- 
gante. Although the relations which B. 
supposes to exist between chemistry and 
medicine are ill-founded, he deserves 
credit not only for rendering the science intelligi- 
able and familiar in his excellent works on 
this subject. His Elements of Chemistry 
is, perhaps, his finest production, and, 
notwithstanding the entire revolution 
which has taken place in this branch of 
science, is still highly valuable. His ex- 
periments are remarkable for their accu- 
rency. The part which treats of organic 
bodies is exceedingly good for that pe- 
riod. So extensive a sphere of action 
gained for B. a name that few learned 
men have enjoyed. People came from 
all parts of Europe to ask his advice. 
His property amounted, at his death, to 
2,000,000 florins—a very extraordinary 
fortune for a man of his profession in 
Europe. Peter the Great visited him on 
his travels, and a Chinese mandarin wrote 
to him with the address, "To Boerhaave, 
the celebrated physician in Europe." In 
1722, an attack of the gout, accompanied 
with a stroke of the apoplexy, obliged 
him to renounce his active practice, in 1727 and 1729, 
compelled him to resign the professorships 
of chemistry and botany, which he had 
held for 20 years. In 1730, he was again 
appointed rector, and, at the close of his 
term, delivered a celebrated address, De 
Honore, Medicæ Servitute, perhaps the best 
of all those essays, in which he represents 
the physician as the servant of nature, 
whose activity he is to awaken and di- 
rect. In this he returned, in some meas- 
ture, to the principles of Hippocrates, 
from which, indeed, he had never depart- 
ed far in practice. In 1735, his disorder 
returns with increased violence, and, 
after a few months, put an end to his life, 
at the age of 70. The city erected a 
monument to him in St. Peter's church, 
with his favorite motto upon it—Simplex 
signillum veri.
The highest honors were thought inadequate to reward his virtues and services. But Theodoric, as he grew old, became irritable, jealous, and distrustful of those about him. The Goths now indulged in all sorts of oppression and extortion, while B. exerted himself in vain to restrain them. He had already made many enemies by his strict integrity and vigilant justice. These at last succeeded in prejudicing the king against him, and rendering him suspicious of B. The opposition of B. to their unjust measures was construed into a rebellious temper, and he was even accused of a treasonable correspondence with the court of Constantinople. He was arrested, imprisoned and executed, A. D. 524 or 525.—While he was at the helm of state, he found recreation from his toilsome occupations in the study of the sciences, and devoted a part of his leisure to the construction of mathematical and musical instruments, some of which he sent to Clothaire, king of France. He was also much given to the study of the old Greek philosophers and mathematicians, and wrote Latin translations of several of them. His most celebrated work is that composed during his imprisonment, On the Consolations of Philosophy. It is written in prose and verse intermixed. The elevation of thought, the nobleness of feeling, the ease and distinctness of style, which it exhibits, make this composition, short as it is, far superior to any other of the age. (Principal edition, Basil, 1570, folio. A modern one of some value appeared at Glasgow, 1751, 4to.)

Boetticher, John Frederic, the inventor of the Dresden porcelain, was born Feb. 5, 1682, at Schleiz, in the Voigtland, in his 15th year went from Magdeburg, where he received his early education, to Berlin, as apprentice of an apothecary. There he devoted his nights to the art of making gold. His want of sleep rendered him so stupid, during the day, as to draw upon him many reproofs, till, at last, he acquired some consideration by showing little pieces of gold, which he pretended to have made. Oct. 1, 1701, he changed, as it is said, in the presence of several witnesses, 19 pieces of silver into fine gold. As this was much talked of, the king desired to see him, and B., believing he was to be arrested as an adept (q. v.), fled to Saxony. The king of Saxony gave him large sums of money, which he wasted, still keeping his employer in suspense. His majesty finally became very impatient to see the gold. B., therefore, in 1704, attempted to escape, but was overtaken, and, with the assistance of one Tschirnhausen, who had discovered a kind of porcelain, invented an improved composition of it, with which he hoped to appease the king, who spent immense sums in China ware. In 1705, B. invented the Dresden porcelain, which has since become so famous. He made use of a clay found in the vicinity of Meissen. The king, upon this, made him a baron of the empire and director of the new manufactory of porcelain in Meissen, though he was often treated as a prisoner, lest the secret should be betrayed. He was finally removed from his dignity, on account of his immoral life, and died, March 13, 1719, in the greatest poverty, so that he did not even leave sufficient to pay the expenses of his funeral.

Boejanowitsch, Hippolyt Fedorovich, the Russian Anacreon, was born in 1743, at Perewolotschina, in White Russia. His father was a physician. He wished to become an actor, but the manager of the theatre, Cheraskow, dissuaded him from his purpose. By his advice, he applied himself to the study of the fine arts, and to learning foreign languages. He gained patrons and friends, and, in 1761, was made inspector in the university of Moscow, and afterwards translator in the department of foreign affairs. In 1782, he travelled with count Beloselsky, as secretary of legation, to Dresden, where he devoted his whole attention to the study of the fine arts and of poetry, till 1768. The beautiful pictures in the gallery of that place inspired him to write his Psyche (Duschehn), which appeared in 1775, and fixed his fame on a lasting foundation. After this, he devoted himself to music and poetry, in solitary study at Petersburg, till Catherine called him from his retirement. He then wrote, on different occasions, several dramatic and historical pieces. In 1783, he was made president of the imperial archives. In 1795, he took leave of the court, and lived as a private man in Little Russia. He was as remarkable for modesty as for genius, and a man of childlike goodness and vivacity.

Boogota, at the time of the Spanish
Bogotá, or Santa Fe de Bogotá; a city of South America, the capital of the republic of Colombia, and formerly the capital of the vice-royalty of New Granada. Lon. 74° 15' W.; lat. 4° 30' N. The city contains a magnificent cathedral, a university, a mint, an hospital, and various other public buildings. The streets are wide and well paved. The city, by reason of its elevation, enjoys the temperature of perpetual spring; the mean heat being 57.74, and the thermometer having a range of only a few degrees. The plains around Bogotá produce two regular harvests in a year.

Bohemia (See Tepennamps, Catast of.)

Bohemia, Brazil, Boshemheim, has its name from the Boii, a Celtic nation, who settled there about 500 B. C., under their leader Segovesus, a nephew of Ambigutus, king of the Bituriges, but were afterwards almost all driven out by the Marcomanni. About the middle of the 4th century, B. then inhabited by German nations, enjoyed a settled and quiet government under its dukes, who were, as yet, but little known. In the middle of the 6th century, a numerous army of Scævonians (Czeches, Tschechen, the Bohemians still call themselves), who had hitherto inhabited the shores of the Black Sea, invaded B. (as some say, under the command of one Zecko), conquered the country, and put it under cultivation. According to others, Zecko was entirely unconnected with the Scævonians, and his successors were hard pressed by that people, although his descendants were never quite expelled from the land. The first of them who is known to us by name was Przemislas, a peasant, whom the princess Libussa espoused, 632, and raised to the throne. Although Charlemagne and some of his successors compelled B. to pay tribute, this subject did not continue long. In 840, B. Silesia and Moravia were free from all foreign dominion, and governed by their own dukes, although still maintaining a sort of confederacy with the German empire. In 1001, Henry IV gave the title of king to the duke of B., which was not, however, generally recognised till the time of Wenceslaus in 1094. About 1230, Philip conferred the royal dignity on Przemislas and his successors. It was confirmed by Frederic II, since whose time B. has remained a kingdom. The male descendants of the old kings ceased with Wenzel V., in 1365, on whose death, John of Luxemburg obtained the crown by marriage, in 1310, and left it to his descendants. After this, Charles IV (the house of Luxemburg, under the name of Charles I, who very much improved the kingdom), and his sons, Wenceslaus and Sigismund (the latter nearly lost B. in the religious war with the Hussites), united the crown of B. to that of the German empire. After Sigismund's death, 1437, B. came into the possession of his son-in-law, Albert of Austria, who died in 1439, and the crown descended to his son Ladislaus (the latter near­ly killed in a battle with the Turks near Mohatz, in 1526), B. fell to the house of Austria. After his death, 1457, the people chose George von Podiebrad, who had been regent, for their king, in 1458, and, in 1469, when he was excom­municated by the pope, they elected the Polish prince Wacławus, who, however, did not come into possession of the throne till the death of George, in 1471. He was succeeded, 1516, after a reign of 45 years, by his son Louis. These were both also kings of Hungary. Louis being killed in a battle with the Turks near Mohatz, in 1526, B. fell to the house of Austria. The brother-in-law of Louis, Maximilian's second grandson, the arch­duke Ferdinand, succeeded. This prince desired the Bohemians to take up arms in the Smalkaldic war against the elector of Saxony; but, finding them averse to his wishes, and threat-
BOHEMIA.

...tradesmen and mechanics, who refused to rebel against him, he conducted towards them with great harshness, after the victory of Charles V, at Mühlberg, and declared B. an absolute monarchy. He was succeeded by his son Maximilian (1564), and he by his sons Rudolph (1576), and Matthias (1612). Towards the close of the reign of the latter prince, in consequence of the infringements upon the religious liberty of the Protestants, troubles arose, which threatened the house of Austria with the loss of B. In 1610, the people invited Frederic V, elector of the Palatinate, to the throne, to the exclusion of Ferdinand II, who had been already crowned king during the life-time of his cousin Matthias. But, when the victory at Prague, Nov. 9, 1620, had decided the war in favor of the emperor, those who had joined in the rebellion were most rigorously dealt with: 27 of them were executed, 18 banished or imprisoned for life, and their goods confiscated. The sentence of confiscation was also extended to those who had already died, and to 29 who had escaped, as well as to 728 wealthy lords and knights, who had voluntarily acknowledged their offence. The Protestant religion, which was held by three fourths of the people, was rooted out; Rudolph's imperial edict was revoked (1637), and B. reduced to an absolute, and hereditary monarchy, and the Roman Catholic faith established to the entire exclusion of all others. From this time B. continually declined. History hardly furnishes a parallel instance of such a complete triumph of brute force over the spirit of a people. The house of Hapsburg has to answer for this violation of human rights. More than 30,000 families (155 of which were of the rank of lords and knights), all the Protestant ministers and teachers, a multitude of artists, tradesmen and mechanics, who refused to become Catholics, emigrated to Saxony, Brandenburgh, Holland, Switzerland, &c. In the mountain and forest villages, however, out of the way of the Jesuits and soldiers, many secret Protestants still remained. Since that period, the Bohemian language has been drowned in public transactions. In the 30 years' war, B. was entirely desolated; it lost the best of its strength and wealth. When Ferdinand II died, in 1617, there remained of the 723 towns, 94,750 villages, and 3,000,000 of inhabitants, which B. contained in 1617, only 130 towns, a little more than 6000 villages, and 750,000 inhabitants! After the death of Charles VI (1740), Charles Albert, elector of Bavaria, laid claim to the crown, and the oath of allegiance was taken to him in Prague; but Maria Theresa succeeded in obtaining possession of B., which has remained ever since one of the richest jewels in the Austrian diadem.—The kingdom of Bohemia is bounded on the west by Bavaria, on the east by Moravia and Silesia, on the north by Lusatia and Moravia, and on the south by Austria and Bavaria. It contains 20,200 square miles, and over 3,350,000 inhabitants (of whom 2,170,000 are Czechs, and more than 30,000 Jews), in 286 large towns (städte), 275 market-towns, and 11,924 villages. The prevailing religion is the Roman Catholic; other sects, however, are tolerated. The language of the country is Bohemian, a dialect of the Slavonic: in some districts, and in most of the cities, German is spoken. B. is surrounded on all sides by mountains, is covered with large forests, and considerable ponds. The number of the latter is reckoned at 20,000. Its plains are remarkably fertile. The largest rivers are the Elbe and the Moldau. All sorts of grain, flax, hops (the best in Europe) and fruits are exported. Wine is not abundant, but, in the neighborhood of Melanie, of pretty good quality. The raising of sheep, horses, swine and poultry is carried on to a considerable extent. The mines yield silver (1823, 13,873 marks), copper, excellent tin (1800 cwt.), garnets and other precious stones, iron (300,000 cwt.), coal, arsenic, uranium and tungsten, antimony, vitriol, alum, calamine, sulphur, and coal in abundance. There are also numerous mineral springs (150), but little salt. Manufactories of different kinds are established in all parts of the country. The most important of these are the linen, cambric, lace, thread and veil factories, and others of a similar kind. These, in 1801, yielded goods to the value of more than 20,000,000 florins: half of this amount was exported from the country. The woolen manufactories produced an amount of 10,000,000 florins. The woolens have advanced, of late years, both in quantity and quality. The Bohemian glass (there are 75 glass-houses) is the best in Europe, and is carried to Spain, America, Russia and the Levant, to the amount of 2,500,000 florins. Besides these, there are 8 mirror factories, at Turnau there are manufactories for composition-stones, porcelain and earthenware, &c. Of considerable importance, too, is the manufacture of hats of the finest sort, of paper, of silk stuffs, polished garnets, musical instruments, and many...
other articles. B. contains, besides the city of Prague, 16 circles, governed by officers appointed yearly. The most important places are the cities of Bautzen, Molin, Turcan, Reichenberg, Trautmann, Kuttenberg, Budweis, Pilsen, Carlsbad (q. v.), Joachimsthal, Teplitz (q. v.), Eger; the fortresses of Königigratz, Josephstadt, Theresienstadt; the manufacturing town of Bautzberg; the villages of Bieber, Sedlitz, Seidschitz, Pöhl, Königs­
wart, Franzensbrunnere (q. v.), Marien­
bad (q. v.), &c. For internal intercourse, there are excellent highways, extending 1000 miles; in 1822, a railroad was laid to connect the Danube with the Moldau.—The Bohemians of all ranks are distinguished for their public spirit, excelling itself in the most noble and useful plans. In 1522, they had 266 public establishments for education, a university, 3 theological academies, 26 gymnasiaums, 261 common schools, and a conservatory for music, 6709 teachers, 410,463 pupils; among them, 2055 students in the high schools. (See prof. Schnabel's Statistical Account of Bohemia.)

BOHEMIAN BRETHREN. — The name of a Christian sect, which arose in Bohemia, about the middle of the 16th century, from the remains of the stricter sorts of Hussites. (q. v.) Dissatisfied with the advances towards popery, by which the Calixtines (q. v.) had made themselves the ruling party in Bohemia, they refused to receive the compacts, as they were called, i.e., the articles of agreement between that party and the council at Basel (30th Nov. 1439), and began, about 1457, under the direction of a clergyman, Michael Bradatz, to form themselves into separate parishes, to hold meetings of their own, and to distinguish themselves from the rest of the Hussites by the name of Brot­
er, or Brothers' Union; but they were often confounded by their opponents with the Waldenses and Picards, and, on account of their seclusion, were called Caven-hunters (Grauenhainer). Amidst the hardships and oppressions which they suffered from the Calixtines and Catho­lics, without making any resistance, their numbers increased so much, through their constancy in their belief and the purity of their morals, that, in 1500, their parishes amounted to 200, most of which had chapels belonging to them. The peculiarities of their religious belief are seen in their books or catechism, especially their opinions with regard to the Lord's supper. They rejected the idea of trans­substantiation, and admitted only a mys­
tical spiritual presence of Christ in the eucharist. In other points, they took the Scriptures as the ground of their doctrines throughout, and for this, but more especially for the constitution and discipline of their churches, received the approba­tion of the reformers of the 16th century. This constitution of theirs was framed according to the accounts which remain of the oldest apostolic churches. They aimed to restore the primitive purity of Christianity, by the exclusion of the vicious from their communion, and by making three degrees of excommunication, as well as by the careful separation of the sexes, and the distribution of the members of their society into three classes—the beginners, the proficients and the perfect. Their strict system of superintendence, extending even to the minute details of domestic life, did much towards promoting this object. To carry on their system, they had a multitud of officers, of different degrees: viz. ordaining bishops, seniors and conseniors, presbyters or preachers, deacons, elders and acolytes, among whom the manage­ment of the ecclesiastical, moral and civil affairs of the community was judiciously distributed. Their first bishop received his ordination from a Waldensian bishop, though their churches held no commun­ion with the Waldenses in Bohemia. They were destined, however, to experi­ence a like fate with that oppressed sect. When, in conformity to their principle not to perform military service, they refused to take up arms in the Smalkaldic war against the Protestants, Ferdinand took their churches from them, and, in 1548, 1000 of their society retired into Poland and Prussia, where they at first settled in Marienwerder. The agreement which they concluded at Sand jaw, 14th April, 1570, with the Polish Lutherans and Calvinistic churches, and still more the Dis­senters' Peace Act of the Polish conven­tion, 1572, obtained toleration for them in Poland, where they united more closely with the Calvinists under the persecutions of the Swedish Sigismund, and have con­tinued in this connexion to the present day.—Their brethren, who remained in Moravia and Bohemia, received a certain degree of liberty under Maximilian II, and had their chief residence at Fulck, in Moravia, and hence have been called Moravian Brethren. The issue of the 30 years' war, which terminated so unfortunately for the Protestants, oc­casioned the entire destruction of their churches, and their last bishop, Com-
BOHEMIAN Brethren—BoHEMIAN LANGUAGE.

nus (q.v.), who had rendered important services in the education of youth, was compelled to fly. From this time, they made frequent emigrations, the most important of which took place in 1722, and occasioned the establishment of the new churches of the Brethren by count Zinzendorf. (For the history of the old churches of this sect, we refer the reader to Cranzone's History of the Brethren, and to Schulz On the Origin and Constitution of the Evangelical Brethren's Church (Gotla, 1822); a sensible and impartial work.) Although the old Bohemian Brethren must be regarded as now extinct, this society will ever deserve reverence for its efforts to establish in their churches; and as the parent of the estabished and widely extended association of the United Brethren (q.v.), whose constitution has been modelled after theirs.

BOHEMIAN AND BAVARIAN FOREST.

From the Fichtelgebirge, southward, towards the confluence of the Ilz and the Danube, extends a ridge of mountains, covered with wood, called the Bohemian Forest, in ancient times a part of the Suevic Hercynia, the highest peaks of which are the Arber (4320 feet high), Rachel and others. It separates Bavaria and Bohemia. The great abundance of wood has occasioned the establishment of many glass-houses, forges, &c. in this region. The inhabitants have acquired, in their seclusion from the world, many characteristic virtues and vices.

BOHEMIAN LANGUAGE. The Czechish (Bohemian) is proved, as well by its antiquity, and its degree of cultivation, as by the size of the countries whose national language it is. We shall consider first the richness of the vocabulary of this language. This richness consists in the number of inflexions of the syllables at the beginning and end of words. Thus from the single radical word byt (his) there are more than 110 derivatives; from the radical word dege se (read like ca), signifying it happens, there are more than 35, without reckoning the frequentive verbs, verbal substantives and adjectives. By the simple prefixing of the letters s, w, z, the verb acquires a different signification; e. g., s-razyti, v-razyti, z-razyti, convey the meanings to beat down, to beat off, to beat in. Hence this language has formed, from native roots, all the scientific terms of theology, jurisprudence and philosophy, and, with every new invention, can be further developed. A proof of its richness is to be found also in the numerous synonyms, viz. pape (c read like the Italian ce), kubka, fata, the bitch; hodmost, dostognost, dignity; hrom, manresa, manure; vca, varence, dedina, the village.—If one compares the Bohemian radical words with the analogous terms in other languages, he will be astonished at the number of inflexions and derivations by which the language of the Czechis is distinguished. A great part of the facility with which it receives new forms and additions reposes upon its manifold declensions and its numerous tenses and participles. In this respect, the language of the Bohemians excels that of all other modern nations, with the exception of the races of Sclavonic origin. In the variety of declensions, which are terminated almost all with a vowel, are inflected only at the end, and are used without an article (see the Grammar of Negsecity, Prague, 1821), the Bohemian equals the precise Latin; for instance, must (viro), zene (femina), z read like the French ch), &c. The participles give it a great deal of pliability, as they unite in themselves the advantage of verbs and adjectives, by denoting, as inflexions, the quality of the thing and the determination of the time, saving thus the use of the relatives which, who, as, and the prepositions after, near, &c., by which periods become dragging: hence its conciseness.—Another advantage of the pliability of the Bohemian language is the means which it affords of compounding words; as, Someclalades, he who rules alone; Hromoseobit, the ruler of the thunder, &c. The Bohemian expresses the compound words of the Greeks and Germans sometimes by a particular form of the adjective, sometimes by particular substantive; as, kostnice, the charnel-house; chmelnice, the hop-yard; duba, the rainbow.—Another peculiarity is the great variety of diminutives, by which not only small, but agreeable and dear objects are designated; as, panenka, the little maiden; mlének, the much beloved; panenka, the little maid, and many others; also the ways of expressing concisely the frequent

158
BOHEMIAN LANGUAGE.

naming of a thing; for instance, *Francis*

kowati se (*read as scho*), to use frequently

the name Francis; *noucchowati se*, to use

frequently the name step-mother. It pos-

sesses also the patronymic nouns; for in-

stance, *krauwece*, the king's son. It in-

icates concisely that an action is comple-

ted as, *dopom*, to write to an end. It

contains the inceptive verbs; for example,

*hrbatim*, I am becoming hunch-backed;

and many others. Secondly, the Bohem-

ian language has much expressiveness

and energy, as it is not weakened by a

number of articles, auxiliary words, con-

junctions and words of transition, but is

able to represent the objects of imagina-

tion, of passion, and all the higher emo-

tions of the poet and orator, in a quick,

vigorou5 and lively manner, by its brev-

ity, heaping together the most significant

words, and arranging the connexion of

the parts of speech according to the de-

gree of feeling to be expressed, so as to

give the style spirit and energy, or gentle-

ness and equability. The Bohemian des-

ignates many objects by the imitation of

natural sounds. Thus the names of many

animals are taken from their voices; as

*krata*, the turkey; *kaschim*, the duck.

Many plants he names from their effects;

as, *boleklaw*, hemlock (from head-ache).

The conciseness of the language is in-

creased by the absence of auxiliaries in

the greater part of the verbs; as, *dam*, I

shall give. The preterites, in the thircl

person, singular and plural, express a

meaning still further condensed, as the

vague and ambiguous is made to de-

signate the sex; for example, *pad*,

*psalo*, *psato*, he, she, it has written;

*psati*, *psalty*, *psala*, they have written;

*nurozen*, nurozena, he, she, it has been born. Thus the absence of the

personal pronouns in the verbs, of the ar-

ticule in the substantives, and the use of

many participles and participial forms, give

to this language the expressiveness and

power of the Latin. In like manner, the

Bohemian saves many prepositions and

much circumlocution of other kinds, by

the use of the instrumental, agreeing

with the Latin ablative: for instance, *srcejim mece krauwece su al* (I read like

to), with a blow of the sword he has cut

off his head. This language is, therefor,

very well fitted for the translation of the

Latin classics. By the use of the partic-

iple passive, must leave always

undeclared and dubious; for instance,

*Pindarus vestanowit Pasikleza porouca*

syna svecho a geja gmenj, tald do Pelopon-

nesus; *Pindarus constudula Pasikle tum*

fitis tum bonorum future, in Peloponnesum

abiit. This contributes to the perspicuity

and precision of the Bohemian language.

Every notion, moreover, is expressed by

a peculiar word; for example, the verbs

*zrj*, *stjfoj*, *krauj*, *rezati*, denote to cut

with the scissors, with the sickle, with

the knife, and with the sicle; while most lan-

guages use one verb, to cut, in all these

cases. In the subtilty of grammatical

structure, the Bohemian is like the Latin,

and has the advantage over the Latin and

other languages. In speaking of two

hands, two eyes, &c., the dual number is

used; e. g., *race, oct*, &c. The language

is also capable of expressing the idea of

duration referring to an indefinite past

time, like the Greek norist; for instance,

*kupowal dam, ale nekapul ho*, which we

have no means of rendering precisely,

for *kupowat* means to buy, and *kapul* means

also to buy; accordingly the phrase would

be, literally, *he bought the house, and

bought it not*, which would be a contra-

diction: he was about to buy the house,

but did not buy it, would be also an in-

correct expression of this idea, for the

action was already going on—he was al-

ready buying. The language affords

several preterite tenses, which are dis-

tinguished with great subtilty; as, *pul

sing. unit.* (time which has only past

once)—*kaupi*, he has bought once; *plus-

quamperf. primum*—*kupowal*, he had pur-

chased for a long time; *plusquamperf.

secundum*—*kupowat*, he had purchased

formerly several times; *plusquamperf.

tertium*—*kupowatovan*, he seldom had

purchased in former times; where, by

adding the auxiliary verb *yj*, a time still

longer passed may be expressed, though

this is very seldom used; for instance,

*bj kupowat*, he had purchased in times

long past. Another advantage of the lan-

guage consists in the many future tenses

by which the Bohemian denotes not only

the time, but also the duration, and the

more or less frequent repetition of the

action; viz. *futurus simplex*—*kaupin*

I shall purchase once; *futurus duratwnum*—*fractus*

—for instance, *budu kupouani*, I shall be

purchasing for a long time; *fut. frequen-

tativum*—*budu kupovat*, I shall pur-

chase several times; and *fut. iteratwnum*

—*budu kupovat*, I shall be purchasing
very often. Not less manifold in signification, and equally subtle in the determination of time, are the participles and the participial constructions. The determination of the sex and the number by the final syllable of the participle gives the Czechish language no small preference above others. The Bohemian can express himself as elegantly and politely, and at the same time as concisely, as the Greek with his optative; for instance, nehato toh, she may let it go; recall, let him do it. The small, connective particles of speech, which the Bohemian has, in common with the Greek, must be considered as so many touches and shadings, by which the whole idea and feeling is more distinctly expressed. The Greek ως, υς, ας, τς, κ. α. agree with the Bohemian de pak, wak, li, z, t; only the three latter are always affixed to a word. Finally, the free, unrestrained arrangement of the words contributes much to perspicuity, as the Bohemian is less fettered than any of the other modern languages to a particular construction. By a happy mixture of vowels and consonants, and by a combination of the latter favorable for the pronunciation, the language has also much euphony, though many call it rough on account of the r (read rr); but the sound of entire words, not that of the single letters which compose them, determines the roughness or smoothness of their pronunciation; besides, every language, on account of the difference of the feelings which it has to convey, some gentle, others harsh and violent, ought to be able to form some harsh sounds. The terminations or the sound of entire words, determines the roughness or smoothness of their pronunciation; besides, every language, on account of the difference of the feelings which it has to convey, some gentle, others harsh and violent, ought to be able to form some harsh sounds. The terminations or the word to each word. It is very seldom that combinations of difficult consonants are to be found in the Slavonic idioms, and these may be softened by the freedom of construction which the language allows. The euphony of the language is also the reason why the Bohemian takes a rank in music inferior only to that of the Italian. Throughout Europe, Bohemian musicians are to be found: the distinguished musicians of Austria are mostly from Bohemia. Taste and feeling for music almost always keep pace with the melody of the language of a nation.

Bohemian Literature has five periods. The first extends from the mythological times to 1400. It is certain, that, among the Slavonian tribes, the Czechi were the first who cultivated and fixed their language. (See Slavonians and Slavonic Language.) It affords no written documents of remote antiquity, unless we believe the Runic characters to have been in use before the introduction of Christianity. We know, however, that the language of that period was similar to the present, from the names of the gods, dukes, rivers, cities, mountains, which have been preserved, such as Perun, Premysl, Boiroweg, Witava, Bila, Praha, Tetin, Koronska. The Slavonian apsztle Method, and the philosopher Constantine, called Cyril, made the Slavonic in Moravia acquainted with Christianity. From thence it penetrated, under duke Boiroweg, to Bohemia, and thus the people of this country received the Slavonic ritual in the year 845. The same Constantine invented for the sounds of the Slavonic language the Cyrillic-Slavonic alphabet—Az, Buky, Wiedi, Glagol, Dobro, &c., borrowed mostly from the Greek. In later times, the Glagolitic alphabet sprung up, of which, however, less use was made. When the Latin church supplanted the Greek in Moravia, Bohemia and Pannonia, the Latin alphabet came also into use, instead of the Cyrillic. In Bohemia, the Cyrillic character was in use only with the monks of Szarzawa, who observed the Slavonic ritual. King Wratiska, intending to introduce it again in other places, and asking the permission of pope Gregory VII, received a refusal. As the Latins endeav-
BOHEMIAN LITERATURE.

161

cred to annihilate all the writings of the old ritual, and the Slavonic language was, in many cases, obliged to give way to the Latin. Bohemian literature suffered from poverty incalculable injury; hence we possess, from the earlier centuries, but a few insignificant remains in the characters above mentioned. In the 10th century, the Bohemians had a school at Kudet, in which they learnt Latin. Their most ancient relic is the hymn (Hospodinae Fonsigne) of Bishop Adalbert (Wettech), a monument of a school which survived to the present day, even by the Russians and Poles. Some think it of still greater antiquity. From the 11th century, we have no complete works; but, in Latin documents, Slavonic names are frequently found. The 12th and 13th centuries were more fertile. When king Wenceslaus issued the summons for the renowned expedition to Milan, all Prague resounded with the songs of the valiant young knights; but none of them has been preserved. Závis Z. Roznerberka wrote, in 1230, several good poems. The Bohe- 

mian language and nation. The

mian nobility of those times not only

learned the word of God. The Bohemian nobility of these times not only wielded with a vigorous arm the national songs worthy of particular attention. They deserve, perhaps, to be placed by the side of Ossian's poems. A Bohemian psalter, and a legend, in rhyme, on the 12 apostles (the latter only a fragment of 70 verses, at Vienna), have also been preserved; likewise, the Complaint of a Lover on the Banks of the Muldau (Weltava), in prose; a fragment of a history of the passion of Jesus, in verse; the hymn Sexta Vespae; besides a number of poems, songs, fables and satires, in verses of four feet, also in rhyme. The 14th century is more productive. Under the emperor Charles IV, who promoted the cultivation of the Bohemian language, the university of Prague was founded, in 1348. In the golden hall, he commanded the sons of the German electors to learn the Bohemian language. Under his son, the emperor Wenceslaus, all decrees were written in Bohemia, which formerly were written in Latin. Prague was then not only the most populous city in Germany, but also, on account of its splendid court and the wealth of its citizens, the centre of the arts and sciences. Bohemian Mezericky wrote a history of Bohemia in verse; Ondreg Z. Dube, a collection of Bohemian laws, in 3 vols.; Wazinac Z. Brezova, a history of the Roman emperors, and translated Myndeville's Travels; Prinak Pulkawa, a Bohemian history; and Benes Z. Horowic, a history of the empire to the time of Wenzel. This period affords, also, many vocabularies, poems and songs; also a description of the life of Alexander the Great; the life of the emperor and king Charles IV; the description of the heroic feats of Plichta of Zerotin, and of the battle of Cresey, in 1346, and an account of the death of king John, which celebrates his fame and that of the other Bohemian heroes; a description of the tournament in 1345; the expedition of king John against count Matthias of Trenzcin, &c.—With Huss commenced the second period, from 1409 to 1500, which elevated the character of the Bohemian language and nation. The assembled fathers at Constance and Bile beheld with astonishment among the Bohemian nobility and citizens, men not only distinguished for their iniquity, but able, also, to explain with profound learning the word of God. The prevalence of religious disputes caused the Bible to be generally read and understood. Aneas Sylvius, then pope, says, "Pudet Latine aedicta, quas ne vadam milium noveam legem conata legisse, apud Taborum vir milicercum inveni, quis
de Novo Testamento et veri respondere merit. (Com. in Diet. Alph. Reg., sec. 17.) Huss of Hussinotz translated Wickliff's book Triologus into the Bohemian tongue, and sent it to the laymen as presents. The treatise of the six errors he caused to be inscribed, in Bohemian, on the walls of the chapel of Beth-lehem. He wrote his first collection of sermons when at the castle of Kozy (1413), besides an appeal to the pope, a commentary on the ten commandments, an explanation of the twelve articles, two sermons on the Antichrist, the Triple Cord, and several excellent hymns. His letters from the dungeon in Constance to the Bohemians were translated by Luther into Latin, accompanied with a preface, and printed at Wittenberg in 1536. He, and Jakobellus and Jerome, improved and distributed the Bohemian Bible, of which several copies have been preserved to our times. How many of his works perished by the hands of the Jesuits is unknown. The cruel execution of the Bohemian martyrs Huss and Jerome, for their faith, was considered by their countrymen as an outrage upon the whole nation, of which they complained bitterly; many satires, also, were written at that time. Of Zisca of Trecnow, one of the greatest generals in history, several letters, and his rules of war, have been preserved. From this period, there have come down to us, also, several war-songs of the Taborites; as: *Kdo gozbo Bej kogunery a zakone zboh* (Who are you, warriors of God and of his law), &c.; *Nuz masnevo poskotkyte* (Well now, ye monks, be chaste), &c.; also some songs of Prague. Martin Lučić took notes, with the assistance of some learned men, the labor of translating the whole New Testament, and rendered it, in many places, more correct and plain. The church-service was now performed entirely in the Bohemian language. The bishop of the Taborites, Nicholas of Pelhrimov, wrote a Bohemian and Latin theological tract. Kristan Pracelatsky wrote a book on medicine; Martin Kalatnik, a Journey to Jerusalem; P. Prespold, the mining laws of Kuttenberg and Iglaw, which have since become so famous. Johann Rokycana, H. Litomericky, W. Koranda and others wrote different works on religious subjects. P. Chelicky gave an explanation of the Lessons of the Gospel for every Sunday; wrote the Net of Faith (Sít Hřež), a discourse on the 10th chapter of Revelation, of the beast and its image (O Šinu a Obrazu Gřejm), and an essay on the love of God. The most famous book of his was one in 40 chapters, which he called Kopyla (Last). Many controversial writings of this period might be mentioned. Bolmslaw of Seclivie wrote the work *Zrcadlo uzrko Krestanstva* (Mirror of the whole of Christianity). In this, the difference between the conduct of the apostles and of the Roman bishops is represented by various drawings. Two other drawings represent Huss preaching, and at the stake; besides 16 leaves, upon which the life and the letters of Huss are contained. After two pictures, of which one represents the worship of the Hussites, the other the expedition of the Taborites, comes a satirical letter of Lucifer: another plate represents the blind hero Zisca at the head of his army, under which there are quotations from the Taborite war-song, *Neprišel se mladýk ze- Ně­rište se zmišastaranýme* (Fear not the foes—Stop not for plundering); besides a dialogue, in which the father tells his son how the cup and the law of God had been introduced into Bohemia. The whole consists of 118 leaves, of which 88 have pictures. Sibor of Cimborg and Towacow wrote the very ingenious work on the possessions of the clergy, which he dedicated to king George, in 1457, and the collection of the rights and privileges of the margraviate of Moravia. Walcowsky Z. Knezmosta wrote on the vices and hypocrisy of the clergy; P. Zdek wrote, in 3 vols., the Art of Governing, 1471 (Zprawa Kralowska). The first volume treats of the duties of a king with regard to the public welfare; the second, on his personal behavior; the third is a general view of history, from the beginning of the world to the time of the author, wherein frequent hints are given, as to what a king should do, and what avoid. William Cornelius of Weshrd wrote nine books on the laws, judiciary offices and the register of lands in Bohemia. King George was the author of an ordinance respecting measures, money, weights, &c.; V. Mladicnovic, who, when notary at Constance, was an eye-witness of the execution of Huss, wrote an account of his life. This used to be read in the Bohemian churches. Procopius continued the rhyming chronicles of Dalemi. J. Luckowic related his Journey to the Holy Sepulchre. Saxe of Mezylor wrote Notes and Travels through Germany, England, France, Spain, Portugal and Italy, of the Bohemian baron Loew of Rozminal and Vlatna (whom he accompanied); a contribution
to our knowledge of the manners of the 15th century, which was published by Jos. Edm. Horky, in a German translation printed at Brünn, 1621. M. Gallus, Albjk, Chrislan, Zidek, J. Cerny, J. Blower and Sindel, wrote on medicine, astrology and agriculture. As early as 1447, we have an anonymous work on the grafting of trees. We have also the translation of the fables of Esop, the rhyming legend of the 10,000 knights, in prose and verse, in 3 vols. (Placc Rada). Each lesson, which flows in rhyme from the mouths of the animals, is preceded by the moral.

It was printed three times in the Bohemian language, and published at Cracow in Latin verse, 1531, 4to. There is, likewise, a satire, in 132 verses, on the persecution of the priests of the Taborites; the Maltraum of Hynek of Podiebrad, the younger son of king George; besides several vocabularies and romances, among which is Tzakofceck, which has been published at Vienna, in a German translation. Of the Bible, 14 translations have come down to us, besides 10 of the New Testament. The oldest, of the year 1463, is in Dresden. The typographic art made a rapid progress in Bohemia. The first printed work was the epistle of Huss from Constance, in 1453; the second, the Trojan War, in 1468; the third, a New Testament, in 1474; the whole Bible, in 1488; the first almanac, in 1489. The third age, from 1500 to 1620, may be called the golden age of Bohemian literature. During those dreadful tumults, in which, not only in this kingdom, but also in the neighboring countries, populous cities became heaps of ashes, and innumerable villages entirely disappeared, the peculiar inclination of the nation to investigation, and their predilection for science and art, developed themselves. The cultivation of learning—in other countries, with only a few exceptions, the monopoly of the clergy—was, in this favored land, open to the whole nation. All branches of science were elaborated, and brought to an uncommonly high degree of improvement for that time. The purpose of this work does not allow us to enumerate all the authors of this age, since, under Rudolph II alone, there were more than 150. Gregory Hruby of Geleni translated the work of Petrarch, De Remediis utriusque Fortunae; John Amos Comenius wrote the Exhortation of Isocrates to Demonicos. The투 authors of this age, since, under Rudolph II alone, there were more than 150. Gregory Hruby of Geleni translated the work of Petrarch, De Remediis utriusque Fortunae; John Amos Comenius wrote the Exhortation of Isocrates to Demonicos. The
Bohemia, Moravia and Hungary, a number of books, mostly new editions. Some Bohemians, who observed the decay of their language, strove to remedy it; as Pesina Z. Cechordu; Joh. Beckowsky, who continued the Bohemian history to 1620; W. Weseley, who wrote a work on geometry and trigonometry, &c. ; but the decay was too great to admit of being checked. The nobility had become strangers, and the government encouraged only German literature. From this time, therefore, the Bohemians wrote more in the German language. — In the fifth period, from 1774 to 1836, a new ray of hope shone on Bohemian literature; when, under the emperor Joseph II, a deputation of secret Bohemian Protestants, trusting in his liberal views, made him acquainted with the great number of their brethren of the same faith. He perceived the necessity of introducing toleration, and hundreds of thousands of Protestants, in Bohemia and Moravia, came to light: their concealed works were printed anew, their classical language was again acknowledged and cultivated. This is done still more under the present government, who perceive the necessity and utility of the Slavonian language, which, in the Austrian states, is spoken by 14,000,000 people, a fourth of which the Bohemian is the written dialect. Under this protection, many men of merit, mindful of the fame of their ancestors, have endeavored to cultivate anew all branches of the sciences, and to reach, if possible, their more advanced neighbors. In particular, the members of the Bohemian society of sciences, of the national museum, and of other patriotic societies, above all, count Kollowrath-Liebestinsky and count Caspar of Sternberg, deserve to be named with high respect. — The Bohemian has natural talents for mathematics, as Copernicus, Vega, Strnad, Wydra, Litrow, &c., may prove. The corps of Austrian artillery, which are recruited in Bohemia and Moravia, have always contained men distinguished for acquaintance with this science. In philology and music, the Bohemians are likewise eminent. The teacher of Mozart was Kriek, a Bohemian. Recently, Adlbert Schedezek, canon of a chapter of the Premonstratensian, has distinguished himself by physical and mathematical compendiums in the Bohemian language. — Compare the Vollständige Böhmishe Literatur of professor Jungmann (Prague, 1825, 2 vols.).

Boiardo, Matteo Maria, count of Scandiano, was born at a seat belonging to his family near Ferrara, in 1434. From 1488 to 1494, the period of his death, he was commander of the city and castle of Reggio, in the service of his protector, Ercole d’Este, duke of Modena. His accomplished courtier, scholar and knight was particularly distinguished as a poet. His Orlando Innamorato (Scandiano, 1496) is continued to the 70th canto, but not completed. He immortalized the names of his own peasants, and the charms of the scenery at Scandiano, in the persons of his heroes and his descriptions of the beauties of nature. In language and versification, he has been surpassed by Ariosto, whom he equalled in invention, grace, and skilful conduct of complicated episodes. Dominichi, Berni and Agostini new modelled and continued the work of B. without improving it. One continuation, only, will never be forgotten—the immortal Orlando of Ariosto. In some of his works, B. was led, by the spirit of his times, to a close imitation of the ancients; e. g., in his Capitoli; also, in a comedy borrowed from Lucian’s Tithon; and in his Latin eclogues and translations of Herodotus and Apuleius. In his sonnets and canzoni (first printed at Reggio, 1499), he has displayed great talents as a lyric poet.

Boil: to heat a fluid until it bubbles and becomes changed into vapor. If the requisite heat is applied a sufficient time, bubbles continually arise, until the fluid is entirely consumed. A singular circumstance is to be remarked, that the fluid, in open vessels, when it has once begun to boil, receives no increase of heat, even from the hottest fire. The reason is this, that the additional caloric goes to form steam, and ascends with it into the air. The steam itself, when formed, may be raised to a much higher degree of temperature. During the period of boiling, the surface of the fluid exhibits a violent undulating motion, and the stratum of air immediately over it is filled with vapor. The noise which accompanies boiling, arises, without doubt, from the displacing of the steam-bubbles, and varies very much with the nature and situation of the vessel. The vaporization of fluids is, very probably, nothing more than a mechanical union of caloric with the fluid. The degree of heat at which different fluids boil is very different. Spirits boil at the lowest temperature; pure water next; at a still higher temperature, the fixed oils. The degree of heat at which a fluid boils is called its boiling point.
This is used as one of the fixed points in the graduation of thermometers. This point is uniform only in case of complete boiling, and under a uniform pressure of the atmosphere. The influence of this pressure appears from experiments. In an exhausted receiver, the heat of the atmosphere. The influence of this boiling, and under a uniform pressure of 30 inches of mercury, water, therefore, would boil in a vacuum at 67° above zero. In a reduced vessel, where the confinement prevents evaporation, it may be heated to 300 or 400 degrees without boiling. Under the common pressure of the atmosphere, the boiling point of rain-water is 212° Fahrenheit; that of alcohol, 174°; that of mercury, 660°; that of ether, 98°. From the experiments of Prof. Robinson, it appears, that, in a vacuum, all liquids boil about 145° lower than in the open air, under a pressure of 30 inches of mercury; water, therefore, would boil in a vacuum at 67°. Ether may be made to boil at the common temperature, by merely exhausting the air from the vessel in which it is contained.

Boileau, Despréaux Nicholas, born in 1678, at Écouen, near Paris, commenced his studies in the collège d'Harcourt, and continued them in the collège de Beauvais. Even in his early youth, he read with ardor the great poets of antiquity, and tried his own powers in a tragedy, though with little success. After having completed his academical studies, he entered upon the career of the law; but soon left it from disinclination, tried some other pursuits, and resolved, finally, to devote himself entirely to belles-lettres. His first satire, Les adieux à Paris, made known his talents. In 1693, he published seven satires, with an introduction, addressed to the king. They met with extraordinary applause; for no one, before him, had written with such elegance of versification. But in this, and in the purity of his language, and the clearness with which he sets forth his luminous principles, consists their chief merit; novel, profound, original ideas, should look for in vain, though the pieces are not destitute of graceful touches and delicate strokes. They are unequal in merit. The satires Sur l'Époque and Sur l'Homme have undeniable defects. That on Women, which he wrote at a more advanced age, is monotonous, and deficient in humor. His epistles, in which he is the successful rival of Horace, are more esteemed at the present day. They display a graceful versification, a natural and sustained style, vigorous and well connected ideas. These were followed by his Art Poétique, in which he describes, with precision and taste, all the different kinds of poetry (with the exception of the apologue), and lays down rules for them. In regularity of plan, happy transitions, and continual elegance of style, this poem is superior to the Ars Poetica of Horace.

It was long regarded, not only in France, but also in foreign countries, as a poetical code, and has every where had a favorable influence, as it inculcates purity and regularity, and subjects all the productions of poetical genius to a fixed standard. B.'s censures of Tasso and Quinault, with some other equally unfounded opinions, display a narrowness of spirit. He had many opponents, who accused him of want of fertility, invention and variety. To refute them, he wrote his Lutrin, a mock-heroic poem, which is still unrivalled in the eyes of the French. A music-stand, which had been removed from its place, had occasioned dissensions in a chapter: this is the subject of B.'s poem, in which his art of making petty details interesting deserves as much praise as the other excellences of his poetry already enumerated. In his life, B. was amiable and generous. Louis XIV gave him the place of historiographer, in connexion with Racine. As he had attacked the academicians in several of his writings, he was not received into their society until 1684, and then only by the interference of the king. He died in 1711, of the dropsy. M. de St. Surin has published Oeuvres de Boileau, with a commentary, Paris, 1824, 4 vols. The first volume of Daunou's (member of the institute) Oeuvres complètes de Boileau, with a literary and historical commentary, appeared in Paris, 1833.

Boiler. (See Steam and Steam Engine.)

Bois-le-Duc (the French name for the Dutch Herbergdorp, also Bois or Bosch); a fortified city in the province of North Brabant, in the kingdom of the Netherlands, with 3770 houses and 13,300 inhabitants, at the confluence of the Dommela and the Aa, which form, by their junction, the Dijle. Lon. 5° 16' E.; lat. 51° 49' N. It has many manufactories, and much trade in corn, some salt-works, a lyceum, 10 Catholic churches, 4 Calvinist, 1 Lutheran. Godfrey, duke of Brabant, founded this important military post in 1184. The fortifications now consist of strong walls and seven bastions, but it owes its security, chiefly, to the facility with which the whole country around can be laid under water (the new
canal to Maestricht has 16 sluices). It is defended by several forts and a citadel. The city has four gates, and three entrances from the water. The cathedral is one of the finest in the Netherlands. The city suffered much in the religious wars of the 16th century, and fell into the hands of the Dutch in 1529. Sept. 14, 1793, the French defeated the English here; Oct. 9 of the same year, it surrendered to Pichegru. In January, 1814, it was taken by the Prussian general Bülow.

Boissere. A celebrated gallery of pictures is exhibited in Stuttgart, which was collected by the brothers Sulpius and Melchior Boissere, and John Bertram, men who, animated by love of the arts, began, at the time of the destruction of the monasteries, during and after the French revolution, to purchase old pictures, and afterwards completed their collection by the addition of many valuable paintings of the old German school. By this collection, the brothers Boissere, and Bertram, have happily realized the idea of a historical series of old German paintings. It is to their endeavors that we owe the discovery, that Germany possessed, as early as the 13th century, a school of painters of much merit, which, like the Italian, proceeded from the old Byzantine school, but became, in the sequel, distinguished by excellences of its own. We owe these collectors, also, the restoration to favor of the forgotten Low German masters, and a just estimation of John von Eyck, as the creator of the genuine German style of painting. By this collection, the museums of von Eyck, Willem van Koln, Hemling, Goeis, Mec kenc, Wohlgemuth, Schoen, Mabuse, Schoorl, and many others, have attained deserved honor. The most distinguished connoisseurs and artists, including Gottle, Canova, Dannecker and Thorwaldsen, have strongly expressed their admiration of this collection. The proprietors are publishing a work consisting of excellent litographic prints from their pictures. In the autumn of 1820, the publication of the splendid engravings, illustrative of the cathedral in Cologne, was resolved on. The plates surpass, in size and execution, every thing which had appeared in the department of architectural delineations, and were partly made in Paris. (See Boissere's Geschichte und Beschreibung des Doms von Koln, Stuttgart, 1823.)

Boismande, Jean Francois, born at Paris, 1774, one of the most distinguished Greek scholars in France, was made assistant professor of the Greek language in the university of Paris, in 1809; and, in 1812, after the death of Larcher, whom he succeeded in the institute, principal professor. The king made him a member of the legion of honor in 1814, and, in 1816, member of the academy of inscriptions. Besides valuable contributions to the Journal des Debats, to the Mercure, to the Magazin Encyclopédique, to the Biographie Universelle, and to the Notices et Extraits (10 vols.), we are indebted to him for an edition of the Heroica of Philocratus (1806), and of the Rhetoric of Tiberius (1815). Still more important are his editions of Eunanus' Lives of the Sophists, of Proclus' Commentary on the Cratylus of Plato, never before printed; of a Greek romance by Nicetas Eugenianus, &c. He compiled, also, a French dictionary, on the plan of Johnson's.

BojacA, Battle of, so called, from having been fought near the bridge of the small town of BojacA, not far from the city of Tunja, between the Spaniards, under Barreyro, and the united forces of Venezuela and New Grenada, commanded by Bolivar. It occurred August 7th, 1819, and was decisive of the independence of New Grenada. Among the republicans, generals Anzunegui, Paez and Santander distinguished themselves; and the Spaniards sustained a total defeat, their general, most of their officers and men who survived the battle, together with all their arms, ammunition and equipments, falling into the hands of Bolivar. So complete was the destruction of the Spanish army, that the viceroy instantly fled from Santa Fé, leaving even the public treasure a prey to the conquerors.

Bolue, or Bolen, Anne, second wife of Henry VIII of England, was the youngest child of Sir Thomas Boleyn and a daughter of the duke of Norfolk. She was born, according to some accounts, in 1507, but, according to other more probable ones, in 1499 or 1500. She attended Mary, sister of Henry, on her marriage with Louis XII, to France, as lady of honor. On the return of that princess, after the king's death, she entered the service of queen Claude, wife of Francis I, and, after her death, that of the duchess...
of Alençon, sister of the French king. Young, beautiful, gay and witty, she was an object of great attraction in the gallant court of Francis I. She returned to England about 1525 or 1527, and became lady of honor to the queen, whom she soon supplanted. The king passionately enamored of her, found an unexpected opposition to his wishes, and Anne firmly declared that she could be had on no terms but those of marriage. She knew that the king already meditated a divorce from his wife, Catharine of Aragon; but she also knew what difficulties the Catholic religion opposed to the execution of this plan. Cranmer offered his services to bring about the accomplishment of the king's wishes, and thus gave the first occasion to the separation of England from the Roman church. But the impetuous Henry did not wait for the ministers of his new religion to confirm his divorce; on the contrary, he privately married Anne, Nov. 14, 1532, having previously created her marchioness of Pembroke. When her pregnancy revealed the secret, Cranmer declared the first marriage void, and the second valid, and Anne was crowned queen at Westminster, with unparalleled splendor. In 1533, she became the mother of the famous Elizabeth. She could not, however, retain the affection of the king, as inconstant as he was tyrannical; and, as she had supplanted her queen, while lady of honor to Catharine, she was now supplanted herself by Jane Seymour, her own lady of honor. Suspicion of infidelity were added to the disgust of Henry, which seem to be not entirely unfounded, although the judicial process instituted against her was wholly irregular. In 1535, she was imprisoned, accused, and brought before a jury of peers. Spweton, a musician, who was arrested with others, confessed that he had enjoyed the queen's favors, and, May 17, 1535, she was condemned to death by 28 judges. Anne in vain affirmed that she had long before been contracted to the duke of Northumberland, and, therefore, had never been the lawful wife of Henry. Cranmer in vain declared the marriage void. The sentence of death was executed by the command of the inflexible Henry, who esteemed it a great exercise of clemency to substitute the scaffold for the stake. The last day of the life of this unhappy woman, May 19, 1536, presents many interesting moments. She sent for the wife of the lieutenant of the Tower, threw herself upon her knees before her, and said, "Go to the princess Mary (daughter of Catharine) in my name, and, in this position, beg her forgiveness for all the sufferings I have drawn upon her and her mother." "She sent her last message to the king," says Hume, "and acknowledged the obligations which she owed him, and whose endeavors for her advancement." "From a private gentlewoman, you have made me, first, a marchioness, then a queen; and, as you can raise me no higher in this world, you are now sending me to be a saint in heaven." BOLINGBROKE, Henry St. John, viscount, born in 1672, at Battersea, near London, of an ancient family, the members of which had distinguished themselves in military and civil offices, received an education adapted to his rank, and completed his studies at Oxford, where he early exhibited uncommon talents, and attracted general attention. On entering the world, he displayed a rare union of brilliant parts and elegance of manners, with beauty of person, dignity and airability, and such fascinating eloquence, that, according to the unanimous testimony of his contemporaries, nobody could resist him. Unfortunately, the passions of his youth opposed the development of his talents; and, in his 23d year, he was distinguished principally as an accomplished libertine. His parents, supposing that marriage would have a salutary influence upon him, proposed to him a lady, the heiress of a million, who united with a charming figure a cultivated mind and noble birth. But the young couple had lived but a short time together, when irreconcilable disputes arose between them, in consequence of which they separated for ever. Another plan was adopted to give a better direction to the impetuous character of B. By the influence of his father, he obtained a seat in the house of commons. Here his eloquence, his sweetness, and the strength of his judgment, attracted universal attention. His former idleness was changed at once into the most incessant activity. In 1704, he was made secretary of war, and came into immediate connexion with the duke of Marlborough, whose talents he discerned, and whose enterprises he supported with all his influence. When, however, the whigs gained the ascendency, B. gave in his resignation. Now, allowed as he said himself, the two most active years of his life, in which he devoted himself to study, but by no means neglected public affairs. He continued to maintain a constant intercourse with the queen, who preferred him to her other counselors.
The whig ministry was overthrown, to the astonishment of all Europe; and B. received the department of foreign affairs, in which post he concluded the peace of Utrecht, of which he was always proud, and which gained him general admiration. In concluding this peace, everything was unfavorable to him—the whigs, the peers, the bank, the East India society, Marlborough, Eugene, the emperors, Holland, the jealousy of all the European powers, the weakness of his own queen, the irresolution, imprudence, and even the envy of his colleagues. In every thing was unfavorable to him—the whigs, the peers, the bank, the East India society, Marlborough, Eugene, the emperors, Holland, the jealousy of all the European powers, the weakness of his own queen, the irresolution, imprudence, and even the envy of his colleagues.

But, when the death of Anne changed the whole scene. George I of Hanover ascended the throne, and the whigs triumphed more completely than ever. B., who could not impose on the Hanoverian court by his plausible pretences, and who was as much envied as he was hated, was dismissed by king George, while yet in Germany, and fled to France. On his return, he lived at first in the country, maintaining, however, a correspondence with Swift and Pope. But no sooner was the voice of opposition heard in parliament, than he hastened to London, and, as the restoration of his seat in the house of lords was still denied him, attacked the ministry during eight years, in the journals or pamphlets, with great success. He drew upon himself powerful enemies, against whom he directed his Treatise on Parties, which is considered as his masterpiece. He then returned to France, with the intention, as even Swift supposed, of throwing himself into the arms of the Pretender's party, against which charge Pope defended him, and declared that he had himself advised his noble friend to leave an ungrateful country, by which he was suspected and persecuted. In France, B. wrote, 1735, his Letters upon History, which are admired even at the present day, but in which the individual character of the author appears to the exclusion of general views, and which were blamed, in particular, for attacking revealed religion, which he had once warmly defended. In 1729, in the midst of his contest with Walpole, he had suggested to Pope his Essay on Man, assisted him in the composition, and supplied him with the most important materials. His feelings finally carried him back to his country, where he wrote, 1735, his Idea of a Patriot King, under the eyes of the heir apparent. He died in 1751, in his 80th year, after a long and dreadful disease, during which he composed Considerations on the State of the Nation. He bequeathed his manuscripts to the Scotch poet Mallet, who published them in 1753; but scarcely had they appeared, when a general cry was raised against them, on account of their
BOLINGBROKE—BOLIVAR.

169

Bolivar, Simon, the great military captain of South America, and the most prominent individual yet produced by the revolution in the late Spanish colonies, was born in the city of Caracas, July 24, 1783. His father was don Juan Vicente Bolivar y Ponte, and his mother, doña Maria Concepcion Palacios y Sojo, both of noble and distinguished families in Venezuela. After acquiring the first elements of a liberal education at home, B. repaired to Europe, in pursuit of more extended means of gaining knowledge, visiting Havana and Mexico on his way. He completed his studies in Madrid, and then spent some time in travelling, chiefly in the south of Europe. He was particularly attracted to the capital of France, where he was an eye-witness of some of the later events of the revolution, and there, probably, conceived the idea of liberating his country from the tyranny of Spain. Returning to Madrid, he married the daughter of don N. Toro, uncle of this, he married the daughter of don N. Toro, uncle of the marquis of Toro, in Caracas, and embarked with her for America, intending to dedicate himself, for a while, to domestic life and the superintendence of his large estate. But the premature and sudden death of his wife, who fell a victim to the yellow fever, dispelled his visions of domestic happiness; and he again visited Europe as a relief to his sorrow for her loss. On his return home, he passed through the U. States; and the lesson of liberty was not without its fruits; for, on his arrival in Venezuela, he embarked in the plans and intrigues of the patriots, and pledged himself to the cause of independence. Being one of the chief promoters of the movement in Caracas of April 19, 1810, which is considered as the beginning of the revolution, he received a colonel's commission from the supreme junta then established, and was associated with don Luis Lopez Mendez, for the purpose of communicating intelligence of the change of government to Great Britain. He took part in the first military operations of the Venezuelan patriots after the declaration of independence, July 5, 1811, serving under Miranda in an expedition against a body of persons in Valencia, who thus early took a stand opposed to the revolution. After the earthquake of March, 1812, the war was commenced in earnest by the advance of Monteverde with the Spanish troops; and the command of the important post of Puerto Cabello was intrusted to B. But, unfortunately, the Spanish prisoners in the castle of San Felipe, which commanded the town, corrupted one of the patriot officers, and obtained possession of the castle; so that B. was compelled to evacuate the place. This mishap contributed greatly to produce the submission of Miranda, which left Venezuela in the full control of Monteverde. Many of those persons, who were deeply committed in the revolution, now sought to leave their country; and B. succeeded in obtaining a passport and escaping to Curaçao. Unable, however, to remain a cold spectator of the events occurring on the continent, he repaired to Carthagena, in September, 1812, and, with other emigrants from Caracas, entered into the service of the patriots of New Grenada. They gave him the command in the small town of Baranca, nominally under the orders of Labatut, the republican governor of Santa Marta; but B. could not be content with the obscure part which must have fallen to him had he remained at Baranca. Instead of this, he undertook an expedition against Teneriffe, a town higher up on the river Magdalena, occupied by the Spaniards, captured it, and, gathering forces on the way, he proceeded, on his own responsibility, to Mompox, driving the Spaniards before him from all their posts in the Upper Magdalena, and finally entering the city of Ocaña in triumph, amid the acclamations of the inhabitants, whom he delivered. These happy and successful movements now turned the public attention upon him; and he was invited to march upon Cucuta, and attempt to expel the Spanish division commanded by Correa. This operation, also, he achieved, without any loss, by the celerity and skill of his movements, and now conceived the great and bold project of invading Venezuela with his little army and delivering it from the powerful forces under Monteverde. The congress of New Grenada gratified him in this respect, and gave him a commission of brigadier; but many obstacles were thrown in his way by colonel Manuel Castillo, commandant-general, under the congress, in the prov-
ence of Pamplona, which led to an irreconcilable difference between them. At length, having overcome a multitude of difficulties which retarded his advance, and driven Correa from the valleys of Cucuta, he commenced his march for Venezuela, with a small force of but little more than 500 men, but accompanied by excellent officers, some of whom afterwards acquired great celebrity, such as Rivas, Jirardot, Urdaneta and d'Eluyar.—Needless of the accusations of rashness lavished on his enterprise, B. plunged into the province of Merida. The inhabitants of the provincial capital rose upon the Spaniards on learning the news of his approach. He hastily reestablished the republican authorities there, while his van-guard was proceeding upon Trujillo, under Jirardot. A single engagement took place in Carache, where Jirardot defeated a strong corps of royalists under Cañas, after which the provinces of Merida and Trujillo remained wholly free from the Spaniards. B. had detached from his troops a small body under colonel Briceno for the occupation of Varinas. Briceno was defeated; and, falling into the hands of the Spaniards, was shot in cold blood, with 17 of his companions, and many of the patriots of Varinas, by the Spanish commandant Fiscar. Meanwhile, B. obtained authentic intelligence of the horrid and shameless cruelties and oppressions every where perpetrated in Venezuela by Monteverde and his subordinate officers, analogous to the butcheries of Fiscar. Exasperated by the knowledge of these events, he issued the famous decree of guerra á muerte, condemning to death all the Spanish prisoners who might fall into his hands. But he is not of a cruel or sanguinary temper; and this decree seems to have been intended rather to intimidate the royalists than literally to be put in execution. His army increasing daily, he separated it into two divisions, committing one of them to the charge of Rivas, and both rapidly advanced upon Caracas through the provinces of Trujillo and Varinas. Several engagements ensued, in which the patriots were successful; and, at length, the decisive victory of La Puerta, near Cura, and compelled to embark for Cumana, with the shattered remnant of his forces; so that Caracas was retaken by the Spaniards in July, 1814, and, before the end of the year, the royalists were again undisputed masters of Venezuela. Once more, therefore, B. appeared in Carthagena as a fugitive, and proceeded to Tunja, where the congress of New Grenada was sitting, to give an account of his brilliant, but, in the result, disastrous expedition. Notwithstanding his misfortunes, and the efforts of his personal enemies, he was treated with great consideration, and received the applause merited by one who had needed only resources proportionate to his talents to have accomplished the permanent deliverance of his country.—When B. arrived at Tunja, the congress was organizing an expedition against the city of Bogota, for the purpose of compelling the province of Cundinamarca to accede to the general union of the provinces of New Grenada, and thus put an end to the collision which divided the means and crippled the exertions of the republicans. Every conciliatory measure having failed to effect a union of the provinces, the government had recourse to arms. B. was intrusted with the delicate task of commanding the forces of the union upon this occasion, and marched against Santa Fé early in December, 1814, at the head of nearly 2000 troops. He invested the city, drove in the outposts, obtained possession of the suburbs by storm, and was
preparing to assault the great square, where the dictator Alvarez and the troops of Cundinamarca were posted, when the latter capitulated, December 12, and became subject, thenceforth, to the general government of New Grenada, which was peaceably transferred to Bogotá. The congress passed a vote of thanks to B. for the wisdom and courage with which he had directed the campaign, and brought it so speedily to a happy termination; and the inhabitants of the city themselves expressed their gratitude to him in person. Previous to this time, Santa Marta had fallen into the possession of the royalists, in consequence of the incapacity of Labasté; and the general government justly appreciated the importance of regaining it. B. was accordingly employed upon this service, and was to receive the necessary munitions of war from the citadel of Carthagena; but the rivalry and jealousy of the military commandant Castilloyo, the origin of which we have already explained, defeated all his plans. Indignant at Castilloyo’s conduct in refusing him the requisite supplies, B., after the season for acting against Santa Marta to advantage had been wasted in ruinous delays, invested Carthagena with his troops, hoping to intimidate Castilloyo into submission, or, if not, to reduce him to reason by force. But, in the midst of these wretched dispositions, wherein both parties listened too much to resentment, Morillo arrived at the isle of Margarita with an overwhelming force from Spain; and B., aware that all further views upon Santa Marta were hopeless, threw up his command, and, finding that he could not usefully employed at Carthagena, embarked for Jamaica, in May, 1815, to wait for better times. He remained in Kingston most of the year, whilst Morillo was reducing Carthagena, and overrunning New Grenada. During his residence there, a hireling Spaniard made an attempt upon his life, and would have assassinated him, if it had not happened that another person occupied B.’s bed at the time, who was stabbed to the heart.

—From Kingston, B. repaired to Aux Cayes, the island of Hayti, and, assisted by private individuals, and with a small force furnished by Pétion, formed an expedition, in conjunction with commodore Boisseree Bezier, who had missed the standard of independence anew in the isle of Margarita. He arrived in safety at Margarita in May, 1816, and, sailing thence, landed on the main land near Cumaná, but, in a few months, was encountered by the Spaniards under Morales at Ocumare, and compelled to reembark. Nothing disheartened by this failure, he obtained reenforcements at Aux Cayes, and, in December, 1816, landed once more in Margarita. There he issued a proclamation convoking the representatives of Venezuela in a general congress; and from thence passed over to Barbados, where he organized a provisional government, and gathered forces to resist Morillo, who was approaching with a powerful division. They encountered each other on the 16th, 17th and 18th of February, in a desperate conflict, which ended in B.’s obtaining the victory. Morillo retreated in disorder, and was met and defeated anew by general Puey with his irresistible Llaneros. B., being now recognized as supreme chief, proceeded in his career of victory, and, before the close of the year 1817, had fixed his head-quarters at Angostura. The sanguinary battles of this period, in the most important of which he was engaged in person, belong rather to the history of Colombia (q. v.) than to B.’s own life. He found time, however, to preside at the opening of the congress of Angostura, February 15th, 1819, and to submit a long and elaborate exposition of his views of government. He also surrendered his authority into the hands of the congress, which required him to resume it, and to retain it until the independence of his country should be fully achieved. B. soon reorganized his forces and set out from Angostura, with the purpose of crossing the Cordilleras, and effecting a junction with general Santander, who commanded the republican forces in New Grenada, so that the united arms of the two republics might act with the greater efficiency. He succeeded, in July, 1819, in reaching Tunja, which city he entered after a battle on the neighboring heights, and, on the 7th of August, gained the great and splendid victory of Bojaca, which gave him immediate possession of Santa Fé and all New Grenada. The viceroy Samano fled precipitately before him; and he was enthusiastically welcomed in Santa Fé as a deliverer, appointed president and captain-general of the republic, and enabled by the new resources of men, money and munitions of war, which he found there, to prepare for the returning into Venezuela with an army sufficient to ensure the complete expulsion of the Spaniards. —B.’s entry into Angostura, after his glorious campaign in New Grenada, was a peculiar gratify—
ing and affecting spectacle. Its whole population hailed him as the liberator and father of his country. He embraced the favorable moment to obtain the fundamental law of December 17th, 1811, by which the republics of Venezuela and New Grenada were to be thenceforth united in a single state, under the presidency of B., and by the title of the republic of Colombia. Meanwhile, the seat of government was transferred provisionally to Rosario de Cucuta; and B. again took the field, at the head of the most formidable army that had been assembled by the independents. After a series of memorable advantages over the Spaniards, an armistice of six months was negotiated at Trujillo, between B. and Morillo, and subscribed November 25th, 1820. Morillo soon afterwards returned to Spain, leaving La Torre in command. At the termination of the armistice; B. made a great effort to finish the war by a decisive blow, and attained his object; and authorized to call into action all the resources of the country for its liberation. But, opposed and denounced by some of the factions which distracted Peru, he found himself under the necessity of returning to Trujillo, in Northern Peru, leaving Lima to be retaken by the Spaniards under Canterac.—At length, in June, 1824, the liberating army was completely organized, and soon after, taking the field, routed the vanguard of the enemy. B. was anxious for the opportunity of a decisive engagement, and, in fact, soon obtained a brilliant victory, August 6, on the plains of Junin. Leaving Sucre to follow the royalists in their retreat into Upper Peru, he repaired to Lima, to organize the government; and, during his absence from the army, Sucre gained the splendid victory of Ayacucho. Nothing was now held by the Spaniards in Peru but the castles of Callao; which Roldan maintained for upwards of a year, B. employing all the resources of the government for their reduction until January, 1825. In June, 1825, B. visited Upper Peru, which detached itself from the government of Buenos Ayres, and was formed into a new republic, named Bolivia, in honor of the liberator. The members of the congress of the new republic, assembled in August, 1825, seemed to vie with one another in extravagant resolutions, testifying their gratitude to B. and Sucre. The former was declared perpetual protector of the republic, and requested to prepare for it a constitution of government. Returning to Lima, he occupied himself in performing this task.—We touch now upon a period when B. appears in a new aspect. With his remarkable fertility in resources, his courage, conduct, and preeminent genius for the art of war, are all undeniable, and are proved not less by his brilliant success, than by the testimony of all the most competent judges. But he now comes before us in the capacity of a lawyer; and imputations on the party of his political views arise contemporaneously with his assuming the delicate task of consolidating the governments which his military prowess had created.—In December, 1824, B. issued a decree, convoking a constituent congress to assemble in Lima the ensuing February. This body
assembled accordingly; but, in consideration of the unsettled state of the country, resolved to continue the dictatorial powers of B. another year, without attempting to settle the government permanently. They also urged on B. a grant of a million of dollars, which he, with the liberality of feeling, and contempt of mercenary motives, which have invariably distinguished him, rejected. Congress soon adjourned, and B. remained sole and absolute governor of Peru. Residing partly at Lima, and partly at Magdalena, he directed the acts of the government, and, at this period, proposed the celebrated congress of Panama, for the purpose of establishing a stable alliance between all the independent states of America. Having completed his project of a constitution for Bolivia, he presented it to the congress of that state, with an address, dated May 35th, 1826, wherein he solemnly recorded his opinions of the form of government required by the new republics of the south. Of this famous code, an account will be found in the article Bolívar. It is enough to state here, that, among other features which alarmed the friends of liberty, the most exceptionable was a provision for lodging the executive authority of the president for life, without responsibility, and with power to nominate his successor. When the nature of this constitution became generally known in South America, it excited the liveliest apprehensions, especially among the republicans of Buenos Ayres and Chile, who feared, or pretended to fear, an invasion from B.; and not less in Peru, where he began to be accused of a design to unite permanently Colombia, Peru and Bolivia, and to make himself perpetual dictator of the same.—These imputations received countenance, at least, from the proceedings of B. himself. The surrender of Callao, by completely freeing Peru from the Spaniards, finished the business for which B., and the Colombian troops, had been called into the country. But he manifested no intention of departing, or of resigning his authority. On the contrary, when the deputies for the constituent congress of 1826 assembled, they saw fit, or were induced, for alleged irregularities in their appointment, and for other causes, to decline acting in their legislative capacity. A majority of the deputies published an address, in which they urged B. to continue at the helm another year, and, meantime, to consult the provinces individually as to the form of government which they might desire, and the person who should be placed at its head. Accordingly, circular letters, written in the name of B. and his council of government, and issued from the bureau of his minister Pando, were addressed to the several prefects of departments, commanding them to assemble the electoral colleges, and submit, for their sanction, a form of constitution precisely the same with the Bolivian code, only adapted to Peru. This constitution was adopted by the colleges, who also nominated B. president for life under it, with a unanimity too extraordinary not to have been the result either of intimidation or management. Before this time, however, events had transpired in Colombia, which demanded the presence of B. in his own country. During his absence, the vice-president, Santander, had administered the government with ability and uprightness. Colombia had been recognised by other countries as an independent state; its territory was divided into departments, and its government regularly organized. But, in April, 1826, general Paez, who commanded in Venezuela, being accused before the Colombian senate of arbitrary conduct in the enrolment of the citizens of Caracas in the militia, refused obedience to the summons of the senate, and placed himself in open rebellion to the national government and constitution. Taking advantage of this unhappy incident, the disaffected party in the ancient Venezuela, all those opposed to a central form of government, and all those opposed to the existing administrators of the government, united with Paez; and thus the northern departments became virtually separated for the time being, from the rest of the republic. But all professed a readiness to submit their grievances to the decision of B., and anxiously required his return to Colombia. While these movements were taking place in Venezuela, professedly with a view to obtain a federal, instead of a central form of government, various municipalities in the southern departments, formed from what had been the presidency of Quito, held public meetings, in which they voted to adopt the Bolivian code, and lodged the authority of dictator in the hands of B. Evidence has been adduced, showing that the latter proceedings were in accordance with the wishes of B., and that the meetings were actually summoned by the personal intervention of Leocadio Guzman, an emissary of his, who suggested the resolutions they...
should pass; and suspicions have not been wanting, that Paez was either incited, or sustained, by intimations received from the same quarter. On these things it would be premature now to decide. Certain it is, that, to all appearance, the central departments alone, answering to New Grenada, continued faithful to the constitution. These circumstances most imperiously demanded the presence of B., whether as the cause and object of the public distractions, or as the means of composing them. Accordingly, he set out from Lima in September, 1826, committing the government to a council of his own appointment, and responsible to him alone, with general Santa Cruz at its head, and leaving the whole of the Colombian auxiliary army in Peru and Bolivia. B. made all haste to reach Bogotá, which he entered Nov. 14, 1826, and, assuming the extraordinary powers which, by the constitution, the president is authorized to exercise in case of rebellion, he remained only a few days in the capital, and pressed on to stop the effusion of blood in Venezuela. He went, accompanied merely by a small escort, although forces were in readiness to sustain him if requisite, and all the demonstrations of insurrection vanished at his approach. He reached Puerto Cabello December 31st, and immediately issued a decree, dated Jan. 1, 1827, giving assurance of a general amnesty to the insurgents, on their peaceably submitting to his authority, and engaging to call a convention for the reform of the constitution. He had a friendly meeting with Paez, and, soon afterwards, entered Caracas, where he fixed his head quarters, having the northern departments under his immediate personal authority, and separated from the body of the republic, which proceeded in its ordinary routine. B. and Santander had respectively been re-elected to the offices of president and vice-president, and should have been qualified anew as such in January, 1827. But, in February, B. addressed a letter from Caracas to the president of the senate, renouncing the presidency of the republic, and expressing a determination to repel the imputations of ambition cast upon him, by retiring to seclusion upon his patrimonial estate. Santander, in reply, urged him to resume his station as constitutional president, convinced that the troubles and agitations of the country, if they were not occasioned by the intrigues of B. himself, might at any moment be quieted by his lending the authority of his name, and his personal influence, to the cause of the constitution. But distrust, suspicion and jealousy of the conduct and intentions of B. now filled all the friends of republican institutions. He had recorded his confession of political faith, to use his own expression, in the anti-republican Bolivian code, and he was believed to be anxious for its introduction into Colombia. When his renunciation of the presidency was submitted to the consideration of the congress, a portion of the members urged that body to accept the renunciation. They publicly accused him of being in concert with Paez; of having designedly thrown the whole nation into discord and confusion, in order to create a false impression of the necessity of bestowing upon himself the dictatorship. But a majority of the members insisted upon his retaining the presidency, and required his presence at Bogotá to take the constitutional oaths. Before he came, however, they had passed a decree of general amnesty; a decree for assembling a national convention at Ocaña, and a decree for re-establishing constitutional order throughout Colombia. His arrival was hastened by unexpected events, touching him personally, which had occurred in Peru and the southern departments. Not long after his departure from Lima, the returns of the electoral colleges were received by the council of government, by which the Bolivian code was pronounced to be the constitution of Peru, and B. the president for life. The constitution was accordingly promulgated officially, and was sworn to, by the public functionaries in Lima, Dec. 9, 1826, the anniversary of the victory of Ayacucho. At this time, the Colombian auxiliary army in Peru was cantoned in three divisions; one stationed in Upper Peru, and two in Lower Peru; one of these at Arequipa, and one in Lima. This third division consisted of veteran companions of B.'s triumphs, and was commanded by his personal friends, generals Lara and Sands. Notwithstanding the attachment of these troops to B., they had lately been growing distrustful of his designs; and, although they did not feel disposed, it would seem, to thwart his views upon Peru, they took fire immediately when they saw cause to believe that he had similar views upon their own native Colombia. The consequence was, that, in the short space of six weeks after the new constitution was solemnly adopted, they came forward, and revolutionized the government of Peru. So well were their measures taken, that, Jan. 23, 1827,
they arrested their general officers without any conflict or opposition; placed themselves under the command of Bustamante, one of their colonels; and announced to the inhabitants of Lima, that their sole object was to relieve the Peruvians from oppression, and to return home to protect their own country against the alleged ambitious schemes of B. The Peruvians immediately abjured the Bolivian code, deposed B.'s council of ministers, and proceeded, in perfect freedom, to organize a provisional government for themselves. Arrangements were speedily made, after this bloodless revolution was effected, to transport the third division to Guayaquil, according to their own desire. They embarked at Callao, March 17, and landed in the southern department of Colombia, in April, part of them proceeding for Guayaquil, and part for Cuenca and Quito, uniformly declaring their object to be the restoration of constitutional order, in opposition to any designs upon the republic entertained by B. Intelligence of these events reached B. while he was still in the north of Colombia. Rousing himself instantly from his long-continued inactivity, he made preparations for marching to the other extremity of the republic, and reducing the third division. But these troops, finding the government was in the hands of the regular national executive, had peaceably submitted to general Ovando, who was sent, by the constitutional authorities, for the purpose of taking the command. B. meanwhile signified his consent to be qualified as president, and proceeded, with this intent, to Bogota, where he arrived Sept. 10, took the oaths prescribed by the constitution and resumed the functions belonging to his official station. To external appearance, therefore, Colombia was restored to tranquility, under the rule of her constitutional magistrates. But the nation was divided between two great parties, and agitated to its centre by their opposite views of the political condition of the country. B. had regained the personal confidence of the soldiers and officers of the third division, who expressed the deepest repentance for their distrust of his character, and their entire devotion to his interests. But the republican party, and the friends of the constitution, with Santander at their head, continued to regard his ascendency over the army, and his political movements, with undisguised and not unfounded apprehension, universally accusing or suspecting him of a desire to emulate the career of Napoleon. They looked to the convention of Quito, which was to assemble in March, 1828, for a decided expression of the will of the nation in favor of the existing republican forms. The military, on the other hand, did not conceal their conviction that a stronger and more permanent form of government was necessary for the public welfare; that the people were unprepared for purely republican institutions, and that B. ought to be intrusted with discretionary power to administer the affairs of Colombia.—In 1828, B. assumed the supreme power in Colombia, by a decree, dated Bogota, Aug. 27, which gives him authority to maintain peace at home, and to defend the country against foreign invasions; to have the command of the land and sea forces; to negotiate with foreign powers; to make peace and declare war; to make treaties; to appoint the civil and military officers; to pass decrees, and ordinances of every description; to regulate the administration of justice, &c. The decree provides, however, that he is to be assisted in the exercise of executive power by the council of ministers. If B. is to be the Cæsar of South America, even his enemies admit that, like Cæsar, his purposes are ultimately good. He desires the pure administration of justice, encourages the arts and sciences, fosters all the great national interests, and, if he attains absolute power, will probably use it wisely and nobly. But it is premature to denominate him the Washington of the South, before it well appears whether the liberties of his country are safe from his ambition.—In his person, B. is described as being of ordinary stature; ungainly in his air and movements; thin and spare, but capable of great endurance; of an olive complexion, with black, coarse hair, thin in front; broad, bushy eye-brows overshadowing an eye somewhat sunken, but full of fire and expression. His intellect is undoubtedly of the highest order, and his general character of that ardent, lofty cast, which civil commotions are apt to form, and which qualifies its possessor to ride on the tempest. His ordinary state-papers do not bespeak a very pure taste, nor an understanding ever subjected to any well-directed cultivation, and are frequently conceived in language which even the lofty idiom of his vernacular tongue will hardly sanction. Being now only 46 years of age, he may have a long career of varied fortune yet before him, wherein he may do much, either to fill the friends of republican institutions with sorrow, or to build for himself a durable
Bolivar—Bolivia.

The monument of glory. (Restrepo's Colombia, vols. 3–6; Columbia, vol. 2; Am. Antiq. Register, vols. 1 and 2.)—There has lately appeared a work, entitled Memoirs of Simon Bolivar, and of his principal Generals, with an Introduction, &c., by general H. L. V. Ducoudray Holstein; Boston, 1829. The book is a violent philippic against B., and evidently colored too highly to be a safe authority. It does not become the biographer to adopt the views of a political partisan, nor to pronounce a decisive judgment until the career of his subject is closed.

Bolivia; the name of a country in South America. It is bounded N. by Peru, N. E. and E. by Brazil, S. by Buenos Ayres or the United Provinces of South America, and W. by the Pacific ocean and Peru. It is elevated and mountainous, giving rise to several large tributaries, both of the Amazon and La Plata. It includes lake Titicaca. It contains rich silver mines, of which those of Potosi, that were formerly very productive, are the most celebrated. The town of Chuquisaca, or La Plata, is the capital. Some of the other principal towns are Potosi, Charcas, Oropesa, Oruro, La Paz and Cochabamba. The population has been recently estimated at 1,000,000 or 1,200,000.

This republic dates its origin from the battle of Ayacucho, fought Dec. 9, 1824, in which general Antonio Jose de Sucre, at the head of the Colombian forces, defeated the viceroy La Serna, and insured the independence of the country. It consists of the provinces known under the Spanish government as Upper Peru, and then governed as a dependency of the viceregal of Buenos Ayres. Olaneta maintained a show of opposition for a short time after the battle of Ayacucho, but Sucre quickly drove him into the province of Salta, where his forces were dispersed by the Buenos Ayrean authorities in April, 1825. No obstacle now remained to prevent the organization of an independent government. A congress assembled at Chuquisaca, in August, 1825, and resolved to establish a separate republic, independent both of Lower Peru and of Buenos Ayres, to be named Bolivia, in honor of the liberator Bolivar. Among other testimonials of their gratitude towards him, they requested him to prepare the draft of a constitution for the republic, lodging the authority of president, meanwhile, in the hands of Sucre. Bolivar accordingly prepared the project of a constitution, which he presented to them May 25, 1826, accompanied by an address containing his general views upon the subject of government. By this code, the powers of government are distributed into four sections—the electoral, legislative, executive and judicial. The electoral body is composed of persons chosen, for a period of four years, by the citizens at large, at the rate of one elector for every hundred citizens. The legislative power resides in three chambers, the first of tribunes, the next of senators, and the highest of censors. The tribunes are to be chosen for a period of four years, half of the chamber being renewed every second year; and the senators for eight years, half of their body being renewed every fourth year. Between these two bodies, the ordinary duties of legislation are apportioned in a manner peculiarly artificial and inconvenient, together with various other functions of a judicial and executive character. The censors are for life, and their business is to watch over the government, to accuse the executive before the senate, to regulate the press, education, and the arts and sciences, to grant rewards for public services, and to denounce the enemies of the state. The executive power resides in a president for life, a vice-president and four secretaries. The president commands all the military and naval forces, and exercises the whole patronage of the government, nominating all the civil and military servants of the state, officers of the army, navy and treasury, foreign ministers, and the vice-president, who is to be his successor: he is, moreover, without any responsibility for the acts of his administration. The judicial power is regulated so as to secure the due administration of justice; and the private rights of individuals are carefully protected by suitable guarantees. This form of constitution, it is evident, would give the executive such preponderating power, that all the measures of government would, in fact, be subject to his will, and he would, to all intents and purposes, the elective prince of a monarchy, limited in theory, but absolute in operation.

This code was presented to the constituent congress of Bolivia, which assembled at Chuquisaca, in May, 1826, and by that body adopted as the constitution of the republic. The 9th of December, the anniversary of the battle of Ayacucho, being fixed upon as the period when it should be carried into effect, Sucre resigned his discretionary authority into the hands of congress, and solicited them to appoint a native of the country to be his successor. But they resolved
that he should retain the executive power
until the election of a constitutional presi-
dent should take place. Sucre consented to
continue in office until that time; re-
quiring, however, that the electoral col-
leges should present a candidate for the
high office of president, previous to the
assembly of the constitutional legisla-
ture. This resulted in the election of
Sucre as president for life under the con-
stitution. Whether the choice was en-
tirely a free one or not is yet uncertain.
A large body of Colombian troops went
in Upper Peru, under circum-
stances analogous to the situation of other
troops of the same nation in Lower Peru,
and of course, affording like reason to
assume that military influence may have
affected the election.—The geographical
position of B. being mostly inland, its po-
itical condition is less accurately known
than that of the neighboring countries, and
less an object of general interest. In the
natural progress of things, it would seem
likely to be reunited to Lower Peru,
from which it was arbitrarily severed by the
Spanish government. But hitherto the
congress of the Rio de la Plata has
refused to recognise its independence,
insisting that the limits of their republic
shall be coextensive with the ancient
boundaries of the viceroyalty of Buenos
Ayres, and, of course, claiming the prov-
ces of Upper Peru by the same title
under which they lay claim to Paraguay
and the Banda Oriental. But it is not
probable, in any event that can be rea-
nably anticipated, that Bolivia will again
be joined to Buenos Ayres. (Const. of
Bolivia; Amer. Ann. Reg. vols. 1 and 2.)

BOLLANDISTS; a society of Jesuists in
Antwerp, which has published, under the
title Acta Sanctorum (q. v.), the well-
known collection of the traditions of the
saints of the Roman Catholic church.
They received this name from John Bol-
lund, who first undertook to digest the
materials already accumulated by H einr i-
bert Roswey.

BOLLMAN, Erich, a man distinguished
for knowledge, character and enterprise,
born in 1770, at Hoya, in Hanover, went,
in 1792, to Paris, to practice as a physi-
cian. Here he saved Count Narbonne
from the Jacobins. In 1794, he resolved
to free Lafayette from his prison in Ol-
nutz. By his efforts, and those of Mr.
Hugcr, a gentleman belonging to the U.
States, Lafayette was enabled to quit his
dungeon, Nov. 8, but was unfortunately
retaken soon after. B. was cast into
prison, but after a while set at liberty, and

BOLIVIA—BOLOGNA. 177

bothered from the Austrian dominions.
He afterwards settled in the U. States,
and subsequently went to England.

BOLOMAX (Bononia Pileinis); one of
the oldest, largest and richest cities of
Italy, with colonnades along the sides of
the streets for foot-passengers. It is cal-
ced la grasse (the fat); lies at the foot of
the Apennines, between the rivers Reno
and Savenna, and contains 65,300 inhabi-
tants and 8000 houses, with manufactories
of cordage, soap, paper, artificial flowers
and arms. B. is the capital of the papal
departments the same name; the secular
concerns of which are administered by a
cardinal legate, who resides here; whilst
the archbishop directs in spiritual affairs.
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nus, Jacobus and Hugo attracted pupils from every quarter. The university formerly possessed so much influence, that even the coins of the city bore its motto, Bononia doct. The law school enjoyed the greatest fame. Its teachers had the reputation of inculcating principles favorable to despotism, and were consequently rewarded by the favor of the emperors and of the Italian sovereigns. During 1400 years, every new discovery in science and the arts found patrons here, and the scientific journals prove that curiosity on these subjects is still awake in B. A citizen of B. general count Fern. Marsigli, founded, in 1709, the istituto delle scienze, and gave it a library of almost 200,000 volumes; to which, in 1825, the abbate Mezzofanti, professor of Oriental languages, was appointed librarian. This learned man speaks a large number of living languages correctly and fluently (for instance, German, in several dialects, Russian, Hungarian, Walachian, the language of the Gipsies, &c.), without ever having left B. The foreign troops in Italy gave him opportunities for learning them.

Count Marsigli founded and endowed, also, an observatory, an anatomical hall, a botanical garden, and accumulated valuable collections for all branches of science and art. These are at present connected with the accademia Clementina of pope Clement XI. In the 16th century, the famous painters and sculptors Caracci, Guido Reni, Domenichino and Albano founded a school, to which their works have given great reputation. (See Painting.) There were, even as early as the 12th and 13th centuries, great painters in B. Francesco, called il Francia, was famous in the 15th century. The chief place of the city is adorned by several venerable buildings: among them are the steeple hall (which contains a number of excellent pictures and statues, and the 200 folio volumes of the famous natural philosopher Ulysses Aldrovandus, written with his own hand, as materials for future works), the palace of justice of the podesta, and the cathedral of St. Petronio, with its unfinished front and the meridian of Cassini drawn upon a copper plate in the floor. Among the 75 other churches, the following are distinguished: S. Pietro, S. Salvatore, S. Domenich, S. Giovanni in Monte, S. Giacomo maggiore, all possessed of rich treasures of art. The collections of works of art are numerous: they are part of rich family fortunes, transmitted in trust, and are continually increased by each generation. The galleries Sampieri and Zambecchini formerly excelled all others, but are now surpassed by those of Marescalchi and Ercole.

The collection of the academy of painting, endowed, in modern times, by the municipality, principally with the treasures of abolished churches and monasteries, is rich, and full of historical interest. The admired fountain of the market is deficient in nothing but water. It is adorned with a Neptune in bronze, by John of Bologna. The towers degli Asinelli and Garisenda were formerly objects of admiration; the former for its slenderness, which gave it the appearance of an Oriental minaret; the latter for its inclination from the perpendicular, which amounted to 14 feet. It has since, however, been reduced to one third of its former height, from precaution. B. has always been famous for cheap living, and has been chosen as a residence by many literary men. Gourmands praise it as the native country of excellent macaroni, sausages, liquors and preserved fruits. The schools for training animals enjoy, likewise, some reputation. The pilgrimage to the Madonna di S. Lucca, whose church is situated at the foot of the Apennines, half a league distant from B., and to which an arcade of 640 arches leads, annually attracts a great number of people from all parts of Italy.

Bomb; a large, hollow, iron ball or shell, formerly often made of cannon-metal, and sometimes of an oval form, with a hole in which a wooden fuse is cemented, and with two little handles. Bombs are thrown from mortars. They are filled with powder and combustible matter (which consists of equal parts of sulphur and nitre, mixed with some mealed powder), and are used for setting fire to houses, blowing up magazines, &c. The charge in bombs of 74 pounds contains from 3 to 5 pounds of powder, and 1 pound of the other composition above-mentioned. In bombs of 10 pounds, it amounts to 1 pound of powder and from 2 to 3 ounces of the mixture. The fuse, which is hollow, and filled with powder and other inflammable ingredients, sets fire to the charge. The length and the composition of the fuse must be calculated in such a way that the bomb shall burst the moment it arrives at the destined place. Bomb-shells are generally cast somewhat thicker at the bottom than above, that they may not fall upon the fuse and extinguish the fire; yet they are, at present, often cast of an equal thickness in every part, because it has been found
that the fuse remains at the top, notwithstanding. As early as the 7th century, balls, filled with burning matter, were thrown from vessels of clay, then from machines called bidoues or mangees, or with hand-slings made of a small net of iron wire. In 1338, James I, king of Aragon, used, at the siege of Valencia, a kind of large rockets, made of four parchment skins, which burst in falling. Afterwards, large iron balls, heated red hot, came into use. In the middle of the 15th century, prince Rimini Sigismund Pan- dolfini of the island, invented mortars and bombs. They consisted, at first, of two hollow hemispheres of metal, filled with powder, and held together by chains. By degrees, they received their present shape. An English engineer, Mal Pius, whom Louis XIII took into his service, introduced them into France, and used them first (1634) at the siege of Laon, in Lorraine. The grenades, which are thrown from howitzers, are easily distinguished from the bombs, which are cast from mortars. The first are used only in the field, the latter in sieges. The Prussian general von Tempelhoff has in vain attempted to bring 10 pound mortars into the field. In order to make a wall bomb-proof, it should be three feet and a half thick.

BOMB; in composition; an attempt, by strained description, to raise a low or familiar subject beyond its rank, which, instead of being sublime, becomes ridiculous. Its original signification was, a stuff of soft, loose texture, used to swell out garments.

BOMBAY; a presidency, island and city in British India; lat. 18° 50' N.; lon. 72° 7' E. The island was formerly subdivided into several smaller ones, but many thousand acres, once entirely under water, have been recovered, and the two ranges of hills which cross the island have thus been united by a line of fertile valleys. It is of little importance as regards its internal resources, but in a commercial point of view is of great value. Its proximity to the main land gives it a facility of communication with all the different points of the long line of coast, as well as with the shores of Persia and Arabia. The island is easily defended, and the rise of the tide is sufficient to allow the construction of docks on a large scale. The surface is either naked rock or low ground exposed to inundation; the quantity of grain, which it is capable of producing, is, therefore, very small. The causeway which connects it with Salsette, an island lying between B. and the coast of Malabar, affords, however, an easy way of introducing provisions. When first known to Europeans, it was considered a very unhealthy place; but it has been improved by draining and embankments. The population, in 1816, was 101,550, of whom 104,000 were Hindoos, 28,600 Mohammedans, 11,000 native Christians, and 4300 English. There were also about 13,000 Parsees, who here found an asylum from the persecutions of the Mohammedans, and are almost the exclusive proprietors of the island. On a neck of land, near the south-eastern extremity of the island, stands the city, which is about a mile in length and a quarter of a mile in breadth. It is surrounded by fortifications, which have been gradually improved, in proportion to the growing importance of the place. It is the seat of government for the south-western part of the British possessions in India. In front of the fort is an esplanade: at the commencement of the hot season, those Europeans, who are obliged to have their principal residences within the fort, erect bungalows on this spot, which are many of them, elegant buildings, but unfit to resist the violence of the monsoons. As soon as the rains begin, they are taken down, and preserved for another year. There are three government residencies in the island. The one within the fort is used principally for holding councils, and for despatching business. It is a spacious, dismal-looking building, like many of the other large houses in B. The European society here is neither so numerous nor so expensive as that in the other residencies; but, if not rivals in splendor, they are quite equal in the comfort and hospitality of the Maryland men in Calcutta or Madras. As this place is the emporium of all the north-western coast of the peninsula, and of the Persian and Arabian gulfs, its trade is very considerable. To China it sends a large quantity of cotton. Pepper, sandalwood, gums, drugs, pearls, ivory, gems, shells' fins, edible birds' nests, and the remainder of the cargoes for Canton. Hemp, coffee, indigo, and other manufactured goods, are sent from Surat, and other articles, are sent to Europe. The trade to America is considerable. The company's marine establishment consists of 18 cruisers, besides boats: the military and marine corps amount to less than 3000 men. Besides the governor and council, stationed at the city, there are magistrates and commercial residents in the chief towns of the
different provinces subject to their government. There is one supreme court of judicature, held under a single judge, called the recorder.—Since 1814, B. has been a station of the American board of commissioners for foreign missions, and, in 1828, they had 4 missionaries and a printing press employed here and in the vicinity; with 16 schools for boys containing 1049 pupils, and 10 for girls containing 577. B. was obtained by the Portuguese, in 1520, from an Indian chief at Salsette; by them it was ceded to Great Britain, in 1661, and, in 1665, it was transferred, by the king, to the East India company. From the commencement of the last century, it has gradually increased in importance, and has now attained a high degree of prosperity. It is difficult to fix, with precision, the extent of the territories included within the presidency of Bombay, some districts belonging to the native powers are intermingled with it; to fix, with precision, the extent of the territory of B., as some districts belonging to the British crown, are situated within a radius of 10,000 square miles, with a population of 2,500,000. Bombay, as some districts belonging to the British crown, are situated within a radius of 10,000 square miles, with a population of 2,500,000.

BOMBAY—BONAPARTE.

Bombeilles, Louis, marquis de; born 1760, at Ratisbon, where his father was French ambassador at the diet. His mother had been governess in the royal family (des enfants de France), and an intimate friend of the varuous Elizabeth, sister of Louis XVI. The son inherited a feeling of devotion for the family of Bourbon. Under the protection of prince Metternich, he was sent, in a diplomatic capacity, to Berlin, and when, in 1813, the king left this city to declare himself against Napoleon, he carried the archives of the Austrian embassy, in the absence of the ambassador, to Silesia. In 1814, at the entry of the allies into Paris, he was appointed, by the emperor of Austria, to carry to the count of Artois the white cockade, and was repeatedly sent to Denmark. In 1816, he went to Dresden, as Austrian ambassador, and married Ida Brun, the daughter of the poetess of this name. Since 1821, he has been Austrian ambassador in Florence, Modena and Tuscany.

Bomb-Ketch: a vessel built for the use of mortars at sea, and furnished with all the apparatus necessary for a vigorous bombardment. Bomb-ketches are built remarkably strong, to sustain the violent shock produced by the discharge of the mortars. The modern bomb-vessels generally carry two 10 inch mortars, four 68 pounders, and six 18 pound caronades; and the mortars may be fired at as low an angle as 20 degrees; their principal purpose, at these low angles, being to cover the landing of troops, and protect the coast and harbors. A bomb-ketch is generally from 60 to 70 feet long, from stem to stern, and draws 8 or 9 feet of water, carrying 2 masts, and is usually of 100 to 150 tons burden. The tender is generally a brig, on board of which the party of artillery remain till their services are required on board the bomb-vessels.

Bona (the Alphroditium of Ptolemy): a seaport of Algiers, 66 miles N. N. E. Constantia; lon. 7° 30' E.; lat. 36° 32' N. Pop. 5600. This town is built above a mile south of the ancient Hippo, or Hippo. The harbor, which is situated to the east of the town, is capacious, and a considerable trade is carried on here in corn, wool, hides and wax. The situation is good, being near the mouth of the Selibous, and, with proper care, it might be made one of the most flourishing towns in Barbary.

Bona Dea: a name given to Ops, Vesta, Cybele, Rhea, by the Greeks, and by the Latins to Fauna or Fatua. She was so chaste that no man saw her, after her marriage, but her husband; for which reason, her festivals were celebrated by night, in private houses, and all statues of men were veiled during the ceremony.

Bonard, Louis Gabriel Auguste, viscount de, member of the French chamber of deputies, is one of the first speakers of the ultramontanist party. He emigrated in 1791, and wrote, in Heidelberg, after the dissolution of the corps of the emigrants, in which he had served, his well-known Théorie du Pouvoir, politique et religieux (3 vols. 1796). The character of this, and of his later political writings, is that of metaphysical abstraction, which is by no means popular among the French. After he returned to France, he succeeded in insinuating himself into the favor of Napoleon and of his brothers. The emperor made him a counsellor at the university, with a salary of 10,000 francs. Louis proposed to him to undertake the education of his son, then crown prince of Holland, but B. declined the offer. He was closely connected with Chateaubriand, and assisted in the editing of the Mercure de France. After the restoration of the Bourbons, he was chosen, in 1815, member of the chamber of deputies. He voted, in this chambre introuv­ ble (q. v.), with the majority. In 1816, he was admitted into the French academy. His most important work is the Legislation primitive (3 vols. 1802).

Bonaparte is the name of an ancient Italian family, which, Louis Bonaparte
BONAPARTE—BONAVENTURA.

sates, in his "Documents historiques sur le Gouvernement de la Hollande," was settled in Treviso as early as 1272, when a Nardilinus Bonaparte gained renown as "podes-
ta" of Parma and knight of St. Maria or Gaudenzias. An author of this name, James Bonaparte, a Tuscan nobleman, who lived about 1527, remarks that his family held important offices in the re-
public of San Miniato, in the Tuscan territory, and that had been distinguished in the wars of Florence. A branch of it existed at Sarzana, in the Genoese do-
cicio, in Cor,;ica. From this branch sprung the father of Napoleon, Charles Bona-
parte, who at first fought with Pcoli for the independence of Corsica, and in com-
pány with him left the island, but eventually returned, at the invitation of Louis XV. In 1776, Corsica chose him one of the deputies of the nobility who were to be sent to the king of France. Before the French revolution, he wrote his name of Bonaparte. On account of his health, he subsequently retired to Montpellier, where he died in 1785, 40 years old.—His wife, the beautiful Maria Letitia, born at Ajaccio, Aug. 24, 1750, was descended from the house of Ramolini, which was of Italian origin. She bore him the fol-
lowing children, whose names are cited in the order of birth:—Giuseppe, Napo-
lore, Luciano, Luigi, Mariana, Carletta, Annunziata and Giovanano. Left a young widow, destitute of property, she sought and obtained friends among the powerful. Her acquaintance with the count of Mar-
beuf was the foundation of the fortune of her family. The Corsicans maintained that they were all nobles, and refused, therefore, to pay taxes. Louis XV, in con-
sequence, commanded the governor to select 400 families, who were alone to be considered as noble. In this list Marbeuf inserted the Bonapartes. When the English conquered Corsica, in 1793, madame Letitia, whose second husband was captain Francis Fesch, of Ilale (see Fesch, Joseph, cardinal), fled, with her daughters, to Marseilles. Soon after the 18th Brumaire (9th November), 1799, she went to Paris; but not till after Napo-
leon's elevation to the imperial dignity, was homage paid to madame Mere, who, in pronunciation and language, was half Italian, half French. She maintained a separate household, and was appointed, by Napoleon, "protectrice generale des étab-
lissemens de charité." Her benevolence, at this period, was much praised. Some persons, however, deemed her avaricious. She was not dazzled by the greatness which surrounded her. Of her children, she entertained the greatest affection for Louis, the ex-king of Holland. In 1814, she went to live at Rome, with her brother-in-law, cardinal Fesch. Napoleon seems to have always had much affection for her. She died at Marseilles in the year 1823. By the treaty of Paris, of Nov. 20, 1815, the whole family of Bonaparte was banished from France; and, in the edict of amnesty issued by Louis XVIII, Jan. 6, 1816, all Napoleon Bonaparte's relations were excepted. They were to remain in banishment, lose all their possessions in France, and dispose of all their property there within six months. The royal ordinance of May 22, 1816, decreed, that the property and income of the members of the Bonaparte family who had come back on Napoleon's return from Elba, which had been confiscated by the law of Jan. 12, 1816, should be appropriated to the support of meritorious soldiers and such donations as had lost their donations in foreign countries.—For ac-
counts of Joseph, Napoleon, Lucien, Louis and Jerome Bonaparte, see these heads; for information respecting Mariana, afterwards called Elisa, we refer the reader to the article Bacciochi; respecting Carletta, afterwards called Marie Pauline, to the article Boregone; respecting Annunziata, afterwards called Annunziata Caroline, to the article Murat. See, moreover, Fesch, Eugenio (whose sister, Hortensia, is men-
tioned in the article Louis Bonaparte), and Maria Louisa (Leopoldine Caroline).

The members of the family of Napo-
leon live retired and much respected, manifesting great taste for the fine arts and the sciences. Almost all have appeared as authors, with more or less suc-
cess, as will be seen under the different heads.

BONAVENTURA, John of Fianza; one of the most renowned scholastic philoso-
phers; born, 1221, in Tuscan; became, in 1241, a Franciscan monk; in 1255, teacher of theology at Paris, where he had studied; in 1256, general of his order, which he ruled with a prudent mixture of gentleness and firmness. He died in 1274, at the age of 53. At this time, he was a cardinal and papal legate at the council of Lyons. His death was hastened by his ascetic severities. On account of his blameless conduct from his earliest youth, and of some miracles ascribed to him, he enjoyed, during his life, the greatest venera-
tion, and was canonized by pope Six-
Bonaventura—Bone.

The Franciscans opposed him as their hero to the Dominican scholastic Thomas Aquinas. He wrote for the honor and improvement of his order, for the promotion of the worship of the virgin, on celibacy, transubstantiation and other doctrines. He is frequently obscure by his attempts to support the creed of the church with arguments drawn from the Aristotelian and new Platonic philosophy, and by his mystical views in treating of the moral and intellectual perfection of the human character. Yet he is distinguished from other scholastics by perspicacity, avoidance of useless subtleties, and greater warmth of religious feeling. Among his writings are, *Rerum Vindicata*; *De Gufum*; *Redu- ducit Actionis in Theologiam*; *Continuatio, and Breviloquium.* The whole was published in 1588—96, at Rome, 7 vols. folio. But many pieces in that collection are not genuine.

**Bondy, Taillepied; count of; born at Paris, 1765, of an ancient family. In 1792, he was made director of the manufacture of assignats. August 10th of this year, he retired from public office until 1805, when Napoleon made him a chamberlain, and afterwards prefect of the department of the Rhone, where he conducted with mildness, and promoted the public works in his district. In 1812, he was very useful to Lyons by his care to prevent a scarcity of food in the city. In 1814, he maintained the city for a long time against the allies. In 1815, he was appointed, by Napoleon, prefect of the Seine, with a vote in the council of state. Here he spoke, usually, with great frankness to Napoleon, on the necessity of a constitutional system of government. July 3d, 1815, he was one of the commissioners of the government for concluding with the generals of the allies the terms for the surrender of the capital. In 1816 and 18, he was deputy for the department of the Indre, and advocated the principles of the left side.

**Bone.** The bones are the hardest and most solid parts of animals; they constitute the frame, serve as points of attachment to the muscles, and afford support to the softer solids. They are the instruments, as muscles are the organs, of motion. In the *mammalia,* birds, fish and reptiles, the whole system of bones united by the vertebral column is called the skeleton. In the fetus, they are first a vascular, gelatinous substance, in different points of which earthy matter is gradually deposited. This process is perceptible towards the end of the second month,
and, at the time of maturity, the bone is completely formed. After birth, the bones become gradually more solid, and, in the temperate zones, reach their perfection in men between the ages of 15 and 20. From this age till 50, they change but slightly; after that period, they grow thinner, lighter, and more brittle. Those of the two first classes of animals are harder on their exterior than they are internally. Their material, except in the teeth, is nearly the same throughout. Their structure is vascular, and they are traversed by the blood-vessels and the absorbents. They are hardest at the surface, which is formed by a thin membrane, called the periosteum; the internal parts are cellular, containing a substance called marrow. The use of the marrow is to prevent the too great dryness and brittleness of the bones. Chemistry decomposes bone into gelatin, fat, cartilage and earthy salts. A fresh bone boiled in water, or exposed to the action of an acid, gives out its gelatin; if boiled in water, on cooling the decoction, a jelly is formed, which makes a good portable soup. A pound of bone yields twice as much as the same quantity of flesh. The earth of bones is obtained by calcination; that is, by exposing them to a red heat, by which they are deprived of the soft substances. That part of anatomy which treats of the bones is called osteology.

Bone-set, Ulrich, the most ancient German fabulist, was a Dominican friar at Berne, in the first half of the 14th century. He lived when the age of minstrelsy and chivalrous poetry was in its declivity, and has published a collection of fables, under the title Der Edelstein (The Gem), which is distinguished by purity of language and picturesque simplicity of description. The first editions of these fables were by Bodmer and Lechenburg. Benecke in Gottingen has published a very good edition more recently, and added a vocabulary (Berlin, 1816).

Bone-set. The herb known by the name of bonset or thoroughwort (Eupataniium perforationum) is a very useful annual plant, indigenous to the United States. It is easily distinguished, in the autumn, in marshy grounds, by its tall stem, four or five feet in height, passing through the middle of a large, double, hairy leaf, which is perforated by the stalk, and surrounded by a broad, flat head of light-purple flowers. It is much used as a medicine, throughout the country, in the form of an infusion of the heads of the flowers, and part of the remainder of the plant, in boiling water, which is allowed to stand a few minutes upon the fire. It is one of the best domestic articles for breaking up and throwing off a violent cold, for which purpose, from a half pint to a pint of the above infusion may be drank cold, at bed-time, which will be found to purge by morning; or it may be taken warm before eating, in the morning, when it will generally operate as an emetic and purgative. Smaller quantities of the infusion, taken warm throughout the day, in bed, and in combination with other medicines, will be found highly serviceable in rheumatism and rheumatic fevers. As a safe and valuable family medicine, it cannot be too highly recommended.

Bone-set; the name of several popes. B. I, elected, 418, by a party of the clergy, and confirmed by the emperor Honorius, who declared the antipope Estalesius a usurper. B. persecuted the Pelagians, and extended his authority by prudent measures. A decree of the emperor Theodosius deprived him, in 421, of the spiritual sovereignty over Eastern Illyria. He died 422. His history proves the Roman bishop to have been, in his time, dependent on the secular power. B. II, elected 530. The death of his rival, the antipope Dioscorus, a few days after his election, left him in quiet possession of the papal chair. He acknowledged the supremacy of the secular sovereign, in a council held at Rome. B. III, chosen 607, died nine months after his election. B. IV, elected 608. He consecrated the Pantheon (q. v.) to the virgin and all the saints. B. V, a Neapolitan, was pope from 619 to 625. He conducted in the institution of the asylums, and endeavored to diffuse Christianity among the English. B. VI, a Roman, elected 896, died of the gout a fortnight after. B. VII, antipope, elected 974, during the lifetime of Benedict VI, whose death he was suspected of having caused. Expelled from Rome, he returned on the death of Benedict VII, and found the chair occupied by John XIV, whom he deposed and threw into prison, where he allowed him to die of hunger. B. died 11 months after his return. B. VIII, see the article. B. IX, Pietro Tomacelli of Naples, succeeded Urban VI at Rome, during the schism in the church, while Clement VII resided at Avignon. He was distinguished for the beauty of his person, and the elegance of his manners, rather than for a profound knowledge of theology and canon law. Even the counsel of his experienced cardinals could not save him.
from the commission of gross blunders. He was more skilled in the arts of simony and extortion. He sold the same benefice repeatedly, established the annates in 1372, and lavished the treasures thus procured on his relations, or in costly edifices; the fortification of the castle of St. Angelo, for instance, and the capitol.—He supported the pretensions of Ladislaus to the throne of Naples, and, during the greatest part of his pontificate, was engaged in negotiations with his rivals at Avignon, Clement VII and Benedict XIII. He died in 1404.

Boniface VIII, Benedict Cajetan; born at Anagni, of an ancient Catalanian family; elected pope Dec. 24th, 1294. He received a careful education, studied jurisprudence, was a canon at Paris and Lyons, advocate of the consistory, and prothonom:ry of the pope at Rome. After Martin IV had elevated him to the dignity of a cardinal (1251), he went as legate to Sicily and Portugal, and was intrusted with embassies at several courts; in particular, with the charge of reconciling the king of Sicily with Alphonso of Aragon, and Philip the Fair with Edward I of England. After Celestine V had resigned the papal dignity, at Naples, in 1294, at the instigation of B., the latter was chosen pope. He met with opposition from the cardinals of the family Colonna, and re­venged himself by excommunicating them. His induction was magnificent. The kings of Hungary and Sicily held his bridle on his way to the Lateran, and served him, at table, with their crowns on their heads. B., however, was not successful in his first efforts for the increase of his power. The sovereignty of Sicily was denied him, and Frederic II was crowned king there in spite of his excommunication. He was equally unsuccessful in his attempt to arbitrate between England and France. The bulls which he issued, at this time, against king Philip the Fair of France, obtained no consideration. This was also the case with the interdict which he pronounced against him at the council of Rome, in 1302. Supported by the states and the clergy of France, Philip defended his royal rights against the encroachments of the pope. The pope was accused of duplicity, of simony, of usurpation, of heresy, of un­chastity; and it was resolved to condemn and depose him at a general council at Lyons. Philip went still further; he sent Nogaret to Italy, in order to seize his person, and bring him to Lyons. Nogaret united himself, for this purpose, with Scipio Colonna, who, with his whole family, had been oppressed by B., and was, in consequence, his enemy. B. fled to Anagni, where Nogaret and Colonna surprized him. B., on this occasion, acted with spirit. "Since I am betrayed," said he, "as Jesus Christ was betrayed, I will die at least as a pope." He assumed the pontifical robes and the tiara, took the keys and the cross in his hand, and seated himself in the papal chair. But the insignia of his holy office did not save him from arrest. Nay, Colonna went so far as to use personal violence. B. remained in a disagreeable confinement for two days, when the Anagnesc took up arms, and delivered him. After this, he departed to Rome, where he died, a month later, in 1303. From fear of poison, he had not taken any food during his captivity. This abstinence brought on a fever, which terminated fatally. Boldness in his views, and perseverance in his resolutions, cannot be denied to B.; but these qualities were stained by ambition, vanity, a spirit of revenge, and a mean pliability. Dante assigns to him, as guilty of simony, a place in hell, between Nicholas III and Clement V. B. founded, in 1300, the centennial jubilees, and enriched his treasury by the frequent sale of indulgences. He was an accomplished man, for the times in which he lived.

Boniface, St.; the apostle of Germany, who first preached Christianity, and spread civilization among the Germans. He was born in England (680), and his original name was Winfrid. In his 30th year, he was consecrated a priest. A great part of Europe, at this period, was inhabited by heathens, and several missionaries set out from England to convert them. Gallus, in 614, went to Allemannia; Emmer, who died 632, to Bavaria; Kilian, who died 689, to Frankonia; Willibrord, who died 739, to Friesland; Sigfrid to Sweden; Swinert to Friesland. In 716, B. conceived the plan of preaching Christianity among the Frieslanders; but was prevented by the war between Charles Martel and the king of Friesland, Rub­bod. He therefore returned to England, where he was chosen abbot. In 718, B. went to Rome, where Gregory II au­thorized him to preach the gospel to all the nations of Germany. He commenced his labors in Thuringia and Bavaria, passed three years in Friesland, and jour­neyed through Hesse in Saxony, baptizing everywhere, and converting the pagan temples to Christian churches. In 725, he was invited to Rome, made a
bishop, by Gregory II, and recommended to Charles Martel and all princes and bishops. His name Winfrid he changed to ll. In 724, he destroyed the oak sacred to Thor, near Geismar, in Hesse, founded churches and monasteries, invited from England priests, monks and nuns, and sent them to Saxony, Friesland and Bavaria. In 734, Gregory III made him archbishop and primate of all Germany, and authorized him to establish bishoprics, the only existing bishopric being the one at Passau. He founded those of Freisingen, Ratibor, Erfurt, Bamberg (transferred afterwards to Fulda), Wurtzburg and Aichstadt. In 739, he restored the episcopal see of St. Rupert, at Salzburg. After the death of Charles Martel, he consecrated Pepin the Short, near Geismar, in Hesse, by whom he was made bishop of Mentz.. He held eight ecclesiastical councils in Germany, founded the famous abbey of Fulda, and undertook, in 754, new journeys for the conversion of the infidels. He was killed at Doekum, in West Friesland, by some barbarians, in 755, in his 75th year. In Fulda, a copy of the Gospels, in his own handwriting, is to be seen. At the place where B. built, in 724, the first Christian church in North Germany, near the village of Altenburg, in the Thuringian forest, a monument has been erected to his memory, consisting of a candelabrum, 30 feet high. The most complete collection of the letters of ll. was published at Mentz, 1789, folio.

Bonn: capital of the Prussian government of Cologne, formerly the residence of the elector of Cologne, on the left bank of the Rhine, with 1109 houses, four Catholic, and, since 1517, one Protestant church. It contains 10,600 inhabitants, among whom are 200 Jews, who dwell in a particular street. B. was formerly fortified: the works were demolished in 1717. A lyceum was instituted here in 1802. An academy had been established in 1777, and, in 1786, erected into a university. This institution was superseded by the lyceum. The manufactures are not important. The commerce is chiefly in the hands of the Jews. A walk, with four rows of trees, and 1200 paces in length, leads to the beautiful palace of Clemensrohe, near the village of Poppelsdorf. B. contains the university of the Rhine, the charter of which was given, Oct. 16, 1818, at Aix-la-Chapelle, by the king of Prussia, who, at the same time, endowed it with an annual income of $0,000 Prussian dollars, 10,000 of which are appropriated to the botanical garden. The former residence of the elector of Cologne was bestowed on the university. It has been fitted up at great expense, and is surpassed, in extent and beauty, by no university buildings in Europe. It contains all the lecture halls, a library of more than 50,000 volumes, a museum of antiquities, a collection of casts of the principal ancient statues, a cabinet for natural philosophy, clinical institutions of uncommon extent and order, to which will be added a Catholic theological seminary, and a convocatorium (refectory). The paintings in the aula minor (among others, the great allegorical picture, the Christian Church) were executed by some pupils of Cornelius. To the liberality of the king, the university owes also an anatomical hall, a new riding-school, and an edifice, once a royal palace, in Poppelsdorf, ten minutes' walk from the city, which contains the mineralogical and zoological collections, and before which lies the botanical garden. Adjoining it are lands and buildings for the use of the agricultural institute. The tower of the old custom-house, which commands a fine view, is destined for an observatory. The king has also established here a printing press for Sanscrit, under the inspection of A. W. von Schlegel. The museum of German and Roman antiquities is under the direction of the same distinguished scholar. The teachers of the five faculties, of which the university consists, are more than fifty. Particular advantages are afforded for the education of young men intended for instructors. Many men distinguished in various branches of science are connected with the university. The historian Nebel has lately repaired thither to deliver lectures. The exertions of the government to collect in B. all the means of instruction, united with the charms of the place and the beauties of the scenery, have made the university a short time very much frequented. In 1826, it contained 981 students, among whom were 110 foreigners.

Boys, Andrew, an anatomist, born at Amsterdam, in 1738, studied and received his degree at Leyden. His dissertation was the excellent treatise De Continuitate Membranorum, of which two famous physicians, Bichat and Wrisberg, have made use in their works. He finished his studies at Paris. In 1771, he returned to Amsterdam, where he delivered lectures. He had the three first numbers of the Thesaurus Hominis Osium Morbo-
died in 1518. His long life was devoted to the relief of the suffering, and to the education of skilful physicians and surgeons. As president of the Monnikhof institution for the investigation of the best remedies against the different kinds of hernia, he has likewise accomplished a great deal.

Bonner, Edmund, an English prelate of infamous notoriety, was the son of a peasant at Hanley in Worcestershire. He was educated at Pembroke college, Oxford, where he was made doctor of common law, in 1525. For his skill in business, he was patronised by cardinal Wolsey, from whom he received several clerical preferments. On the death of Wolsey, he acquired the favor of Henry VIII, who made him one of his chaplains, and sent him to Rome to advocate his divorce from queen Catharine. Here he conducted with so much intemperance, that the pope is said to have threatened to return. In 1538, he was nominated bishop of Hereford, being then ambassador at Paris; but, before his consecration, he was translated to the see of London. At the time of the death of Henry, he was ambassador to the emperor Charles V, but returned the same year, when, refusing to take the oath of supremacy, he was deprived of his bishopric, to which, however, he was restored, on making submission. Still continuing to act with contumacy, he was, after a long trial, once more deprived of his see, and committed to the Marshalsea; from which prison, on the accession of Mary, he was released, and once more restored by commission. During this reign, B. distinguished himself by a most sanguinary persecution of the Protestants, 390 of whom he was instrumental in bringing to the stake, whipping and torturing several of them with his own hands. When Elizabeth succeeded, he went, with the rest of the bishops, to meet her at Highgate, but, at the sight of him, she averted her countenance with an expression of horror. He remained, however, unmolested, until his refusal to take the oath of supremacy; on which he was once more committed to the Marshalsea, where he remained a prisoner for nearly 10 years, until his death, in 1569. He was buried at midnight, to avoid any disturbance on the part of the populace, to whom he was extremely obnoxious. B. was well versed in the canon law, and was an able diplomatist. He cannot, says a Catholic writer, be defended from the charge of extreme rigor and cruelty; yet he deserves credit for his firmness of principle, for his courage when in disgrace, and for the calmness and resignation with which he supported a long imprisonment.

Bonnet, in fortification; an elevation of the parapet in the salient angles of a field retrenchment, or of a fortification, designed to prevent the enfilading of the front of the work, at the end of which it is situated. The bonnet accomplishes, however, only part of this object, and is subject, at least in field retrenchments, to the disadvantage, that the men destined for its defence are too much exposed to be taken in flank by the fire of the enemy, on account of the necessary elevation of the banquette (q. v.)—a fault which cannot occur in the works of a fortress which are well laid out.

Bonnet, Charles, a natural philosopher and metaphysician, born at Geneva, in 1720, exchanged the study of the laws for that of natural history. His essay On Aphides, in which he proved that they propagated without coition, procured him, in his 20th year, the place of a corresponding member of the academy of sciences at Paris. Soon afterwards, he partook in the discoveries of Trembley respecting the Polypus, and made interesting observations on the respiration of caterpillars and butterflies, and on the structure of the tape-worm. An active correspondence with many learned men in his own country and abroad, and too continued perseverance in labor, brought on an inflammation in his eyes, which prevented him from writing for more than two years. His active spirit employed this interval in meditating on the source of our ideas, on the nature of the soul, and on other mysteries of metaphysics. From 1755 till 1768, he was a member of the great council of his native city. He afterwards retired to his country-seat (Genthod), on the banks of the lake of Geneva, where he led a retired life, devoting his time to the investigation of nature, to the conversation of learned men, and to an extensive correspondence, till his death, in 1793. B. was a close and exact observer. He carried religious contemplations into the study of nature. In his views of the human soul, many traces of materialism are to be found; for instance, the derivation of all ideas from the movements of the nervous fibres. Of his works on natural history and metaphysics, there are two collections; one in 9 vols., 4to., the other in 13.
BONNET—BONNYCASTLE.

187

vols., 8vo., Neuchatel, 1779. The most celebrated are, Traité d’Insectologie; Recherche sur l’Usage des Fueilles dans les Plantes; Considerations sur les Corps organiques; Contemplation de la Nature; Essai analytique sur les Facultés de l’Âme; Polyclastie Philosophique, and Essai de Psychologie.

Bonnet; advocate, and baillonner (president) of the advocates in Paris. During the revolution, he was zealous in defending many unfortunate persons who were dragged before the revolutionary tribunal. He displayed his brilliant eloquence in the defence of general Moreau. In later times, he has been blamed for having yielded too much to the vindictive spirit of the French state attorneys: since 1815, particularly, he has been considered too complaint towards the procureur-général Bellart. We have reason to suppose that much of the reproach which has been cast upon him is unfounded, as he is known to have exposed his life and liberty, in former times, to save the accused. B. belongs to the extreme right side in the chamber of deputies, and has thus lost his popularity.

Bonval, Claude Alexander, count of, or Achmet Pacha, born 1672, at Coussac, in Limousin, of an illustrious French family, entered, in his 16th year, the body-guard of the king, but showed an extravagant propensity for pleasure. In war, he was an able and successful partisan, beloved by those under his command. He enjoyed the esteem of the marshal of Luxembourg. In the war of the Spanish succession, he obtained a regiment, with which he marched to Italy, and distinguished himself by his valor as well as by his excesses. On his return, he was obliged to fly, in consequence of some violent expressions against the minister and madame de Maintenon. He was, in 1705, appointed major-general by prince Eugene, and fought against his native country. At the peace of Rastadt, in 1714, by the interference of prince Eugene, the process against him for high treason was withdrawn, and he was allowed to return to his estates. In 1716, he was lieutenant field-marshal of the Austrian infantry, and distinguished himself by his valor against the Turks at Peterwardein (1716). In 1718, B. was made a member of the imperial council of war, but his licentiousness and indiscretion induced prince Eugene to get rid of him, by appointing him, in 1723, master-general of the ordnance in the Netherlands. To revenge himself on Eugene, he sent complaints to Vienna against the governor, the marquis of Frie; but the latter, who, on his side, had not been inactive, received an order to arrest B., and to imprison him in the citadel of Antwerp. B., being afterwards ordered to appear at Vienna, and give an explanation of his conduct, spent a month at the Hague before he chose to comply with the summoms. He was therefore confined in the castle of Spielberg, near Brunn, and condemned to death by the imperial council of war; but the sentence was changed, by the emperor, into one year’s imprisonment and exile. B. now went to Constantinople, where the fame of his deeds, and his humanity towards the Turkish prisoners of war, procured him a kind reception. He consented to change his religion, received instruction in Mohammedanism from the mufti, submitted to circumcision, and received the name Achmet Pacha, with a large salary. He was made a pacha of three tails, commanded a large army, defeated the Austrians on the Danube, and quelled an insurrection in Arabia Petræa. His exertions, as commander of the bombardiers, to improve the Turkish artillery, were opposed by the jealousy of powerful princes, the irresolution of Mohammed V, and the dislike of the Turkish troops to all European institutions. He enjoyed, however, the pleasures of his situation. He died in 1747. His Mémoires were published by Desherliers (Paris, 1803, 2 vols.) In the second volume of the Mémoirs of Casanova are to be found some notices of B.

Bonycastle, John, professor of mathematics at the royal military academy at Woolwich, was born in Buckinghamshire. Though his education was not neglected, yet he was chiefly indebted to his own exertions for the various and extensive knowledge which he acquired. While young, he became private tutor to the two sons of the earl of Pomfret. After two years, he quitted that situation on being appointed one of the mathematical masters at Woolwich. Here, for more than 40 years, he devoted his time to the duties of his profession, and to the composition of elementary mathematical works. His first production was the Scholar’s Guide to Arithmetic, which has passed through many editions. His guides to algebra and mensuration are useful school-books. He likewise wrote a Treatise upon Astronomy, 8vo.; the Elements of Geometry, 8vo.; a Treatise on Plane and Spherical Trigonometry,

Bonpland, Aimé, educated at the medical school and the botanical garden in Paris, accompanied Alexander von Humboldt to America in 1799, and discovered above 6000 new species of plants. After his return, he was made, in 1804, superintendent of the garden at Malmaison, which he has described (Paris, 1813-1817, 11 numbers, folio, with copperplates). He was also co-editor of the Travels and Voyages in the Equinoctial Regions of the New Continent, from 1799 to 1804, by Alex. Humboldt and A. Bonpland; published in French in Paris, and in German, by Cotta, in Tübingen (1818). In 1813, he went, as professor of natural history, to Buenos Ayres. There, Oct. 1, 1826, he undertook a journey along the Parana, to explore the interior of Paraguay. At Santa Ana, however, on the eastern bank of the Parana, where he had laid out plantations of tea, and had founded a colony of Indians, he was surprised, on the territory of Buenos Ayres, by 800 soldiers of doctor Francia, dictator of Paraguay, who destroyed his plantations, and carried him off prisoner, together with most of the Indians. Francia sent him, as physician, to the garrison of a fort, and employed him in laying out a commercial road. B. lived till within a few years in Santa Maria. There is no other reason for his captivity, than his success in planting the Paraguay tea. Alex. Humboldt wrote to doctor Francia to persuade him to liberate his friend, and he was supported in his request by the English minister Canning, and the British council in Buenos Ayres, Mr. Parish, but without success. A late French mission to South America has in view his liberation. From the manuscripts of B., Kunth arranged the large work, Noua Genera et Species Plantarum, which B. and Alex. Humboldt had collected and described on their travels in the tropical countries of the new world. (Paris, 1815-1825, 7 vols., fol., with copperplates, in 35 numbers, 1240 francs.)

Bonnetten, Charles von; born at Berne, 1745, of an ancient and noble family, in the canton of Zürich. His father, Charles Emanuel, was treasurer of Berne. He was educated, till his 19th year, at Yverdon, then in Geneva, where he improved himself in the society of Bonnet, Stanhope, Voltaire, Sanssouci and other learned men. He studied at Leyden, afterwards with Gray at Cambridge, then at Paris, and travelled in Italy. In 1775, he became a member of the supreme council at Berne, and, in 1757, ländvoigt in Nyon. Here Mattisson, Sulis and Frederica Brun lived with him; here John Muller wrote on the history of his native country. By his endeavors to improve education, and other useful efforts, he promoted the welfare of his native country. During the revolutionary times, he lived with his friend Frederica Brun, in Copenhagen. On his return, in 1802, he chose Geneva for his residence. The results of a journey to Italy, in which he had made interesting investigations on the depopulation of the campania at Rome by the mal aria, appeared under the title Voyage sur la Scène du dernier Livre de l'Entëde, suivi de quelques Observations sur le Latium Moderne (Geneva, 1813). In 1807, appeared his Recherches sur la Nature et les Lois de l'Imagination, 2 vols. He afterwards published Pensées Diverses sur divers Objets du Bien Public (Geneva, 1815); Etudes ou Recherches sur les Fucultés de Sentir et de Penser (1821, 2 vols.); and L'Homme du Midi et du Nord (Geneva, 1824). These works indicate a philosophical spirit of observation.

Bonzaniga, Giuseppe; royal sculptor at Turin. By a persevering application of 40 years, he raised the art of carving in wood and ivory to a high degree of perfection, and founded an establishment, from which numerous works of art have been produced, that are much sought for in all Italy, and valued by connoisseurs. He died Dec. 15, 1829.

Bonzes; the name given by Europeans to the priests of the religion of Fo, in Eastern Asia, particularly in China, Birmania, Tonquin, Cochlin-China and Japan. As these priests live together in monasteries, unmarried, they have much resemblance to the monks of the Christian church: the system of their Lantharchy and of their worship also agrees, in many respects, with that of the Catholics. They do penance, and pray for the sins of the laity, who secure them from want by endowments and alms. The female bonzes may be compared to the Christian nuns; as the religion of Fo suffers no priestesses, but admits the social union of pious virgins and widows, under monastic vows, for the performance of religious exercises. The bonzes are commonly acquainted only with the external forms of worship and the idols, without understanding the meaning of their religious symbols. They endeavor to keep up the
The principle of this system is, that all money and entered on the debtor and creditor are separated from each other, and entered first, the posts of debtor and creditor are in such a way, that each one appears double in sides; and a superstition by which they are supported a manner, that a man may thereby know, on the other hand, all those who receive money or goods from us become debtors to cash or to the goods. The books which the merchant wants are principally a waste-book, in which all his dealings are recorded without particular order; a journal, in which the contents of the waste-book are separated every month, and entered on the debtor and creditor sides; and a register, in which the posts entered in the journal are placed under particular accounts, and from which, every year, the balance is drawn.

Book-keeping is a mercantile term, used to denote the method of keeping commercial accounts, of all kinds, in such a manner, that a man may thereby know, at any time, the true state of his affairs, with clearness and expedition. Book-keeping rests, like commerce in general, on the notions of debtor and creditor, or on the notions of that which we possess or are to receive, and that which we are to pay, and is divided into single, and double or Italian book-keeping. In the first, the posts of debtor and creditor are separated from each other, and entered in such a way, that each one appears singly; while, in the latter, creditor and debtor are in continual mutual connexion, to which end all the posts are entered doubly, once on the debtor and once on the creditor side, by which every error or mistake is prevented. This mode of double book-keeping sprung up in Italy, in the 15th century; yet it had been practised already in Spain in the 14th century, according to a legal ordinance. The invention of typography; those who had formerly been employed in copying now acted as agents of the printer, and carried the printed copies into the monasteries for sale. Towards the end of the 15th century, there were such book traders in Ulm, Nördlingen and Augsburg. The first bookseller who purchased manuscripts from the authors, and had them printed by others, without possessing a press of his own, was John Otto, in Nuremberg (1516). In Leipzig, there were, for the first time, in 1545, two booksellers of this kind—Steiger and Boscop. The books were carried to Frankfort on the Maine to the fair. The book-fair at Leipzig did not become important until a later period: in 1607, it was attended by 19 foreign booksellers. The Leipzig catalogue of books appeared as early as 1560. The booksellers of the present day may be divided into printers who sell their own publications (they have become rare), booksellers who sell the books which have been printed at their expense by others, and those who keep for sale the publications of others. The last have, usually, at the same time, publications of their own, which they sell or exchange with others. This trade is promoted, in Germany, chiefly by the book-fairs at Leipzig, of which the Easter fair is frequented by all the booksellers of Germany, and by those of some of the neighboring countries, as of France, Switzerland, Denmark, Livonia, in order to settle their mutual accounts, and to form new connexions. The German publisher sends his publications to the keeper of assortments, a condition, that is, on commission for a certain time, on which the latter pays for what have been sold, and can return what have not been sold. This is not so favorable for the publisher as the custom in the French book-trade, where the keeper of assortments takes the quantity he wants for a fixed rate. In the German book-trade, it is the practice for almost every house, either in the country or abroad, which publishes or sells German books, to have its agent in Leipzig, who receives and distributes its publications. As, in Riga, who publishes a book calculated for the German trade, has his agent, B, in Leipzig, to whom he sends, free of expense, a number of copies of his publication, and he may distribute the new work to all the booksellers with whom he is connected, from Vienna to Hamburg, and from Strasburg to Königsberg, each of whom has his agent in Leipzig. Instructions are also given as to the number of copies to be sent to each. B, delivers those copies in Leipzig to the agents, who send them
BOOK-TRADE—CATALOGUES OF BOOKS.

every week, or more or less frequently, by the post, or by carriers, at the expense of the receiver. C., in Strasburg, who finds that he has not received copies enough, writes for an additional number to D., in Leipzig. D. gives this order to B., who delivers the number wanted to B., to be transmitted to C. This arrangement is advantageous to the German book-trade as well as to Leipzig. The dealer receives every thing free to Leipzig, and, as a great number of packets from all parts of Germany, arrive there for him every week, he can have them packed together and sent at once. The freight is thus much less than if the packets were sent to him separately from the different places, and the whole business is simplified. The booksellers are also enabled to agree with greater ease on a certain discount per cent. In other European countries, for instance, in England and France, no such connexion of the booksellers has yet been formed. Paris is the central place of the French book-trade. In Great Britain, Edinburgh rivals London. In the Netherlands, the most important repositories of books are at Amsterdam, Utrecht, Leyden and Haerlem. In Brussels and Liege, many French works are reprinted. In Germany, several houses rarely unite for the publication of great works, as is done in France and England. In 1802, the booksellers of the U. States established a fair at New York, and rules for its regulation. In Spain and Portugal, the price of every book is regulated by the government. Due de la Valliere, Gabriel Naude opened the way by the Catalogus Bibliothecae Cordissiana (Paris, 1774, 3 vols.), Floncel (Paris, 1774, 3 vols.), and Ginguene (Paris, 1779). Gabriel Martin, a bookseller at Paris, distinguished himself, in the 18th century, by a further attention to the method of arrangement, and, at the same time, by bibliographical accuracy. (Catalogues of the Bodleian (Oxford, 1738, 2 vols. fol.) and Parisian libraries (1739, 6 vols. fol.) and Parisian libraries (1739, 6 vols. fol.) and Parisian libraries (1739, 6 vols. fol.) and Parisian libraries (1739, 6 vols. fol.) and Parisian libraries (1739, 6 vols. fol.) and Parisian libraries (1739, 6 vols. fol.) are very defective. John Michael Francke, in his catalogue of the library of Buna (Leipsic, 1750, 7 vols. 4to.), and Audiffredi, in the alphabetical catalogue of the library of Cassani (Rome, 1761, 4 vols. fol.), have distinguished themselves as scientific bibliothecarians. Both works, though incomplete, are excellent models. Catalogus Biblioth. Aea-
demia Thereseana, by Joseph de Sartori (Vienna, 1801, 13 vols. 4to.), is full of errors and defects, and is by no means to be compared to the former of the above-mentioned works. There are, lastly, critical catalogues (cat. raisonnés) which contain more minute information and opinions, descriptions of uncommon and remarkable books, and sometimes accounts of their prices. Besides the few generally interesting works of this nature by John Fabricius (Wolfenb., 1717, 6 vols. 4to.), Jac. Fred. Reimmann (Hildes., 1731, 5 vols.), Gotlieb Stolle (Jena, 1783, 18 vols. 4to.), and others, the catalogues of Crevenna (Amsterdam, 1778, 6 vols. 4to.), Serna Santander (Brussels, 1803, 5 vols.), and lord Spencer (see above), and Denis's Memorabilia of the Library of Guarini (Vienna, 1780, 4to.) are very valuable.

Books, Censorship of. Unless we consider the burning of condemned books under the Roman emperors as a censorship, the establishment of this institution must be attributed to the popes; but it cannot be denied, that it would have sprung up in a thousand other places, even if it had not existed in their dominions. Soon after the invention of printing, the popes perceived the influence which this art exerted over the diffusion of knowledge. It was, besides, doubly dangerous at a time when the authority of the church had been assailed, and was shaking under the load of its abuses. They endeavored, therefore, to prohibit first the reading, and secondly the printing, of certain literary works. They enforced the ancient decrees of the church against the reading of heretical books, and introduced an ecclesiastical superintendency of the press in 1479 and 1496, which was more completely established by bull of S4, in 1513. In this the bishops and inquisitors were required to examine all works before they were printed, and thus to prevent the publication of heretical opinions. They went still further: as this papal decree could not be carried into execution in all countries, on account of the reformation, they prepared an index of books which nobody was allowed to read under penalty of the censorship of the church. This index was commenced by the council of Trent, in the fourth session of which (1546), the decree of the censorship was renewed; but it was not executed, and was finally left to the popes (25th session of 1563), by whom several such Indices Librorum prohibitorum have been published. Even in recent times, in 1786, such an augmented index was issued. Works of an established character, which could not well be prohibited, it was determined to expurgate. The duke of Alva caused such an Index expurgatorius to be prepared in the Netherlands; another was drawn up at Rome, in 1607, which, however, with the exception of some fragments, has remained secret. This censorship was soon afterwards adopted by the secular authority, and, in some respects, extended still further. In Germany, the politico-theological controversies gave the first occasion for the introduction of this institution, as they were carried on with the greatest violence on both sides. The decree of the German diet, in 1524, prohibited them: By the diet of 1530, a more severe superintendency of the press was established; and this was confirmed by later laws of the empire, in 1541, 1548, 1567, and 1577, &c. It was also provided, at the peace of Westphalia, 1648 (Osnabr. Instr., chapter v, § 50), that the states should not suffer attacks on religious parties: From that time, the emperors have promised, in their elective capitulations, to watch strictly over the fulfilment of this article. In the capitulations of the emperor Leopold II, 1790, and of the emperor Francis II, it was further added (art. vi, § 5), *that no work should be printed, which could not be reconciled with the symbolical books of both Catholics and Protestants, and with good morals, or which might produce the ruin of the existing constitution, or the disturbance of public peace. It was, however, not difficult, in most Protestant countries, for individual authors or literary journals to obtain an exemption from the censorship; and many institutions, universities, &c., were privileged in this way, as far as concerned their regular professors. The governments sometimes protected their subjects with great energy; as, for instance, that of Hanover, in the case of Puffer and Schloezer. In France, the censorship belonged to the department of the chancellor, and was administered by royal censors. It was first abolished in England. It was formerly exercised by the well-known star-chamber, and, after the abolition of this court, in 1641, by the parliament. In 1661, it was regulated by a particular statute, but only for a certain number of years. This statute was renewed in 1673, and again, in 1692, for two years more. In 1694, the right of the crown to render the printing of writings, journals, &c. dependent on its permission, that is, the
censorship, ceased entirely. In Holland, and even in the Austrian Netherlands, a great liberty, if not an entire freedom of the press, prevailed. All that was not permitted to be printed in France appeared in the Netherlands or in Switzerland, at Lausanne and Geneva, to the great advantage of the Dutch and Swiss book-trade. In Sweden, by an edict of 1766, and accordingly under the aristocratic constitution, the abolition of the censorship was ordered; yet Gustavus III, personally a friend to the liberty of the press, was obliged to retain the censorship, and even to execute it with severity, during the aristocratical machinations which disturbed his reign, and which were but imperfectly counteracted in the revolution of 1771. Gustavus IV issued an edict soon after he ascended the throne, by which the censorship was retained only in matters of religion, and was administered by the consistory. This, however, was not permanent: at first, penalties were enacted, and, in 1802, the censorship was entirely reestablished, committed to the chancellor of the court, and executed with severity. French and German books were prohibited. King Charles XIII, immediately after his ascension to the throne, abolished it entirely by a provisional order of April 12, 1809, which was confirmed, as an article of the constitution (§ 80), June 6, 1809. In Denmark, by a royal rescript of Sept. 14, 1770 (under the minister Struensee), the censorship was wholly abolished; neither has it been restored, though the laws by which the liberty of the press has been regulated have changed, and have sometimes been very oppressive. In France, the censorship, like so many other institutions, was annihilated by the revolution. All the constitutions, from 1791 to the Charle Constitutionelle of 1814, declare the liberty of the press one of the fundamental laws. During the republic, there was no censorship, but the revolutionary tribunals took its place. Napoleon restored it, in another form, by the decree of Feb. 5, 1810 (Direction de l'Imprimerie). Since the restoration, it has also undergone various changes. Books of more than 20 sheets have always remained free, but the censorship has been exercised over pamphlets and journals at different periods; for the last time, Aug. 15, 1824, just before the death of Louis XVIII: it was, however, abolished again by the present king, Sept. 29 of the same year. For the establishment of new political journals, the permission of the government must be obtained, and bonds must be given by the editors. What changes will yet be made in France remain to be seen. The introduction of the censorship is demanded by one side, even in respect to books already published. In the kingdom of the Netherlands, the censorship is abolished by a fundamental statute of Aug. 24, 1815, art. 236. Even in the kingdom of Poland, this was formerly the case (constitution of Nov. 27, 1815, art. 16), but it has been restored by a decree of June 16, 1819. In the German states, the liberty of the press was much restrained till 1806, the state-attorney having till then had control over it. After 1814, several states abolished the censorship—Nassau (decree of May 4, 1814), Weimar (in the constitution, May 5, 1816), Würtemberg (decree of Jan. 30, 1817), Bavaria (May 26, 1818), grand-duchy of Hesse (constitution of Dec. 17, 1820, § 39), though with very different provisions as to the responsibility of authors, printers and booksellers. (See Press, Laws of the.) In accordance with the infamous decrees of Carlsbad, 1819, and the resolutions of the German diet of Sept. 20, 1819, the censorship in all the states of the German confederation has become one of the conditions of the union, but only with regard to books of less than 20 sheets, and journals. These measures were, at first, adopted only for five years, but are, at present, continued indefinitely. In Russia and Austria, there is naturally a despotic censorship. In the U. States, a censorship has never existed. Besides the different degrees of severity with which the censorship is exercised in different countries, it may be divided into different kinds, according to the field which it embraces. 1. A general censorship of the book-trade and of the press, under which even foreign books cannot be sold without the consent of the censors, exists in Russia, Austria, Spain, &c. (Austria has, in the censorship of foreign books, four formulas: A. admittitur, entirely free; B. transact, free, but without public advertisements for sale; C. erga schedam, to be sold only to public officers and literary men, on the delivery of a receipt; D. damnatur, entirely forbidden.) 2. A general censorship of the press, extending only to books printed in the country, exists in Prussia (edict of Sept. 10, 1758; order of the cabinet of Dec. 25, 1824), where, however, a case once took place, in which the publications of a foreign bookseller, Brockhaus of Leipsic, were prohibited. 3. A limited censor-
In the winter, only over works of less than 20 sheets, and journals, is at present the law in the states of the German confederation. (See Press, Liberty of the.)

Boone, Daniel, one of the first adventurers who penetrated into the wilds of Kentucky, was born in Virginia. He was, almost from his infancy, addicted to hunting in the woods. He emigrated early to North Carolina, then recently settled. Having determined to cross the wilderness bordering on the Cumberland mountains, in quest of the region of Kentucky, then little known, he set out on his expedition, with five companions, May 1, 1763. June 7, they arrived at Red river, north of the Kentucky. A short time afterwards, B. and one of his companions, John Stewart, were captured by a party of savages. They soon escaped, but could discover no traces of their friends, who had returned home. B. and Stewart would have been constrained to follow them, had not Squire B., the brother of Daniel, pursued their track from North Carolina, and relieved them with a few necessaries. Shortly afterwards, Stewart was killed by the Indians, and the two Boones were left the only white men in the wilderness. They passed the winter in a cabin. In May, 1770, B.'s brother returned home. In July of the same year, however, he came back, according to agreement. They then traversed the country to the Cumberland river, and, the following year, returned to their families, with a determination of returning with them to Kentucky. In September, 1773, B. commenced his removal to Kentucky, with his own, and five other families, and was joined by 30 men, who placed themselves under his guidance. Being attacked by the Indians, 6 of his men were slain, and the cattle belonging to the party dispersed. The survivors returned, in consequence, to the settlements on Clinch river, about 40 miles from the scene of action. A company of North Carolina, having formed a plan of purchasing the lands on the south side of the Kentucky river from the southern Indians, employed B. to buy a tract of country, the limits of which were described to him. He performed the service, and, soon after, made a road from the settlements on the Holston to the Kentucky river, notwithstanding the incessant attacks of the Indians, in which 4 of his men were killed and 5 wounded. In Apr., 1775, he built a fort at a salt-spring, on the southern bank of the Kentucky, where Boonesborough is now situated.

It consisted of a block-house and several cabins, enclosed with palisades. In 1777, he sustained two sieges in Boonesborough from the Indians, but repulsed them. In the following year, however, Feb. 7, B. was taken prisoner by the savages, while hunting, with a number of his men. In May, they were conducted to Detroit, where they experienced great kindness from governor Hamilton, the British commander of that post. He even offered the Indians £100 for their prisoner, in order that he might liberate him on parole, but they would not part with him, having conceived for him sentiments of great affection and respect. On his return, he was adopted by one of the principal chiefs at Chilicothe, and might have been happy in this situation, had not the thoughts of his wife and children continually kept alive the desire of escape. This he effected one morning, having risen at the usual rising hour, and departed, apparently for the woods, but in reality for Boonesborough. He arrived there on the 20th of June, after a journey of 100 miles, which he performed in 4 days, having eaten, it is said, but one meal during that time. On the 5th of August, a body of savages, to the number of 450, commanded by Canadian Frenchmen and some of their own chiefs, invested the fort, with British colors flying. B. was summoned to surrender, but announced his determination, and that of the garrison, who amounted to but 50 men, "to defend the fort as long as a man of them was alive." The enemy then resolved to obtain it by stratagem, and requested that nine of the principal persons of the garrison would come out and treat with them, promising terms so favorable, that the invitation was accepted. After the articles of the treaty had been signed, B. and his companions were told that it was customary, upon such occasions, among the Indians, for two of them to shake each white man by the hand, in order to evince the sincerity of their friendship. This was also agreed to; and, accordingly, two Indians approached each of the nine, and, taking his hand, grappled him, with the intent of making him prisoner. Their object being then immediately perceived, B. and his party extricated themselves, and retreated into the fort, amid a heavy fire from the savages. An attack was then quickly commenced, and continued until the 26th of August, when the enemy abandoned the siege. This was the last attempt of the Indians to possess themselves of Boonesborough. In October, as B. was...
returning from the Blue Licks, with his brother, the latter was slain, and B. pursued by a party of Indians for three miles, by the aid of a dog; but, having killed the animal, he escaped. In 1782, the depredations of the savages increasing to an intolerable extent, B., with other militia officers, collected 176 men, and went in pursuit of a large body, who had marched beyond the Blue Licks to a bend of the main fork of the Licking river, 40 miles from Lexington. They overtook them August 19, but, being much inferior in numbers, were obliged to retreat. General Clark, then at the falls of the Ohio, immediately assembled a considerable number of men, and commenced the pursuit of the savages, accompanied by B. From that time until 1798, B. resided alternately in Kentucky and in Virginia. In that year, he removed to Upper Louisiana, where he received a grant from the Spanish authorities of 2000 acres of land. His children, friends and followers were also presented with 800 acres each. He settled with them on the Missouri river, at Charette, some distance beyond the main fork of the Licking river, 40 miles from Lexington. They overtook them August 19, but, being much inferior in numbers, were obliged to retreat.

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ivory, musk, gold dust, silver ingots, with silks, tea, paper and knives from China, with which B. has a close intercourse. The current coin is the Narayn rupee of Couch Becher, worth about 20 cents. The customs of the inhabitants resemble those of the Birmans or inhabitants of Ava, more than they do those of their nearer neighbors of Tihbet or Assam.

Boote, a northern constellation, called also, by the Greeks, Arctophylax, and, by the English, Charies's Waifs. Arcturus was placed, by the ancients, on his breast; by the moderns, on the skirt of his coat. Fable relates that Philonous, son of Ceres and Jason, having been robbed by his brother Ptitus, invented the plough, yoked two bulls to it, and thus supported himself by cultivating the ground. Ceres, to reward his ingenuity, transferred him, with his cattle, under the name of Bodes, to the heavens.

Booth, Barton, an actor of great celebrity in the reigns of queen Anne and George I, was born in 1681, and placed, under doctor Busby, at Westminster school. An early attachment for the drama was fostered by the applause he met with while performing a part in one of Terence's plays, at the annual exhibition in that seminary. He eloped from school at the age of 17, and joined Ashbury's company of strolling players, with whom he went to Dublin. After performing three years in the Irish capital with great applause, he returned, in 1701, to London, and, engaging with Betterton, met with similar success. On the death of that manager, he joined the Drury Lane company, and, on the production of Cato, in 1712, raised his reputation as a tragedian to the highest pitch, by his performance of the principal character. It was on this occasion that lord Bolingbroke presented him from the stage-box with 50 guineas—an example which was immediately followed by that nobleman's political opponents. Declamation, rather than passion, appears to have been his forte, though Cibber speaks of his Othello as his finest character. He became a partner and manager of the theatre in 1713, in conjunction with Wilks, Cibber and Doggett, and died May, 1733. He was buried in Westminster abbey, where there is a monument to his memory. He was the author of Dido and Aeneas, a mask, various songs, &c., and the translator of several odes of Horace.

Boor, Francis, born in 1791, at Neutz, went to Paris, in the nature of a student, in 1812, in order to become acquainted with the Oriental, and, in particular, with the Indian language and literature. While studying these, he did not neglect Arabic and Persian, and found in Elmina von Chezy and Sylvestro de Sacy, as well as in Augustus William von Schlegel, friends who willingly assisted him in his investigations. With a small pension from the king of Bavaria, he lived five years in Paris, afterwards in London, then in Gottingen, devoted to his favorite studies with the greatest perseverance. He was now made professor of the Oriental languages in Berlin. He wrote on the system of conjugation in the Sanscrit language, compared with that of the Greek, Latin, Persian and German tongues, and accompanied his remarks with translations of extracts from Indian poems (Frankfort on the Maine, 1810). He also published works with the following titles: Scismadhibabarat, Nolopakhojanam, Nalas, carmen Sanscritum, e Mukabharato, edidit, Latin vertit et adnot. illust., Fr. Bopp, London, Paris and Berlin; Complete System of the Sanscrit Language; Indrakeumavision, Voyage of Arleschura to the Sky of India; together with other Episodes of Maimdsarah, published for the first Time in the original Language, and translated in Metre, with a Commentary.

Bora, Catharine von, wife of Luther, was born in 1499. Her birth-place is not known, and of her parents we only know that her mother, Anna, was descended from one of the most ancient families of Germany, that of Hugewitz (Haugewitz). The daughter took the veil, very early, in the nunnerery of Nimpetschen, near Grimma. Notwithstanding her devout disposition, she soon found herself very unhappy in her situation, and, as her relations would not listen to her applied, with eight other nuns, to Luther, whose fame had reached them. Luther gained over a citizen of Torgau, by the name of Leonard Koppe, who, in union with some other citizens, undertook to deliver the nine nuns from their convent. This was done the night after Good Friday, April 4, 1523. He brought them to Torgau, and from thence to Wittenberg, where Luther provided them a decent abode. At the same time, to anticipate the charges of his enemies, he published a letter to Koppe, in which he frankly confessed that he was the author of this enterprise, and had persuaded Koppe to its execution; that he had done so in the confident hope that Jesus Christ, who had restored his gospel, and destroyed the kingdom of Antichrist, would be their protector, though it might cost them
even life. He also exhorted the parents and relations of the nine virgins to admit them again into their houses. Some of them were received by citizens of Wittenberg; others, who were not yet too old, Luther advised to marry. Among the latter was Catharine, whom Philip Reichenbach, at that time mayor of the city, had taken into his house. Luther proposed to her (by his friend Nicholas von Amisdorf, minister in Wittenberg) doctor Kaspar Glaz and others in marriage. She declined these proposals, but declared her willingness to bestow her hand on Nicholas von Amisdorf, or on Luther himself. Luther, who, in 1524, had laid aside the cowl, was not averse to matrimony, yet appears to have been led to the resolution of marrying by reason rather than by passion. Besides, he was not then favorably inclined towards Catharine, because he suspected her of worldly vanity. He says, however, that he found in her a pious and faithful wife. There could be no want of disadvantageous rumors on this occasion, some of them as shameful as they were unfounded. The domestic peace of the pair was also drawn into question, and Catharine, in particular, was accused of being peevish and domineering, so that her husband was often obliged to correct her. Although this last story is without foundation, yet Luther seems not to have been fully satisfied with her; for he speaks with great sincerity of the sufferings, as well as of the happiness, of his marriage. When, after Luther's death, in 1547, Charles V entered Wittenberg in triumph, Catharine saw herself obliged to leave this place, and to remove to Leipzig, where she was compelled to take boarders for her support. She afterwards returned to Wittenberg, and lived there till 1552 in want. When the plague broke out in this place, and the university was removed to Torgau, she went thither also, arrived there sick, and died soon after (Dec. 27, 1552). In the church of Torgau her tomb-stone is still to be seen, on which is her image, of the natural size.

Boracic Acid. —Boracic acid, uncombined, exists in several small lakes in Tuscany, at Volciano, one of the Lipari islands, and in the hot springs near Sassu, in the Florentine territory, from whose waters it is deposited by natural evaporation. It is easily obtained also from borax, a native salt, composed of this acid and soda, by dissolving it in boiling water, and gradually adding sulphuric acid to engender the soda; the boracic acid is in this manner set at liberty, and is deposited in crystals on the cooling of the liquid; these, when washed with cold water and dried, are perfectly pure. In this state, it presents the form of brilliant, white, hexagonal scales, soft and greasy to the touch, and having a specific gravity of 1.479. Its taste, when first taken into the mouth, is sourish; afterwards it becomes bitter, and finally leaves a sweetish impression upon the tongue. It is slightly soluble in water, and much more so in alcohol, to which, when burning, it communicates a green color. It contains 43 per cent. of boracic acid. Boracic acid was discovered by Sir J. Davy to be a compound of a peculiar base, which he called boron, and oxygen, in the proportion of 8 parts of the former to 16 of the latter. Its principles are separated both by means of galvanism and by the action of potassium. Boron is a tasteless and odorous substance, in the form of a greenish-brown powder. It is insoluble in water, ether, alcohol and oils; nor does it fuse when subjected to the strongest heats. By exposure to common air, it gradually becomes oxygenated, and, when heated in oxygen gas, burns vivibly, and is converted into boracic acid.

Boracic acid is sometimes employed in the analysis of minerals, and for soldering metals in the arts; and, since its discovery in such abundance in the Italian springs and lakes, it has also been used in the manufacture of borax, being united with soda. The most important combination formed by boracic acid is that with soda, commonly called borax. It is brought into Europe, in an impure state, from the East Indies, under the name of tiucad, and is understood to occur principally in certain lakes, from whence it is obtained by evaporation. It is also reported to be dug from the earth in Thibet, and to exist in the mines of Riquintapa and Escapa, in South America. A knowledge of its manufacture was, for a long time, confined to the Venetians and Hollanders. This is now known to consist in boiling carbonate of soda with the calcined tincal, in order to saturate its excess of acid: 12 pounds of carbonate of soda are requisite for every 100 pounds of washed tincal, in the water; the lie is left to cool gradually and crystallize. The French nation manufacture their borax (of which they consume about 25 tons annually) from the boracic acid found in the Italian lakes; in consequence of which the price of this
the blow. By Orestes, daughter of Erec-theus of Athens, he was father of Cleopatra, Chione, Calais and Zetes. The last two partook in the Argonautic expedition.

**BORGHESE.** A Roman family, which derives its origin from Sienna. They have held the highest offices in this republic, from the middle of the 13th century. Pope Paul V, who belonged to this family, and ascended the papal chair in 1605, loaded his relations with honors and riches. In 1607, he appointed his brother, Francesco B., leader of the troops sent against Venice to maintain the papal claims; bestowed the principality of Sulmone on Marco Antonio B., the son of his brother Giovanni Battista; granted him a revenue of 150,000 dollars, and obtained for him the title of a grandee of Spain. Another of his nephews, Scipione Calirelli, he created cardinal, and made him adopt the name of B. From Marco Antonio B., prince of Sulmone, is descended the rich family of B., which is continued in the prince Camillo B. and his brother Francesco, prince B. Aldobrandini. (See Cenci.)

**BORGHESE, Camillo Philip Louis, prince;** formerly duke of Guastalla, prince of France, &c.; born 1775, at Rome; son of Marco Antonio B. When the French invaded Italy, he entered their service, showed great attachment to the cause of France, in particular to general Bonaparte; went, in 1803, to Paris, and married the second sister of Napoleon, Pauline, widow of general Leclerc. In 1804, he became a French prince, and grand cross of the legion of honor, and, at the breaking out of the war against Austria, in 1805, commander of a squadron of the imperial guard. After its termination, his wife received the duchy of Guastalla, and he was created duke of Guastalla. After having served, in 1809, in the campaign against the Prussians and Russians, and after having been sent to Warsaw, to prepare the Poles for a revolt, the emperor appointed him governor-general of the provinces beyond the Alps. He fixed his court at Turin, and became very popular among the Piedmontese. After the abdication of Napoleon, he broke up all connexion with the Bonaparte family, and separated from his wife. The prince sold to the French government, for the sum of 8,000,000 francs, 223 works of art, which ornamented the palace of his ancestors, known under the name of the villa BORGHESE. (See Rome.) Among them were several masterpieces; e.g., the BORGHESE Gladiator, the Horae, the SILENS, the Dying SENECA, AMOR AND PSYCHE. Bonaparte provided for the payment out of the national domains in Piedmont, which the king of Sardinia confiscated in 1815; at the same time, in consequence of the second invasion of France, the prince received back part of these treasures of art. He now lives in Florence. In 1818, he sold Lucedio, in Savoy, for 3,000,000 livres. In the kingdom of Naples, he possesses the principalities Sulmone and Rosano. He is one of the richest Italian princes. During his residence in Rome, in 1825, Leo XII treated him with great distinction, and the establishment of some pious institutions was expected from him.

**BORGHESE, Marie Pauline, princess,** originally BONAPARTE, sister of Napoleon, born at Ajaccio, Oct. 20, 1780, went, when the English occupied Corsica, in 1793, to Marseilles, where she was on the point of marrying Feron, a member of the convention, and son of that eulogist whom Voltaire made famous, when another lady laid claim to his hand. The beautiful Pauline was then intended for general Dupiot, who was afterwards murdered at Rome, in December, 1797; but she bestowed her hand, from choice, on general Leclerc, then at Milan, who had been, in 1795, chief of the general staff of a division at Marseilles, and had there fallen in love with her. When Leclerc was sent to St. Domingo, with the rank of captain-general, Napoleon ordered her to accompany her husband with her son. She embarked, in December, 1801, at Brest, and was called, by the poets of the fleet, the Galatea of the Greeks, the Venus marina. Her statue, in marble, has since been made by Canova, at Rome—a successful image of the goddess of beauty. She was no less courageous than beautiful, for when the Negroes, under Christophe, stormed Cape Francois, where she resided, and Leclerc, who could no longer resist the assailants, ordered his lady and child to be carried on shipboard, she yielded only to force. After the death of her husband, Nov. 23, 1802, she married, at Morfontaine, Nov. 6, 1803, the prince Camillo Borghese. (q. v.) Her son died at Rome, soon after. With Napoleon, who loved her tenderly, she had many disputes, and as many reconciliations; for she would not always follow the caprices of his policy. Yet even the proud style in which she demanded what her brothers begged, made her the more attractive to her brother. Once, however, when she
gundy wines. The Bordelais are the safest wines for daily use, as they are among the most perfect of the light wines, and do not easily excite intoxication. They have been accused of producing the goit, but without reason. Persons who drench themselves with Madeira, Port, &c., and indulge in an occasional debauch of claret, may, indeed, be visited in that way; because a transition from the strong branded wines to the lighter is always followed by a derangement of the digestive organs. The principal vineyards are those of Medoc, Graves, Pales and Vignes Blanches; after these, those of Entre-deux-Mers, St. Emilion and the Bourgeois are the most important. The first growths of Medoc are the famous wines of Chateaux-Margaux, Lafitte and Latour. The Lafitte is characterized by its silky softness on the palate, and a perfume partaking of violet and raspberry. The Latour is fuller, has more aroma, but less softness. The Chateaux-Margaux is lighter than the Latour, and delicate, like the Lafitte, but has not so high a flavor. Of the second growths, we may mention the Rauran and the Leoville. The average produce of the first growth is 100 tonneau of (217 gallons each). The soil of Medoc is a sandy and calcareous loam. The gravelly lands (les Graves), to the south and west of Bordeaux, produce the Graves. The first growth of the red Graves is the Haute-Briou, which rivals the first growth of Medoc; it has more color and body, but is inferior in aroma and taste. The principal white Graves are St. Bris and Carbonieux. The best Medoc ought to be kept three or four years before removal; the Graves five or six. The wines of Pales, which is a bed of rich alluvial deposits, are inferior to the preceding; they are stronger and more deeply colored than those of Medoc. Being hard and rough, they are improved by a voyage, and are principally sent to the East Indies and America as vins de cargaison, or are mixed with Medoc, which is intended for exportation. By the voyage, they become more light and delicate, but are not to be compared with the growths of Medoc and the Graves. The best are Quinies and Mt. Ferrand. The former are deeply colored, and have much body. Age gives them an agreeable aroma, resembling that of a raspberry. Among the white Bordelais wines, besides those already mentioned, the finest growths are Sauternes, Preignac, Barcass and Bonmes. Martillac and St. Medard are of a good quality, and have lightness and body. Barisse, more Dulamon, is equal to St. Bris and Carbonieux. Among other red wines are the Bourgeois, which are of a fine color, and acquire by age lightness and an agreeable almond aroma; of all the Bordelais wines, they most resemble the Burgundy wines. The first growths are Deboisquet, Chateau-Rousset, Tajac and Falfaix. The Bourgeois wines were formerly preferred to Medoc. The wines of St. Emilion have been much esteemed. The Fronsac and Canon are the best. Those of Entre-deux-Mers become agreeable with age. The vins de Cotes are good vins ordinaires; they are generally more hard and improve by age. The best are those of Basses and Canton. Those of St. Gervais, Cadillac and St. Romain are soft and agreeable. (For further information, see Le Guide ou Conducuteur de l'Etanger a Bordeaux; 2d ed., Bordeaux, 1827, which contains a minute account of the wines raised in the neighborhood of Bordeaux.) See, also, A. Henderson's History of the Ancient and Modern Wines, 4to, London, 1824.) The light wines of Bourdeaux might be very advantageously substituted, in the United States, for the strong liquors too generally drunk in this country.

Bordentown, in New Jersey; on the east side of the Delaware, 26 miles N. E. of Philadelphia. It is a small, pleasant town, and now the residence of Joseph Bonaparte.

Bordeaux, Paris, a celebrated painter of the Venetian school, born at Treviso, in 1500, died in 1570. Under Titian, he made rapid progress in painting. The execution of many works for his native city and for Venice spread his fame as far as France, whence he was invited by the king. The galleries of Dresden and Munich possess several of his pieces. His most famous picture is the Old Gold-digger presenting a Ring to the Doge; it is painted in oil, and now to be seen at Venice.

Boreal; northern.

Boreas; the north wind, worshipped by the Greeks as a deity, residing in Thrace, and represented with wings, which, as well as his hair and beard, were full of flakes of snow; instead of feet, he had the tails of serpents, and, with the train of his garment, he stirred up clouds of dust. Boreas was the son of Aegeus and of Aurora. When Apollo and his favorite Hyacinthus were once playing at quoits, he blew the quoit of the former, of whom he was jealous, upon the head of the youth, who was killed by
the blow. By Ori莉a, daughter of Eunice of Athens, he was father of Cleopatra, Chione, Calais and Zetes. The last two partook in the Argonautic expedition.

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Another of his nephews, Scipione Caffarelli, he created cardinal, and made him a general of the provinces beyond the Alps. In 1717, to Warsaw, to prepare the Poles for a revolution, his brother, Francesco, prince of Sulmone, is descended the rich family of B., which is continued in the prince Camillo B. and his brother Francesco, prince of Sulmone, who love her tenderly, she had many suitors, and as many reconciliations; for when the Negroes, under Christoph, the son of that critic Voltaire made famous, when another lady laid claim to his hand. The beautiful Pauline was then intended for general Duphot, who was afterwards murdered at Rome, in December, 1797; but she bestowed her hand, from choice, on general Leclerc, then at Milan, who had been, in 1795, chief of the general staff of a division at Marseilles, and had there fallen in love with her. When Leclerc was sent to St. Domingo, with the rank of captain-general, Napoleon ordered her to accompany her husband to Paris, and married the second sister of Napoleon, Pauline, widow of general Leclerc. In 1804, he became a French prince, and grand cross of the order of honor, and, at the breaking out of the war against Austria, in 1805, commander of a squadron of the imperial guard. After its termination, his wife received the duchy of Guastalla, and he was created duke of Guastalla. After having served, in 1806, in the campaign against the French and Russians, and after having been sent to Warsaw, to prepare the Poles for a revolt, the emperor appointed him governor-general of the provinces beyond the Alps. He fixed his court at Turin, and became very popular among the Piedmontese. After the abdication of Napoleon, he broke up all connexion with the Bonaparte family, and separated from his wife. The prince sold to the French government, for the sum of 8,000,000 francs, 322 works of art, which ornamented the palace of his ancestors, known under the name of the villa Borghese. (See Rome.) Among them were several masterpieces; e. g., the Borghese Gladiator, the Hermaphrodite, the Sirens, the Dying Sirens, Anor and Psyche. Bonaparte provided for the payment out of the national domains in Piedmont, which the king of Sardinia confiscated in 1815; at the same time, in consequence of the second invasion of France, the prince received back part of these treasures of art. He now lives in Florence. In 1818, he sold Lucedio, in Savoy, for 3,000,000 livres. In the kingdom of Naples, he possesses the principalities Sulmone and Rosano. He is one of the richest Italian princes. During his residence in Rome, in 1820, Leo XII treated him with great distinction, and the establishment of some pious institutions was expected from him.

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forget herself towards the empress, whom she never liked, she was obliged to leave the court. She was yet in disgrace, at Nice, when Napoleon resigned his crown in 1814; upon which occasion she immediately acted as a tender sister. Instead of remaining at her palace in Rome, she set out for Elba, to join her brother, and acted the part of mediatrix between him and the other members of his family. When Napoleon landed in France, she went to see her sister Caroline, and afterwards returned to Rome. Before the battle of Waterloo, she placed all her diamonds, which were of great value, at the disposal of her brother. She went and afterwards returned to Rome. There she lived, separated from her husband, at Rome, where she occupied part of the palace Borghese, and where she possessed, from 1816, the villa Sciarra. Her house, in which taste and love of the fine arts prevailed, was the centre of the most splendid society at Rome. She often saw her mother, her brothers Lucien and Louis, and her uncle Fesch. When she heard of the sickness of her brother Napoleon, she repeatedly requested permission to go to him at St. Helena. She finally obtained her request, but the news of his death arrived immediately after. She died, June 9, 1825, at Florence. She left many legacies, and a donation, by the interest of which two young men of Ajaccio will be enabled to study medicine and surgery. The rest of her property she left to her brothers, the count of St. Leu and the prince of Montfort. Her whole property amounted to 2,000,000 francs.

Borgia, Cesare; the natural son of an ecclesiastic, who afterwards became pope Alexander VI, and of a Roman lady, named Vanozza. At a time when the court of Rome was a school of falsehood and licentiousness, and conquests and oaths afforded no security, he reduced crime to a system. Other princes have shed more blood, have exercised more atrocious cruelty; but his name is stigmatized with the greatest infamy; for with B. all was calculated with cool reflection. He professed whatever was most likely for the attainment of his purposes. His father, who had become pope in 1492, invested him with the purple. When Charles VIII of France made his entry into Rome, Alexander was obliged to treat with him, and delivered Cesare B. into his hands as a hostage, who escaped, however, after a few days, from the camp of the king. In 1497, Alexander bestowed the duchy of Benevento, together with the counties of Terracina and Ponte-corvo, on his eldest son, who had already received from the king of Spain the duchy of Gandia. Cesare became jealous of his elevation, and, when the duke of Gandia was murdered, a week after his investiture, public opinion accused his brother Cesare of the deed. His father permitted him to lay aside the purple, and devote himself to the profession of arms, and sent him to France, to carry to Louis XII the bull for divorce and dispensation for marriage which he had long desired to obtain. Louis rewarded B., for the compliance of his father, with the duchy of Valentinois, a body-guard of 100 men, and 20,000 livres a year, and promised to aid him in his projects of conquest. In 1499, Cesare married a daughter of king John of Navarre, and accompanied Louis XII to Italy. He first undertook the conquest of Romagna, expelled the lawful possessors of the land, caused them to be treacherously murdered, and himself to be appointed, by his father, duke of Romagna, in 1501. In the same year, he wrested the principality of Piombino from Jacopo d'Arpino. He also endeavored, though in vain, to make himself duke of Bologna and Florence. In 1502, he announced that he was about to attack Camerino, and demanded, for that purpose, soldiers and artillery from Guidobaldo of Montefeltro, duke of Urbino. Camerino was taken by storm, and Julius of Barona, the lord of the city, with both his sons, was strangled at the command of B. This fact he prepared for all whom he had robbed. Those who did not fall into his hands, he pursued with poison or the dagger. Meanwhile, all the petty princes had united, and collected the soldiery for their defence; but Cesare B. terrified some by means of 3000 Swiss, whom he called to Italy, and gained over others by advantageous offers. Thus he dissolved their alliance, seized their lands, and saw no further obstacle to his being made, by his father, king of Romagna, of the March, and of Umbria, when Alexander VI died, Aug. 17, 1503. At the same time, Cesare B. was attacked by a severe disease, at a moment when his whole activity and presence of mind were needed. He found means, indeed, to get the treasures of his father into his possession, assembled his troops in Rome, and formed a closer alliance with France; but enemies rose against him on all sides, one of the
Borgia—Borneo.

most bitter of whom was the new pope, Julius II. B. was arrested and carried to Spain, where he remained for two years in prison. He at length made his escape to his brother-in-law the king of Navarre, went with him to the war against Castile, and was killed by a shot before the castle of Biano, March 13, 1507.—Cesar B. was temperate and sober, loved and protected the sciences, wrote verses himself, and possessed so much eloquence, that he reduced even those who were most on their guard against his treacherous designs.

Borbon, Stefano, cardinal, superintendent of the Propaganda, one of the noblest protectors of science in the 18th century, was born at Velletri, in 1731; and died November 23, 1804, in Lyons. His life was affected, in various ways, by the political revolutions of Europe. The dictatorship of Rome was intrusted to him, together with two other cardinals, by Pius VI, when the French attacked the city. His Memorie storiche della Città di Bologna del Secolo VIII al XVII (3 vols., 1763, etc.), show his ability as a historian and antiquary.

Borneo, next to New Holland, the largest island in the world, is about 600 miles long and 700 broad, with a population estimated at from 3,000,000 to 5,000,000. Lon. 106° to 110° E.; lat. 7° N. to 4° 20' S. Its central parts have never been explored by Europeans, and the insalubrity of its climate has prevented them from frequenting its shores. On this account, the geography of Borneo is very imperfect. The principal chain of mountains is called the Crystal mountain, from the numerous crystals they contain. The island is often devastated by volcanoes and earthquakes. The coast, for 10 or 20 miles inland, is marshy, and a considerable portion is a moving bog. Though situated under the equator, the heat is not excessive, being moderated by the sea and mountain breezes, and by the rains, which are incessant from November till May. Some of the rivers are large. The principal are the Borneo, the Bagansamali and Parma. Gold is found in large quantities. Diamonds, which are found nowhere else but in Hindostan and Brazil, are confined to the south and west coasts. The best are obtained from Lambak. The mines are the aboriginal savages. The petty prince of Malun is in possession of one of the largest diamonds in the world. It is valued at 1,200,000 dollars, which is 150,000 dollars less than the Russian, and 500,000 more than the Pitt diamond. The other minerals are iron, copper and tin. Pearl and mother of pearl are found on the north coast. Rice, yams and betel, with all the fruit-trees of India, excellent ship-timber, groves of nutmeg and clove-trees, pepper, ginger and cotton, are produced on the island. The camphor differs from that of Japan, and is found only in Sumatra and Borneo. Borneo, a species of resin, is produced in great abundance. B. produces the pongo, the largest of the...
Borneo is a kingdom of Central Africa, lying between 15° and 10° N. lat., and 12° and 15° E. lon., is bounded N. by Kanem and the Desert, E. by lake Tchad, S. by Mandara, and W. by Soudan. The first Europeans by whom it was visited, major Denham and captain Clapperton, furnish us with the most authentic information concerning this country (Travels in Northern and Central Africa, 1822, 83 and 84; London, 1826). From March to July, the heat is extreme, the thermometer rising to 107°, and rarely falling below 56° Fahr., during this time, scorching winds from the south prevail. As in other tropical countries, the seasons are divided into the dry and rainy: the latter continues from March to October, when the air becomes milder and fresher. The country is populous, containing 13 principal towns. These are generally large and well built, with walls 40 feet high and about 20 feet thick. The houses consist of several court-yard, with apartments for slaves, habitations for the different wives, and several turrets connected by terraces, forming the apartments of the owner. The Shouaas are Arabsians: they are deceitful, arrogant and cunning. The Borno people, or Kanowry, have Negro features: they are peaceable and quiet, but cowardly and addicted to pilfering. The government, until lately, has been an elective absolute monarchy, under a sultan. The sultan is now but a name, the real power being in the hands of El Kanemy, sheikh of the Corans, an able, warlike and popular chief. His force is chiefly cavalry, and is estimated at about 30,000 men, armed with spears, shields and daggers. The chiefs wear jackets of chain armor, cuirasses, or coats of mail. Indian corn, cotton and indigo are the most valuable productions of the soil. Very few fruits or vegetables are raised, and agriculture is in a wretched state. The domestic animals are asses, camels, horses, dogs, sheep, goats, cows, and innumerable herds of oxen. Lions, panthers, leopards, hyenas, jackals, elephants (in herds of from 50 to 400) and buffaloes crowd the forests. The crocodile and hippopotamus are considered a luxury. A Shouana belle, arrayed for conquests, her hair streaming with fat, a black rim of kohl round her eyes, sits jambe dela jambe dela on her favorite bullock, who is guided by a thong passed through the cartilage of his nose.
ostrich, pelican, crane and Guinea fowl abound. The air is filled with locusts, which are devoted by the natives, both roasted and boiled, and formed into balls of a sort of paste. The vegetable productions are unimportant. The principal return which the Moorish merchants obtain for their goods is slaves. The currency of the country consists of strips of cotton, about three inches wide and a yard long, called gambak, four or five of which make a rotella.

Borromeo. (See Morone, Battle of.)

Borromeo; originally, a fortified town.

In England, the term was early restricted to those towns which sent burgesses to parliament. This burden, as it was once considered, was probably imposed on the largest and wealthiest towns, or on those which had placed themselves under the protection of some baron. The number of boroughs in Great Britain, represented in parliament, is 265, sending 390 burgesses: of these, 171 are in England, and are represented by 239 burgesses. Several centuries have elapsed since the distribution of representatives among the towns was fixed. Many places, formerly populating, and entitled to be represented, now contain not more than two or three houses, and yet retain their original privilege. These are called rotten boroughs.

(See Parliament.)

Borromeo Islands (Isole dei Conigli, on account of the many rabbits there); four small islands in the Lago Maggiore, in Upper Italy, which is 30 miles in length and 7 or 8 in breadth. The greater part belongs to Piedmont, the rest to the kingdom of Lombardy. Its banks are formed of a beautiful Alpine country, with many villages, villas, vineyards, gardens and chestnut groves. The islands have their name from the family of Borromeo, which, for centuries, was in possession of the richest estates in the vicinity of the Lago Maggiore. Vittelliano Borromeo, in 1671, caused garden-soil to be spread over three rocky rocks in this lake, and terraces to be walled up. Thus arose the Isola Bella, Isola Madre, L'Isolino and Isola dei Pescatori, the two first famous for their beautiful garden-grounds. The Isola Madre, abounding in pheasants, lies in the middle of the lake. It consists of seven terraces, with a kitchen-garden, cypresses, laurels, cistus and myrtles. The Isola Bella is loaded with artificial ornament. It contains a handsome palace of four stories, which lies near the shore, and is occupied, for some months in the year, by the count Borromeo. By means of the Grotte Terrene, it communicates with the gardens, which are laid out in the French taste, upon 10 terraces, rising above each other, and narrowing in proportion to their elevation. The whole has the appearance of a truncated pyramid, on the top of which stands a colossal unicorn, the armorial ensign of the Borromeo. Orange, citron and lemon-trees, united by fine hedges, or forming arbors, breathe their fragrance; lofty laurels form a little grove; myrtles and cypresses are to be seen, together with pomegranate-trees, the fruit of which ripens here; for the mountains which crown the lake serve as a shelter against the cold winds. The climate of the Isola Madre, however, is milder than that of the Isola Bella. In the latter, the orange and cypress-trees, &c. must be secured, in winter, by boards laid over them, and, in extreme cold, by applying charcoal-pans underneath. The inhabitants of the Isola dei Pescatori carry on a trade in fish to Milan and Piedmont, and are engaged in smuggling.

Borromeo, Carlo, count, of an ancient Milanese family, born, Oct. 2, 1538, at Arona, on Lago Maggiore, the family-seat of his virtuous and pious parents; was, at the age of 12, a commendatory abbot; studied the law at Pavia; was, in 1559, made doctor, and, in 1568, was successively appointed, by his uncle, Pius IV, apostolical protonotary, refectorary, cardinal, and archbishop of Milan. From his earliest youth, grave, pious and severe towards himself, the young ecclesiastic, at the age of 22, devoted himself to the duties of government with a conscientious zeal. As legate over Romagna, the march of Ancona and Bologna, he had a great share in the civil government: as protector of Portugal, of the Netherlands, of Switzerland, of the Franciscan, Carmelitines, and of the knights of Malta, he administered several important branches of the spiritual government of the pope, who created him his grand penitentiary, and did nothing of importance without his advice. The re-opening and the results of the council of Trent, so advantageous to the papal authority, were chiefly effected by the great influence of B., which was felt during the whole term of the council. He did much for the establishment of the papal buildings, employing even his own fortune for that purpose, and established many good institutions, as archbishop of Milan; he improved the discipline of the clergy, founded schools, seminaries, a regular order of secular divines, libraries, hospitals, and was indefatigable
in doing good. All his virtues, however, could not save him from persecution and calumny; he was even severely attacked by the government, but no charge could be proved against him. He died, Nov. 3, 1584, at the age of 46, exhausted by mental sufferings, the accusations of his enemies, and his monastical penances. Miracles were immediately wrought at his tomb, and his canonization took place in 1616. Posternity will venerate the purity of his life, the energy and grandeur of his character, his exemplary administration, and the noble works which he accomplished; and, in spite of the bigotry which is to be attributed to the spirit of his age, and to his clerical relations, must acknowledge his truly Christian and apostolic character.

Borstelli, Louis George Leopold von; lieutenant-general in the Prussian service, born in 1773. In the campaign against the French, in 1813, he commanded two brigades, and decided the battles of Grossbeeren and of Dennewitz; the latter, by hastening from Grossbeeren to the field of battle, and, in opposition to the orders of the crown-prince of Sweden, joining the left wing of Blücher, in order to take Gelbenshain, the key of the enemy's position. General B. was very active through the whole war, and, in 1815, had the command of the 2d Prussian corps. While he was occupied with its organization in Namur, some battles of Saxon guards and grenadiers in Liege, excited by the news of the partition of their country, and by some incendiary expressions, as well as by the measures which had been taken to gain over the Saxon officers and soldiers, broke the windows in the lodgings of prince Blücher, and committed other excesses. It was necessary that they should be punished in the most severe manner, as many thousand soldiers, formerly in the French and Westphalian service, but now united under Prussian, English, Belgian and other colors (many of them yet attached to Napoleon), were on the French borders, almost in sight of the enemy, and there was danger of a repetition of these excesses, if they were treated with clemency. Blücher therefore sent the guilty battalions to Namur, with orders to B. to disarm them, to burn their colors, and to shoot the ring-leaders. B. considered the order too severe; accustomed to expose his person and life for his own colors, he felt that such a disgrace must be worse than death; and he adopted the determination of not obeying the command, althoughpronounced in the most decided manner, and confirmed by a refusal to listen to his remonstrances. Blücher felt obliged to suspend him from his command, and to report his behavior to the king. Borstelli returned into his country, and a court-martial condemned him to several years' confinement in a fortress. In the year 1815, he was pardoned and reinstated in his command by the king.

Bory-de-Saint-Vincent, J. B. G. M., born at Agen, 1772, displayed, from his earliest youth, an excessive and oratoribility for literary and political subjects. As a youth, he was full of zeal for natural history, and, as a man, his political views, though often erroneous, were always marked with genius. This is the character of the essays which he wrote in the Vies d'Hommes, and Aristarque, and of the defence of his principles, published in Aix-la-Chapelle. His Essai sur les Îles Fortunées de l'Antique Atlantique ou Précis de l'Histoire-générale de l'Archipel des Canaries, and his treatises on the cryptogamic plants, are full of original views. He accompanied captain Baudin, in 1788, in his voyage round the coasts of New Holland, examined closely the volcanoes of the island of Bourbon, and was led to form many geological hypotheses. When military intendant of the general staff of marshal Soult, he showed much severity towards the commissaries. In 1815, he served as colonel in the campaign under Napoleon. After the battle of Waterloo, he proposed, July 1, to his colleagues of the chamber of representatives, not to submit voluntarily to the Bourbons. In consequence of the royal decree of Jan. 17, 1816, he emigrated, and lived in Aix-la-Chapelle and Halberstadt, and, afterwards, in Brussels, where, with van Mous, he edited a journal dedicated to natural science, which is at present continued in Paris. He wrote also, an excellent work on the subterranean quarries in the lime mountains near Maastricht. After his return, in 1820, he was engaged in many of the journals of the liberal party. He reported the sittings of the deputies in the Courir Français, and assisted in Courtin's Encyclopédie.

Bos, Lambert, a profound philologist, was born at Worcum in Friesland, 1704, and died in 1717. He studied in the university at Franeker, where his rapid and brilliant progress obtained for him the Greek professorship in 1704. His Ellipses Græca is a standard work, and has been often printed. The edition of Schäffer (Leipsic, 1808) is the best. The Antiquit. Græc. Descrip. has also passed through
BOS-BOSCOVICH.

numerous editions. His *Philae. Test. ex Versione LXX* is highly esteemed. He was also the author of several other valuable philological works.

Bosc, Louis Antoine Guillaume; superintendent of the French establishments for breeding sheep; member of several learned societies in France, &c.; born at Paris, in 1750, where his father was physician to the king; made himself known, from 1784 to 1788, as editor of the *Journal de Physique*. Proscribed in the reign of terror, in 1793, he took refuge in the forest of Montmorency; and, though daily exposed to the danger of being taken and executed, he occupied himself with labors in natural history. In 1796, the directory sent him to the United States, as consul at Wilmington, and afterward at New York; but the American government doubted whether the French directory was entitled to be represented by a consul. Thus exempt from official duties, he travelled through the United States, collecting botanical and zoological specimens, and contributing to the advancement of his favorite studies. In 1799, B. was made *directeur des hospices*. From that time, he has been actively engaged in researches in natural history. His brother, Etienne Bosc, an orator and author, combines a profound knowledge of natural history with an extensive acquaintance with political economy.

Boscana, Almegaver, Juan, a Spanish poet, born towards the close of the 15th century, at Barcelona, died about 1540. His parents, who belonged to the most ancient nobility, gave him a careful education. He followed the court of Charles V, and, in 1536, was attached to it for some time in Grenada. His noble manners and character gained him the favor of the emperor. The education of the duke of Alva was committed to him, and his instructions developed the great qualities which the duke afterwards displayed. After his marriage, B. lived at Barcelona, occupied in publishing his works, together with those of his deceased friend Garcilaso, in which he was employed at the time of his death. B. was persuaded to attempt Italian measures in Spanish, by Antonio Navigente, an Italian scholar and ambassador of the republic of Venice at the court of the emperor. Thus he became the creator of the Spanish sonnet, and, with Garcilaso, first used the terza in his poetical epistles and elegies. In general, he distinguished himself by introducing Italian forms into Spanish poetry, which met with great opposition, and not less applause. The poems of B. are still esteemed. His other literary works, mostly translations, are forgotten.

Boscawen, Hon. Edward, a British admiral of the last century, was born in 1711, and distinguished himself at Porto Bello and at Carthagena, where he stormed a battery at the head of a part of his crew. In 1744, he was promoted to the rank of rear-admiral, and despatched with a squadron to the East Indies. Though he failed in an attempt on Pondicherry, he succeeded in making himself master of Madras, and returned to England, where he obtained a seat at the admiralty board. In 1755, he again sailed for North America, and, in an action with a French squadron, two ships of the line fell into his hands. In 1758, in conjunction with Lord Anclerst, who commanded the land forces, he succeeded in reducing Louisbourg and Cape Breton, and, the year following, having then the command in the Mediterranean, pursued the Toulon fleet, under De la Clue, through the straits of Gibraltar, and, coming up with it in Lagos bay, completely defeated it, burning two ships and taking three. For these services, he received the thanks of parliament and £3000 a year, with the rank of general of marines, in 1760. He died in the following year. He sat in the parliament of 1743, as member for Truro, in his native county.

Boscovitch, Roger Joseph, an astronomer and geometerian of distinguished eminence in the 18th century, was a native of Ragusa, in Dalmatia. He was educated among the Jesuits, and, entering into their order, was appointed professor of mathematics in the Roman college, before he had entirely completed the course of his studies. He was employed by pope Benedict XIV in various undertakings, and, in 1750, began the measurement of a degree of the meridian in the Ecclesiastical States, which operation occupied him for two years. He afterwards visited the Pontine marshes, to give advice respecting the draining of it. He was then intrusted, by the republic of Lucca, with the defence of its interests, in a dispute about boundaries with the government of Tuscany. This affair obliged him to go to Vienna, and, having terminated it with success, he visited Paris and London. He was elected a fellow of the
BOSCOVICI--BOSPHORUS.

royal society, and dedicated to this body a Latin poem on eclipses. Returning to Italy, he was appointed mathematical professor in the university of Pavia; whence, in 1770, he removed to Milan, and there erected the celebrated observatory at the college of Brera. On the suppression of the order of Jesuits, he accepted an invitation to France from Louis XV, who gave him a pension of 8000 livres, with the office of director of optics for the navy. This appointment induced him to pay particular attention to that part of optical science which treats of the theory of achromatic telescopes, on which subject he wrote a treatise of considerable extent. He was obliged to leave Paris, in 1783, on account of ill health, when he retired to Milan, where he died Feb. 12, 1787.

An edition of the works of father J.J. was published by himself; in 5 vols., 4to., 1785. This publication was made on account of ill health, when he retired to Milan, where he died Feb. 12, 1787.

His Theoria Philosophiae Naturalis reduxta ad unicum Legem Vitium in Nature existentium, first published in 1755, is a curious production, containing speculations of which doctor Priestley availed himself in his writings in favor of materialism. (See Hottentots.)

The execution is excellent; but the transfer of the support of the horse to its tail might be objected to as contrary to modern taste.

Bushmen. (See Hottentots.)

Bosnia; a Turkish province, with the title of a kingdom, which comprehends, besides the ancient B., part of Croatia (Sanjak Bielogrod), between the rivers Una and Verbas, a tract of Dalmatia and Herzegovina, and is bounded N. by Slavonia, W. by Croatia, S. by Dalmatia and the Adriatic sea, and E. by Servia. B. contains 25,000 square miles, with 500,000 inhabitants, mostly of Slavonian origin, Bosnians and Morlacs, among whom are 50,000 Turkish militia. The inhabitants are two thirds Christians, mostly of the Greek church, and one third Turks, who possess nearly all the territorial property as alienums or feuds, besides Jews and Gipsies. The country is level towards the north; in the south, mountainous and woody. Its chief rivers are the Save, the Vrbas, the Bosna, Rama and Drina. B. contains fertile fields, orchards and vineyards; the breed of cattle is excellent, and the mountains furnish good iron, of which a great part is manufactured in the country into guns and blades. The other articles manufactured are leather, morocco, and coarse woollen cloths. In the 12th and 13th centuries, B. belonged to Hungary. In 1333, it fell into the hands of Stephen, king of Servia. After his death, it remained independent, and the Ban Twartko took the title of king in 1370. In 1401, it became tributary to the Turks, and, since 1463, has been a Turkish province. It is divided into the southern and northern parts, or Upper and Lower B. The former is called sometimes Herzegovina, or the duchy of Sabao, because the emperor Frederic III bestowed the title of duke on the ruler of this district in 1440. Travnik is the residence of the pasha of B. The capital of the country is Bosna-Serai, or Sarajevo (in Italian, Scroglio), at the confluence of the Miglianza with the Bosna, with 15,000 mostly miserable houses, and 60,000 inhabitants, including the garrison of 10,000 janizaries. The citadel lies at some distance from the town. The taxes of Sarajevo are an appanage of the mother of the sultan. Zvornick, Barajbuka and Turkish Gradiska are also important in historical and statistical points of view. The fear of losing their property is the chief cause of the adherence of the Bosnians to the Turkish government, since, in case of the conquest of B. by the Christians, they expect the same treatment which the Christians formerly experienced, when it was conquered by the Turks.

Bosphorus. The strait which leads from the Black sea into the Propontis, or sea of Maranoe, was formerly so called, either because Io, after being metamorphosed into a cow, passed over at this place, or because the strait is so narrow that an ox can swim across. When other straits were afterwards called by the same name, this was called B. Thracicus. Over this channel (5 stadia, about 3000 feet wide) Darius constructed a bridge of boats, on his expedition against the Scythians. Bosphorus Cimmericus was the name given by the ancients to the strait that leads to the Black sea, which was a considerable port of the ancients. Bosphorus is derived from Bosphorus, a strait of the same name. The Phosphorus of Homer lies about 300 stadia from the Bosphorus Cimmericus.
from the Black sea into the sea of Azof. The Italians, who formerly traded in these regions, called it bocca di S. Giovanni, or estretto di Cofta. There was also an
ciently a kingdom of the name of B, so
called from the straits, on both sides of
which it was situated. In Panticapæum
(at present, Kertsch, q. v.) a Milesian col-
y in the Tauric Chersonese, the Archae-
emidides established this kingdom, B. C.
471, and reigned till B. C. 437. Spartacus
was the first king. Under his successor,
Sutyrus, the kingdom was extended to the
coast of Asia, and his son Leucon acquired
Theodosia, B. C. 390. He improved the
commerce of the country (in particular by
the exportation of corn to Athens, also of
fishes, fur, skins, bees-wax and slaves).

From him his descendants were called
Leucanides. Leucanor became tributary
to the Scythians 290 B. C., and the trib-
ute was finally so oppressive, that Par-
sades, the last of the Leucanides, prefer-
ted to submit to Mithridates, the king of
Pontus, who vanquished the Scythians
under Scilarus, 116 B. C., and made his
son king of B. The latter killed himself.

At the death of Mithridates, the Romans
gave the country, B. C. 64, to his second
son, Pharnaces, who was afterwards mur-
dered. The Romans placed different
princes successively upon the throne, who
all pretended to be descendants of Mith-
ridates. When this family became ex-
tinct, A. D. 235, the Sarmatians took pos-
session of the kingdom, from whom it
was taken by the Chersonides, in 344.

The Tauric Chersonese then belonged to
the Eastern empire, till it was seized by
the Chazars, and afterwards by the Tar-
sars, under the Mongol princes. (See
Tauria.)
energy, but not without defects: his Latin style is hard. The French academy consider him among their most renowned members. B. has described his own life at length. (For his dispute with the archbishop of Cambry, Fenelon, see Fenelon and Quietism.)

Bostangi (gardeners); the guard of the sultans in the seraglio, whose overseer is called bostangi baschi, and has the superintendence over the gardens of the seraglio, over the channel of the Black sea, and the imperial summer residences. The bostangi baschi accompanies the sultan in all his roads, and has the privilege of wearing a beard. The bostangi are also the boatmen and executioners of the sultan.

Boston [anciently Botolph's Town]; a town of England; in Lincoln; 34 miles S. S. E. from London; lon. 0° 2' W.; lat. 52° 48' N. Population in 1801, 5926; in 1811, 8113. It is nearly surrounded by fens, on the Witham, which is navigable, and forms a port, well frequented, and much assisted by navigable canals. It has four annual fairs, and markets on Wednesday and Saturday. It has a flourishing trade with the Baltic towns. The church is a handsome structure, and serves as a mark to seamen.

Boston, the capital of Massachusetts and the largest city in New England, lies 14 miles S. W. of Salem, 40 N. N. E. Providence, 56 S. W. of Portsmouth, 100 E. N. E. Hartford, 210 N. E. of New York, 300 S. S. E. of Montreal, 300 N. E. of Philadelphia, 430 N. of Washington; lon. 71° 4' W.; lat. 42° 22' N. Pop. in 1765, 3450; in 1790, 18,036; in 1820, 48,281; in 1825, 56,250; in 1830, 60,000. It is situated at the bottom of Massachusetts bay, at the mouth of Charles river. It stands principally on a small peninsula of elevated ground, two miles and three quarters in length and one in breadth, and is connected with the continent by a narrow neck of land, and by seven bridges. Including South Boston, which is without the peninsula, its whole extent is nearly three square miles. It has a capacious harbor, of sufficient depth of water for the largest ships of war to enter safely and lie at anchor, protected from storms by a great number of islands, on several of which are fortifications. The bridges, with one exception, are of wood. That which leads from B. to Cambridge is 3483 feet in length, and is supported by 138 piers. The western avenue, so called, leading across the bay, from the western part of the city to Roxbury, is 8000 feet in length, and is formed of solid earth, supported on each side by walls of stone. It serves the double purpose of a bridge and a dam, by means of which and a cross dam, two large basins are formed, one of which is filled at every flood-tide, and the other is emptied at every ebb, whereby a perpetual water-power is created for carrying mills and machinery. This dam was built at a cost exceeding $500,000. One of the bridges is free; all the others are toll bridges. The streets are mostly narrow and irregular, and some of them are crooked. The wharves are, in general, spacious, and afford ample accommodation to shipping, and storehouses for merchandise. Long wharf is 1650 feet in length; Central wharf, 1240 feet long and 150 wide. The wharves and many of the streets have been made by raising the ground formerly covered by the tide. The number of dwelling-houses is about 10,000, besides a great number of store-houses and shops. A great part of the buildings are of brick, four stories in height. Many of them are of hammered granite and sienite. These are excellent building materials, of a beautiful gray color, hard and durable, splitting easily, and readily wrought into the required form. Many of the dwelling houses are large and well built. The principal public buildings are the state-house, which is of brick, is situated on the highest part of the city, and commands a view of the country and bay for many miles round; the county court-house, which is of stone; Faneuil hall, in which town-meetings and public assemblies for political discussions are held; the Massachusetts general hospital, and the Faneuil hall market, two handsome buildings of granite, the latter two stories in height, 540 feet in length and 50 feet in width; about 40 churches; 10 public school-houses; a house of industry; a house of correction; a county jail; and two theatres. Among the best specimens of architecture are the market-house, Trinity church, the general hospital, several of the bank buildings, and the Tremont house, the front of which is built of gray sienite, and is ornamented with a handsome portico of the Doric order, with fluted pillars. This last-named building is finely situated, and is the most elegant and commodious hotel in the U. States. The city is divided into 13 wards. The municipal government is vested in a
mayor, 8 aldermen, and a common council of 43 members. The executive powers are exercised by the mayor and aldermen, and measures of a legislative character are adopted by a concurrent act of that board and of the common council. These officers are chosen annually by the citizens, voting in the wards in which they reside. Ward officers are also chosen annually to superintend the elections.

The city, with the small town of Chelsea, forms the county of Suffolk. The county is represented in the senate of the state by six senators. Until the year 1821, the municipal affairs of the town were superintended by a board of seven select-men, annually chosen; and all measures for raising and granting money, establishing schools, and making municipal regulations, were adopted in town-meeting, or assembly of the qualified voters, held in Faneuil hall. All public officers were chosen in town-meeting. There is a police court of three justices, for examining all criminal charges and the trial of minor offences; and a municipal court, held by a single judge, which has jurisdiction of all criminal causes not capital, which are tried by jury. The annual expenditures of the city amount to about $300,000; of which sum $53,000 are expended for the support of schools; $50,000 for paving, repairing and widening streets; $30,000 for the support and relief of the poor, &c. The public schools are, a Latin grammar school, open to all boys between the ages of 9 and 15; a high school, in which are taught the various branches of mathematics and other branches of English education; 8 grammar and writing schools, 7 of which have 2 masters each—a grammar and a writing master, who teach alternately, boys and girls, at different hours; one African school; and 57 primary schools, which are kept by women, and in which children from four to seven years of age are taught to read, spell and write. The schools are under the direction of a school committee, consisting of the mayor and aldermen and 12 members, annually elected. The principal literary institution in the vicinity, Harvard university, is situated at Cambridge, three miles from the city. The medical branch of this institution is established in Boston, where the professors residing. The Boston Athenaeum has two large buildings; one containing a library, and the other a picture gallery, a hall for public lectures, and other rooms for scientific purposes. The library consists of about 24,000 volumes. There are many literary, scientific and charitable societies in B. Among the former are the American academy of arts and sciences, which has published four volumes of memoirs; the historical society, which has published 23 volumes; the Massachusetts medical society; the mechanic institution, under whose patronage courses of lectures for mechanics are delivered annually. Among the latter are the humane society; the Boston dispensary, by which the poor are furnished with medical attendance and medicine free of expense; the female asylum, for the maintenance of female orphans; the boys' asylum, and several others. The pursuits of the inhabitants are in a great measure mercantile. They carry on an extensive foreign trade, and in trade between foreign markets. B. is the second commercial town in the U. States. The value of the annual imports is about $13,000,000, and that of the exports $9,000,000. The amount of shipping owned in B., at the commencement of 1828, was 164,583 tons. Many kinds of manufactures are carried on here. The capitalists of B. are also the principal proprietors of the joint stock manufacturing companies established in Lowell, Waltham, and other towns in Massachusetts and some of the neighboring states. Great improvements have been made, within a few years, in the appearance of the city by the widening and repaving of streets, the erection of new and elegant buildings, and the embellishment of the public grounds. The principal public square is the common, which, with the mall, a gravelled walk which surrounds it, covers a surface of about 50 acres. It is a handsome piece of ground, has a sloping and undulating surface, is partly shaded with elms, and is surrounded by some of the most elegant buildings in the city. There are six newspapers published daily, three semi-weekly, several weekly and a number of other periodical journals, some of which are conducted with great ability, and are extensively circulated. Among these are the North American Review and the Christian Examiner. B. was founded in August, 1630. It received the name of B. from a borough of the same name in Lincolnshire, England (from which a part of the inhabitants emigrated), by a vote of the court of assistants, September 7, and, on the 19th of October of the same year, the general court of the colony was held there. This general court was not com-
posed of representatives, but of the proprietors under the charter, acting in their own right. The first church was built in Boston harbor to the Merrimack river, forms with this river a navigable channel to Concord in New Hampshire. There are no other means of transportation to and from the interior, except such as are afforded by the common roads. In this respect, B. is behind the other principal cities of the U. S. States, and its inland trade is much less than it would otherwise have been. Projects are now before the public for remedying this inconvenience by the construction of rail-roads. The population has doubled from the year 1783 once in about 23 years. Previously to that date, the population of the town had been, for 100 years, nearly stationary; and for 50 years, even greater; its trade, and that of the colony, having been subjected to severe restraints and heavy burdens. In the reign of Charles II, the inhabitants of the colony fell under the royal displeasure, and, in 1653, a writ of quo warranto was issued against the charter of the colony. A legal town-meeting of the freemen of B. was held, and the question was put to vote, whether it was their wish that the general court should resign the charter and the privileges therein granted, and it was resolved in the negative unanimously. The charter, however, was declared forfeited by a decree of the court of chancery, and, soon after, sir Edmund Andros was appointed the first royal governor. His administration, which endured for two or three years, was arbitrary and oppressive. In April, 1683, the people of B. took forcible possession of the fort in B., and the castle in the harbor, turned the guns upon the frigate Rose, and compelled her to surrender, seized the governor, and held him a close prisoner under guard in the castle. A little more than a month afterwards, news was received of the revolution in England, and the event was celebrated with great rejoicings. In 1765, after the passage of the stamp act, the person appointed distributor of stamps was compelled, by threats of violence, to decline the acceptance of the office, and the house of the lieutenant-governor was destroyed by a mob. A large military and naval force was stationed at B. for the purpose of overawing the people. On the evening of March 5, 1770, a sergeant's guard fired upon a crowd of people, who were surrounding them, and pelting them with snow-balls, and killed five men. Dec. 16, 1773, on the arrival of three ships loaded with tea, after various unsuccessful attempts had been made by public meetings of the citizens, to prevent its being landed and sold, in violation of the non-importation resolves of the people, a number of men, disguised as Indians, went on board the ships, and threw all the tea overboard. In the following spring, the port of B. was closed by an act of parliament (Boston Port-bill), and the landing and shipping of goods within the harbor was ordered to be discontinued. The session of the general court was removed to Salem, and additional bodies of troops and a military governor were ordered to B. In 1775, the war commenced with the battles of Lexington and Bunker hill, and the town of B., in which the British troops were encamped to the number of 14,000 men, was besieged by the American army. The siege continued until the March following, when, the British troops evacuated the town and castle, embarked on board their own ships, and withdrew to another part of the country. The inhabitants were among the earliest and most ardent assertors of the rights of the people, and among the earliest advocates and active supporters of independence. During the revolutionary struggle, popular meetings were frequent. These meetings were usually held in Faneuil hall. Benjamin Franklin was born in B., Jan. 17, 1706.

Boswell, James, the friend and biographer of Johnson, born at Edinburgh, in 1740, studied in his native city; in Glasgow, and in the Dutch university of Utrecht. He afterwards resided several times in London, and cultivated the acquaintance of the most distinguished men of his time. He became acquainted with Johnson—a circumstance which he himself calls the most important event of his life. He afterwards visited Voltaire at Ferney, Rousseau at Neufchatel, and Paoli in Corsica, with whom he became intimate. He then returned by the way of Paris to Scotland, and devoted himself to the bar. In 1765, when Corsica attracted so much attention, he published his valuable Account of Corsica, with Memoirs of Paoli. At a later period, he settled at London, where he lived in the closest intimacy with Johnson. In 1773, he accompanied him on a tour to the Scottish Highlands and Hebrides, and published an account of the excursion after their return. After the death of Johnson, he became his biographer. The minuteness and accuracy of his account, and the store of literary anecdote which
it contains, render this work very valuable. It was published in 2 vols. 4to., in 1790, and has been repeatedly reprinted.

**Botanical Gardens:** establishments in which plants from all climates, and all parts of the world, are cultivated, in the open air, in green-houses and hot-houses. The object of such an establishment is partly information and the improvement of science, partly pleasure and luxury. Generally, one seems to have instituted the first botanical garden. He bequeathed it to his scholars. Attalus Philomotor, king of Pergamus, and Mithridates Eupator of Pontes, vied with each other in the establishment of gardens, where they cultivated poisons and antidotes. Piny mentions a botanical garden which was laid out in Italy by Antonius Castor, son-in-law of king Dejotarai. In the middle ages, Charlemagne exerted a favorable influence, by establishing gardens near the imperial palaces and castles, specifying even the single shrubs, which were to be planted. In the beginning of the 14th century, Matthias Sylvaticus, at Salerno, founded the first botanical garden, properly so called. The republic of Venice, soon afterwards, in 1333, instilled a public medical garden, and had the plants painted by Amadei. The paintings are still preserved. After the time of the revival of learning, the first botanical gardens, which contained, however, for the greater part, merely medicinal plants, were laid out in Italy. Duke Alfonso of Este was the founder of an excellent institution of this kind in Ferrara; then followed the gardens in Padua, Pisa and Pavia. Montpellier, in France, first imitated his example. The academical garden in Leyden was instituted in 1577; that of Paris, in 1633; and about the same time the first botanical gardens in Germany and England were founded. At present, the largest and most renowned in Germany are the imperial Austrian, at Schönbrunn, under the inspection of Jacquin; the royal Prussian, near Berlin, under Link and Quek; of Weimar, in Belvedere; that of the grand duke of Baden, at Schwetzingen; and the royal Hanoverian, in Herrnhausen. In Great Britain, the royal garden at Kew; the Chelsea garden, founded for the London apothecaries; and that at Liverpool, under the superintendence of Shepherd, are the most celebrated scientific institutions, to say nothing of the extensive gardens where, plants are raised for sale. In France, the royal garden in Paris, under the inspection of Desfontaines and Thouin, is the principal. Formerly, that of Malmaison, founded by the empress Josephine, was the most famous (see Bontanist). In Italy, the garden of the university at Turin, superintended by Capelli, is, perhaps, the best; in Spain, the royal garden at Madrid, under Mariano Lagasca; in Denmark, the garden of the university at Copenhagen, under the superintendence of Hornemann. In Russia, the excellent institution of the empress Josephine, was the most famous (see Bontanist). In the U. States are in New York, in Philadelphia and Cambridge. In Asia, the garden of the East India company at Calcutta is the most important. At present, almost all universities and learned academies, as well as many rich private proprietors, have botanical gardens.

**Botany:** the science of plants, may be divided into two parts, one of which describes their external appearance, and is sometimes called phytography; the other treats of their internal structure and organic action, and may be termed philosophical botany or phytomony. The former requires a perfect knowledge of terminology, the latter a thorough knowledge of the plants themselves, with a view to a systematic classification of them, according to fixed principles. The necessity of such a classification must have been felt as soon as the number of known plants became great, and their relations and analogies obvious. At the time of the revival of letters, hardly 1500 plants were known from the descriptions of the ancients. At present, at a moderate estimation, more than 50,000 have been described. It is obviously impossible to introduce order into this infinite chaos, or to acquire any distinct knowledge, without the aid of general principles. Even in the 16th and 17th centuries, the founders of botanical science perceived that in plants, as well as in all other natural bodies, the essential and necessary parts must be distinguished from the accidental, and that a
scientific classification must be founded on the former alone. Now it was obvious that the production of fruit and seed is the ultimate object of vegetation, and, accordingly, in the first attempts at classification, the relations and component parts of the seed and of the fruit were made the foundation of the arrangement. This arrangement was confirmed by an observation of the uniformity of nature in the formation of those parts in plants of similar kinds. But it was found, also, that uniformity in these formations prevailed in too great a number of plants to allow them alone to be made the distinguishing characteristics. It became, therefore, necessary to have recourse to other parts. The flower was first chosen, as it presents a great variety of forms, and, at the same time, a uniformity of structure. But the limits to this uniformity, and the absence of flowers in innumerable plants, with the consideration that they are not essential, suggested to the immortal founder of modern scientific botany the idea that the sexual parts are most intimately related to the growth of the fruit, and that they are, therefore, of the greatest importance, and furnish better grounds of classification than the flower. A general principle was thus established, fertile in consequences, excellently adapted to facilitate the diffusion and extend the sphere of the science. The Linnean system was founded exclusively on the relations of the sexual parts. Linnaeus divided all known plants into two general divisions, one of which has visible sexual parts (phanerogamous), while in the other they are invisible or wanting (cryptogamous). The first division comprehends the 33 classes of his system, which are distinguished according to the situation of the sexual parts in the same or in separate flowers, their number, their length, &c. If any system has introduced order in the midst of variety, and shed light on the immense diversities of nature, it is that of Linnaeus. Hence, even those who have departed from it in their writings have considered it necessary for elementary instruction. Many objections, however, are brought against it. It has been made a question whether it is fitted for the investigation and classification of unknown plants. It is said that the sexual parts may be very different in similar plants; that he never will have a complete idea of nature, who proceeds only on one principle. It has, therefore, been thought necessary to find a more natural arrangement. (See Planta.) In order to follow nature, we must look at every part; at the internal structure, as well as the external relations, analogies and differences. This can be done only by a profound and toilsome investigation, of which the mere follower of a system has hardly a notion. Seed is considered as the ultimate object of vegetation. Its parts, their formation, situation, and other relations, must be critically examined. The most perfect natural system, in modern times, is that of Jussieu, particularly as enlarged by Decandolle. (See Decandolle’s Regni vegetabilis Systema naturale, et Prodomus Systematis naturale Regni vegetabilis; also the Nouveaux Elements de la Botanique, by Richard.)

The second general division of this science begins with the investigation of the internal structure, or the anatomy of plants. This study has been recently cultivated, by the Germans, to an extent, which, 30 years ago, could hardly have been conceived. It is closely connected with the first division, if the plants are studied in their natural order. Without good microscopes, and the aid of the best works in this branch, a distinct knowledge of the structure of plants cannot easily be obtained. Chemical botany must be connected with the anatomy of plants. Their constituent parts, their various changes, and the different combinations of their liquid and solid parts, are to be examined. From those, at last, we ascend to the laws of vegetable life, which are, in general, the same as those of animal life. Animal physiology must, therefore, be intimately united with the physiology of plants. Connected with the latter are two branches of knowledge, which the botanist cannot well dispense with, since they offer the most important conclusions on the economy of nature, on the history of the earth, and on the application of science to the arts. These are, first, the science of the deformities and diseases of plants, which can be made certain only by correct physiological views, and which is of great value in gardening, agriculture, and the cultivation of woods; and, second, a knowledge of the mode in which plants have been spread over the earth. If we study the forms of vegetation which have come to us from distant ages, in the floras of these formations, this observation affords the most interesting discoveries in relation to the history of our earth. If we trace the laws by which vegetation seems to have been distributed, we extend our knowledge of the general action of nature, and arrive at conclusions which may be of
great practical utility. The work of Syrengeil on the structure and nature of plants, is, perhaps, the most complete. Separate parts of the anatomy of plants have been treated of by Link, Treviranus and Moldenhawer; vegetable chemistry by Sprecher, Saussure and Schulz.

History of the Science. Of the two general divisions of botany, the physiological or philosophical is the elder. Before the Greek philosophers attempted to distinguish classes and species of plants, they examined the laws of vegetable life, the difference of plants from animals, and, as far as it could be done with the naked eye, their structure. Theophrastus of Eresus is the creator of philosophical botany, which he treated on a great and original plan. From the writings of the Alexandrians, and from original observations, Dioscorides of Amazurba, in the first century of the Christian era, compiled a work, which contains imperfect descriptions of about 1200 plants, the medical qualities of which were more attended to by the author than the description of their characteristics or their philosophical classification. This work continued, for 13 centuries, the only source of botanical knowledge. The Persian and Arabian physicians added about 200 plants, which were unknown to the Greeks, and, consequently, the number of known plants, at the time of the revival of letters, was about 1400. Germany has the merit of having founded historical botany. The obvious imperfections of Dioscorides, which the plants of Germany came to be investigated, and the extravagances into which those persons fell, who attempted to apply his descriptions to German plants, impelled Hieronymus von Beauwis, Otho Braunfelsius, Leon. Fuchsius, Hieron. Ttragus and Conrad Gesner, to examine the vegetable productions of their country, independently of Dioscorides, and to represent them in wood-cuts. Gesner first started the idea that the parts of fructification were the most essential, and that plants must be classified with reference to them. They were followed, in the 16th century, by the Italians, Peter Matthius, Andr. Crespinius, Presp. Alpinus and Fab. Columus; the Belgians, Dodonaeus, Chusius and Lobelius. Among the botanists of this period, who extended the science by their labors in collecting specimens, are the French Da'echamp, the English Gerard, the German Joach. Camerarius, Taberamontanus and John Bauhin, whose brother Gaspard not only increased the number of known plants by numerous discoveries, but endeavored to reform the nomenclature, which had become much confused by the multiplication of names of the same plant. These are the fathers of botany, whose standard works still reward examination. By the exertions of these men, the number of known plants, at the beginning of the 17th century, amounted to 5500. The necessity of classification increased with the quantity of materials. Lobelius and John Bauhin adopted the natural division of trees, grasses, &c., without reference to any general principle. Andreas Celsus, by the advice of Conrad Gesner, fixed upon the fruit and the seed as the foundation of a classification, which is still retained by many of his followers, who are called fructists. In the 17th century, new methods were introduced by Robert Morison and John Ray; the latter of whom attended to the structure of the corolla and its parts, while Rixinus considered only the regularity or irregularity of its shape, and Tournefort its resemblance to other objects. The number of known plants was increased by Morison, Plukenet, Barrelier, Bocone, van Rheede, Petiver and Plumier. In the 17th century, the foundation of botanical anatomy was laid by Grew and Malpighi; botanical chemistry was founded by Hornberg, Dodart and Mariotte; and the difference of sex was discovered by Grew, Morland and Rud. Jak. Camerarius. This discovery Micheli attempted to extend even to the lower degrees of organization, moss, lichens and sponges. To such predecessors, and to the great collectors of herbariums, Rumphius, Parkinson, Sloane, Placourt, Sommelyn, Buxbaum, Ammann and Peculée, the immortal Linnaeus was indebted, in part, for the idea on which his system was founded, and for his great stores of botanical knowledge. When the first edition of his Species Plantarum was published, he was acquainted with 7300 species; in the second edition, with 8800. If we consider that a moderate herbarium now contains from 11,000 to 12,000 species, we must be astonished at the increase in the number of known plants in 60 years. The two sexes of Linnaeus were afterwards extended, by Dillenius, Schmidel and Hedwig, to the imperfect vegetables. This system was opposed by Adanson, Alston and Haller; it was extended still further by Schreber, Scopolis, Crantz and Jacquin. In the 18th century, numerous discoveries in the vegetable world were made by John Burmann, J. G. Gmelin, Pallas, Forski, For-
ster, Hasselquist, Browne, Jacquin, Aublet, Sommerson, Stahl, Swartz, Aiton. Vegetable physiology was enlarged and enriched with new discoveries by Bonnet, Du Halde, Hill, Koelreuter and Sonneberg, and thus botany approached its present degree of improvement. (See Sprengel's History of Botany, 2 vols., Leipsic, 1818.) An outline of the Linnean system is to be found in the article Plants.

BOTANY BAY. (See New South Wales.)

Bothnia, Gulf of; the northern part of the Baltic sea, which separates Sweden from Finland. It commences at the island of Aland, 61° N. lat., and extends to 66°; its length is about 360 miles, its breadth from 90 to 130, and its depth from 20 to 50 fathoms. It freezes over in the winter, so as to be passed by sledges and carriages. Its water contains only one third of the proportion of salt found in other seawater. It abounds in salmon and in seals, which furnish great quantities of whale-oil. This gulf is gradually decreasing in extent.

Bothwell; a village of Scotland, on the Clyde, nine miles from Glasgow. At Bothwell bridge, a decisive battle was fought, in 1679, between the Scottish covenanters, commanded principally by their clergy, and the royal forces, commanded by the duke of Monmouth, in which the former were totally routed.

Bothwell, James Hepburn, earl, is, known in Scotch history by his marriage with queen Mary. It is supposed, by some historians, that he was deeply concerned in the murder of the unfortunate Darnley, Mary's husband, and that he was even supported by the deluded queen. He was charged with the crime, tried, but acquitted. After the death of Darnley, he seized the queen at Edinburgh, and, carrying her a prisoner to Dunbar castle, prevailed upon her to marry him, after he had divorced his own wife. Though seemingly secure in the possession of power, and though crowned earl of Orkney by the unfortunate queen, he soon found that his conduct had roused the indignation of the kingdom. Mary found not in him the fond husband she expected: he became unkind and brutal. A confederacy was formed against him by the barons, the queen was liberated from his power, and he escaped to the Orkneys, and afterwards to Denmark, where he died, 1577. In his last moments, it is said, that, with an agonizing conscience, he confessed his own guilt, and the queen's innocence, of the murder of Darnley.

Bothocudes, savages of Brazil, received their name from the large wooden pegs,
BOTTICELLI. 215

with which they ornament their ears and lips. A small part of these savages is now somewhat civilized. Most of the tribes are still in a completely barbarous state, continually at war among themselves, and accustomed to eat the flesh of their enemies. A more particular, though incomplete, account of them is to be found in the Travels of the Prince of Neuwied and others in Brazil. With the view of promoting their civilization, three Indian villages were laid out, in 1894, by order of the emperor.

BOTTA, Carlo Giuseppe Guglielmo, member of the academy of sciences at Turin, a poet and historian, born, 1766, at S. Giorgio, in Piedmont, studied medicine and botany at Turin. In 1794, he was a physician in the French army which passed the Alps. This service carried him to Corfu. In 1798, he was a member of the provisional government of Piedmont, and was one of those who favored the incorporation of Piedmont with France. After the battle of Marengo, he was a member of the Piedmontese consult. In 1814, he was one of the members of the corps legislatif, which pronounced that Napoleon had forfeited his throne. After the restoration, he was struck out of the list of members of the legislative body, because he was a foreigner, and not naturalized. In 1815, Napoleon appointed him director of the academy at Nancy. At the restoration, he resigned this post, and lives now as a private individual. His most important works are his Description of the Island of Corfu (2 vols.); his translation of Born's (Joannis physiophili) Specimen monochologiae; Memoir on the Theory of Brown; Recollections of a Journey in Dalmatia; On Tones and Sound; Short History of the Royal House of Savoy and Piedmont; History of the North American Revolutionary War; Il Camillo o Veja conquistata, a much-esteemed epic poem, in 12 cantos, published in 1818; Storia d'Italia dal 1792 al 1814 (4 vols. 4to.), in 1824, somewhat rhetorical, but a good picture of the state of this unhappy country; Histoire des Peuples d'Italie (Paris, 1825, 3 vols.), in which he denies to the Christian religion and to philosophy the merit of having civilized Europe, and attributes this effect to the revival of learning.

BOTTLES, by the ancients, were made of skins and leather; they are now chiefly made of thick glass, of the cheapest kind, and formed of the most ordinary materials. It is composed of sand, with lime, and sometimes clay, and alkaline ashes of any kind, such as kelp, barilla, or even wood ashes. The green color is owing partly to the impurities in the ashes, but chiefly to oxide of iron. This glass is strong, hard and well vitrified. It is less subject to corrosion by acids than flint-glass, and is superior to any cheap material for the purposes to which it is applied.

Bottomry is the hypothecation or pledge of a vessel for the payment of a debt. The creditor has no right to take possession of the ship, until the expiration of the time for which the loan is made, and then (under a bottomry contract in the usual form) only by the intervention of an admiralty court. If the loan is not repaid at the stipulated time, the lender applies to an admiralty court, which (the truth of the claim being established) decrees a sale of the ship to satisfy the debt. The conditions of such a contract usually are, that, if the ship is not lost or destroyed by these risks which the lender agrees to run, the debt is to become absolute. The risks assumed by the lender are usually the same as are enumerated in a common policy of insurance. If the ship is wholly lost in consequence of these risks, the lender loses his loan. In case of a partial damage, the bottomry bond usually provides that this damage shall be borne by the lender in the proportion of the amount loaned to the value of the ship. If this amount is equal to one half of the value of the ship, the lender is to bear one half of the amount of such loss, &c. As the lender thus assumes a certain risk, he is justly entitled to a greater interest than if he did not thus take the hazard of the loss of the whole loan; and this is called marine interest. He is entitled to the usual rate of interest on his loan, in addition to the usual premium of insurance for the same voyage or period. The stipulation for such a rate of marine interest is not a violation of the laws against usury, for it is not merely a compensation for the use of the money loaned, but also for the risk assumed. The ship-owner may borrow money on bottomry, whether his vessel be in port or at sea. But the captain of the ship, as such, cannot so borrow when in the port where the owner resides, or near enough to consult him on any emergency. In any other port, he may pledge the ship on bottomry for the purpose of raising money necessary for repairing, supplying and
navigating her, if he can obtain it in no other way. If he borrow thus without necessity, the bond is void, and the lender can look only to the personal responsibility of the captain.

Boys. (See Utens.)

Botzen, or Bolzano; a town in Tyrol, at the confluence of the Eisack and the Adige, containing 8100 inhabitants, and 1000 houses. It has four annual fairs. The streets of the town, the former privileges of the bishop of Trent, and the intersection of the main roads leading to Germany, Italy and Switzerland, at this place, account for the chains of mountains and the courses of the streams, afforded it great advantages for commerce, which yet continue, in some degree. Its commerce, however, is much injured by the smuggling over lake Como, and also from Switzerland, into Lombardy. It lies in a valley, enclosed by high mountains; it is, therefore, excessively hot in summer, and sometimes even visited by the sirocco. The finest fruits of Upper Italy (agrumi) are produced here, if protected by a covering in winter on the east side of the mountain. Autumn is here the most beautiful season of the year. The winter is generally short. On the declivities of the mountains is produced a peculiar kind of red wine. In the valleys, mulberry-trees flourish. It is, therefore, the best place for silk-worms in the Austrian dominions.

Bouchardon, Edmund, born in 1698, at Chaumont-en-Basigni, son of a sculptor and architect, applied himself early to drawing and painting. He made many copies, without, however, giving up the study of nature. In order to devote himself to statuary, he went to Paris, and entered the school of the younger Conston. He soon gained the highest prize, and was made royal pensioner at Rome. He studied his art partly in the works of antiquity, and partly in those of Raphael and Domenichino. He executed several busts, and was to have erected the tomb of Clement XI, but the orders of the king recalled him to Paris in 1722. Here, among other works, he made a large group in stone, representing an athlete overcoming a bear. This stood for a long time in the garden of Grosbois. Afterwards, he assisted in repairing the fountain of Neptune at Versailles. He executed ten statues, which adorn the church of St. Sulphice. A monument to the duchess of Launaguais, made by him, is also in that church. The fountain in the rue de Grenelle, which the city of Paris ordered to be constructed in 1733, was made by him, and is considered his masterpiece. A Cupid which he made for the king was unsuccessful. For the Traité des Pierres gravées, B. furnished designs, from which the plates were copied. The execution of the greatest monument of that period, the equestrian statue of Louis XV, which was erected by order of the city of Paris, was committed to him. He labored 12 years on this, with inconceivable perseverance, and has left, in it, the horse, a model which may be ranked with any work of antiquity. He died in 1762. His designs are great and accurate. His pieces bear the character of simple grandeur. He put more spirit, and expression into his sketches than into the marble. In general, more fire is to be desired in his sculpture. The paintings which he executed at Rome are bold and powerful. Afterwards he adopted a more polished, delicate manner, to suit the taste of the age. Among his scholars, Louis-Claude Vasé, who died in 1772, is distinguished. Caylus has written his life.

Boucher, Alexander, or, as he was accustomed to call himself, from the title given him in a French journal, L’Alexandre du violon, one of the most remarkable but eccentric violinists, was born at Paris in 1770. At the age of six, he played before the dauphin, and at eight he played in public. He was in unfortunate circumstances in early life, until he obtained a place in Spain, under Charles IV, who was himself a very good violinist. In 1814, he went to England. At Dover, the customs officers were about to seize his instrument, but B. suddenly struck up “God save the King,” with variations, and was suffered to pass unmolested. He is as remarkable for eccentricity as for his musical powers. He is now established at Berlin. B. has attracted much attention by his resemblance to Napoleon, whose gait, demeanor and look he can perfectly imitate. Every one fancies he sees the emperor when B. folds his arms. He declares this resemblance to have been disadvantageous to him at the time of the restoration of the Bourbons.

Boucher, Francis; painter to the king, and director of the academy of painters; born at Paris, 1704, died 1770. While a pupil of the celebrated Lemoine, he gained, at the age of 19, the first prize of the academy. After studying at Rome for a short time, he returned to Paris, and was stilled the painter of the graces—a title which he did not merit. He would, per-
Boucher, Stanislaus, chevalier de, born 1644, died 1711, may be considered one of the most celebrated generals of his age. He was an officer of the great Condé, of Turin, Crequi, Luxembourg and Coligny. His defence of Namur, in 1695, and of Lille, in 1708, are famous. The siege of the former place was conducted by king William in person, and cost the allies more than 20,000 men. The latter was conducted by prince Eugene. An order was sent from Louis XIV, signed by his own hand, commanding B. to surrender; but he kept it secret, until all means of defence were exhausted. The retreat of the French after the defeat at Malplaquet, under the direction of B., was more like a triumph than a defeat.

Bois, Elisa, was born in Phila-
delphia, May 2, 1740. He was descended from one of the Huguenots, who sought refuge in America from religious persecution in France. He studied the law, and became eminent in that profession. At an early period of the revolutionary war, he was appointed, by congress, commissary-general of prisoners. In the year 1777, he was chosen a member of congress, and, in 1782, was made president of that body. After the adoption of the constitution, he entered the house of representatives, where he continued six years. He then succeeded Rittenhouse as director of the mint of the U. States, an office which he resigned in the course of a few years, and lived, from that time, at Burlington, New Jersey. He devoted himself largely to Biblical literature, and, being possessed of an ample fortune, made numerous donations to various charitable and theological institutions. The American Bible society, of which he became president, was particularly an object of his bounty. He died at the age of 82, in October, 1821.

Boudoir; a small room, simply and gracefully fitted up, destined for retirement (from couder, to pour, to be sulky). It may be indebted for its name to an angry husband, whose wife, when inclined to pour, shut herself up in her chamber. The boudoir is the peculiar property of the lady—her sanctum sanctorum. To this she flies for peace and solitude from the bustle of society.

Vol. II. 19
BOUFFLERS—BOUILLON.

BOUFFLERS, Francis Claude Amour, marquis de, one of the most celebrated of the generals of Louis XVI, born 1739, at Auvergne, 'early entered on a military life. He distinguished himself in the seven years' war, and was appointed governor of Guadaloupe in 1788, and conquered Dominica, St. Eustatia, Tobago, St. Christopher, Nevis and Montserrat. After the peace of 1783, he returned to Paris, and was appointed lieutenant-general. He afterwards travelled in England, through Holland and a great part of Germany, until he was made chief of the province Trois-Évêchés. In the assembly of notables (1787–88), he declared for the proposed reforms of Calonne, which, however, were defeated by cardinal Brienne. He was opposed to the plan of Necker for the union of the provinces. At the breaking out of the revolution, he supported the existing government, both in his former province and in Lorraine, Alsace and Franche-Comté. It was only at the urgent desire of the king, that he swore allegiance to the constitution of 1791. He repressed, in 1790, the rebellion of the garrisons of Metz and Nancy; and, although the national assembly decreed him a vote of thanks for the bravery and ability he had displayed on this occasion, still the revolutionists distrusted him. Shortly afterwards, he made preparations to assist Louis XVI in his escape. B. had made his arrangements well, and, had not the king forbidden any bloodshed, he would certainly have rescued him. Being thus compelled to leave the king at Varennes to his fate, he fled from the dangers to which he himself was exposed by the attacks of the revolutionists. From Luxembourg, he wrote a threatening letter to the national assembly, and then exerted himself to excite the foreign powers against the republic. He succeeded well at Vienna, gained over Gustavus III, and obtained the promise of 30,000 men from the empress Catherine II, to be put under the command of the king of Sweden and the French general. But Gustavus was murdered, the empress forgot her promises, and B. went over to England in 1796. Here he wrote his Mémoirs of the Revolution, which appeared in an English translation (London, 1797), and, after his death, in the original. B. died at London in 1800.

BOUILLON; a large district in Ardenne, 9 miles wide and 18 long, on the borders of Luxembourg and Liege. This woody and mountainous tract consists of the
town of B. with 1050 inhabitants, and 31 villages with 16,000 inhabitants. The town, which is the capital of a canton, within the arrondissement of Sedan, department of Ardenne, lies in the midst of hills, on the left bank of the Semois, which abounds with fish, 40 miles from Liege and 18 from Ivoix. It has a strong castle upon a rock, which, however, is commandeered by the neighboring mountains. Godfrey of B. once possessed the dukedom of this name. He was duke of Lower Lorraine, and B. was bestowed upon him as belonging properly to the county of Ardenne. In order to supply his expedition to the Holy Land, Godfrey mortgaged his duchy of B., in 1095, to the bishop Albert of Liege. After the estate had been held for many years by the bishopric, the houses of La Marck and La Tour d'Auvergne laid claims to it. In 1678, Godfrey Charles Henry de la Tour d'Auvergne, his chamberlain, after this time, relinquished their pretensions to the bishop of Liege for 150,000 Brabant guilders. In the war of 1672, France conquered B., and Louis XIV gave it, in 1678, to the chevalier La Tour d'Auvergne, his chamberlain. After this time, it belonged to the house of La Tour until the revolution, when it was taken from them, in 1792. The last possessor, Godfrey Charles Henry de la Tour d'Auvergne, died Dec. 1812. By the peace of Paris, in 1814, the dukedom was included in that of Luxembourg, which had fallen to the king of the Netherlands. The title of prince of B. was assumed, in 1712, by Philip d'Auvergne, captain in the British navy, and he continued to bear it till his death, in 1816. The congress which met at Vienna in 1815 appointed commissioners to investigate the comparative claims of this nobleman and prince Charles of Rohan. They decided in favor of the latter.

Bouilly, J. N., a popular French writer, born of a respectable family at Tours, applied himself, at first, to the law; but this study did not prevent him from devoting himself to literature. In the revolution, in which his whole heart was engaged, he united himself with Mirabeau and Barnave. About this time, he wrote his opera Peter the Great, which Godfrey set to music. At Tours, where he was president of the department, judge of the civil tribunal, and public prosecutor, his sense of justice prevented him from misusing his power to the detriment of the party. Neither the excesses of the Vendéans nor the fury of the revolutionary tribunal were experienced in his government. With his Château de Savigny, he contributed much to the introduction of primary schools. When the direction of public instruction passed from the hands of the committee of organization into those of the police, he left his office, and devoted himself to the drama. On account of the proximity of his style, the critic d'Arnaud says, he suffers from embroilment.

BOUILLON-BOULOGNE.

Bouillon—Boulogne. (See Paris.)

Boulogne; an old seaport town on the coast of Picardy, now chief town of an arrondissement of 280 square miles, with 74,676 inhabitants, in the department Pas de Calais, at the mouth of the Liane; lat. 50° 43' 33" N.; lon. 1° 36' 59" E. It consists of the upper and lower town; the latter of which is called Boulogne sur Mer, and is far superior to the former in the beauty of its houses and streets. Both parts contain together over 16,000 inhabitants, and about 1000 houses, and a harbor, which is too shallow for large vessels of war, but the largest merchant vessels can go in and out at high tide, without danger. With a favorable wind, vessels can reach the coasts of England in two or three hours from this place. Bonaparte, therefore, ordered the harbor to be made deeper, and a number of vessels to be built, in order to transport the army intended for the invasion of England, and some small forts and batteries to be erected, in order to strengthen the harbor and the town. A large army remained here for many months in a camp, which almost resembled a town, waiting to embark; when, upon the breaking out of hostilities with Austria, 1805, they were called to other places. B. is a bishopric, contains 6 churches, an hospital, an exchange, a maritime court, a society for the promotion of agriculture, commerce and the arts, a school for instruction in navigation, sea baths, manufactories of soap, earthen-ware, linen and woollen cloths, herring and mackerel, large quantities of which are caught off the coast, champagne and Burgundy wines, coal, corn, butter, linen and woollen stuffs, are the
articles of export. Four steam-boats run from this place to England.

Boulogne, Wood of; a pleasant grove near the gates of Paris, mentioned in all the French romances. The greatest part of the old trees were destroyed during the revolution. When Napoleon chose St. Cloud for a summer residence, he ordered young trees to be planted, had the place enclosed with a wall, and the wood stocked with game, so that it became more a place of resort than before. From July, 1815, to September, the English troops under Lord Wellington were stationed in it, and cut down the most beautiful trees, old and young, for barracks. For a long time, it has been the dwelling of the Parisians. Here was many a partie fine; and gay equipages and handsome coaches enlivened the place. Through the principal walk the pious heart of the illustrious founder of this place is only those which prefer.

The wild plants of the place are only those which prefer. Rich alluvial soil. The little castles of Madrid and Bagatelle lie near the wood, which no traveller should omit seeing.

Boulton, Matthew, a celebrated engineer, was born at Birmingham in 1728. After being educated at a grammar-school, he was instructed in drawing by Worlidge, and he also studied mathematics. He engaged in business as a manufacturer of hardware, and, as early as 1743, he is said to have invented, and brought to great perfection, inlaid steel buckles, buttons, watch-chains, &c., of which large quantities were exported to France, whence they were re-exported with avidity by the English, as "the offspring of French ingenuity." In 1762, B., finding his manufactory at Birmingham too confined for his purposes, purchased a lease of the Soho, about two miles distant, in the county of Stafford. This spot, then a barren heath, was gradually converted into an extensive manufactory and school of the mechanical arts, where ingenious men found ample employment for their talents from the liberal patronage of the patriotic proprietor. The introduction of that marvellous machine the steam-engine, at Soho, led to a connexion between B. and James Watt, of Glasgow, who became partners in trade in 1769. Among the many great undertakings in which these gentlemen were engaged, one of the most useful and important was the improvement of the coinage. In beauty and accuracy of execution, the coins struck at the Soho manufactory have rarely been surpassed; and the reform thus effected in the state of the English national currency conferred the highest honor on those with whom it originated. About the year 1773, was invented, at the establishment of Boulton and Watt, a method of copying, by a mechanical process, paintings in oil, so as to produce fac-similes of the originals, sufficiently accurate to deceive a practised connoisseur. The various mechanical inventions and improvements which originated, more or less directly, from the genius and application of B., are too numerous to admit of specification. His long life was almost unintermittently devoted to the advancement of the useful arts, and the promotion of the commercial interests of his country. He died at Soho, Aug. 17, 1809, and was interred in the parish-church of Handsworth. 600 of his workmen attended his funeral, each of whom had a silver medal presented to him, which had been struck for the occasion. He was a fellow of the royal societies of London and Edinburgh, and an associate of several scientific institutions abroad. His manners and conversation are said to have been highly fascinating; and his private character was extremely respectable. He left an only son, who succeeded him in his establishment at Soho.—(See his Memoirs, published at Birmingham, 8vo.)

Bounties, in political economy, is a reward or premium granted to encourage a particular species of trade or production. The general subject of encouragement of domestic, in competition with foreign, industry or trade (which is one species of industry), will be treated of under other heads, and only those circumstances mentioned, in this place, which distinguish bounties from other species of encouragement.

And it is to be observed, in the first place, that the general principle is the same, whether the encouragement is given to a particular species of education, as that in the clerical profession, which has been the subject of encouragement, direct or indirect, time immemorial; or education in general; or a particular kind of literary productions, as the best poetical composition; or a treatise on some scientific subject, as one on light and heat (for which Count Rumford has provided a premium in the funds left by him to the American academy of arts and sciences); or to some
agricultural or manufactured product, as in the case of the premiums formerly granted by England on the exportation of wheat, and those given by agricultural societies in the U. S., for the greatest production of any kind of grain on a given extent of land, or the best threshing or winnowing machine, &c. In all these instances, the general doctrine is assumed and presupposed, that the successful direction of talent or industry to the species of art or mode of production indicated will be beneficial to the public. The utility of the bounty will depend upon the correctness of this assumption. All bounties or premiums are not offered for the encouragement of domestic talent and industry to the exclusion of foreign competition. Many of those offered by the British and French governments, and by private associations, are held out to all competitors indiscriminately; and, where the object is universal improvement, this is one of the appropriate modes of encouragement, though others concur with it, such as the monopolies of copyrights and patents, and the honors and distinctions conferred on those who make any important improvement. But if the object be to favor the domestic production of any article, which is consumed in great quantities, and the supply of which will employ many hands, bounties are only the first steps in promoting it; for, when the species of production is once introduced to an extent sufficient for the supply of the consumption, or so far introduced that it can readily be pushed to the limits of the national demand, the production is more usually, and may be more economically, sustained by a tax or prohibition of the foreign substitute. It was, for instance, a very expensive mode of encouraging the domestic production of grain in Great Britain, to offer a bounty upon the exportation for it was buying a place in the foreign market; and though the bounty went to the subjects of the kingdom, namely, the British landholders, yet experience abundantly shows that a government may oppress, derange, and, possibly, paralyze, its industry, by pensions, rewards and gratuities to its own subjects. The object of the bounty was to encourage the home production, by guaranteeing that the domestic should be generally higher than the foreign market price, by the excess of the amount of the bounty over that of the freight paid on the exportation. If the government had, at the same time, imposed an additional land-tax, proportional to the enhancement of rents occasioned by the corn-bounty, it would thus have derived a great revenue. If the land-tax could, in this case, have been exactly proportioned, on each estate, to the enhancement of the rents in consequence of the bounty, the bounty and land-tax would have constituted a tax on the consumption of wheat, without affecting the value or rent of land. But no tax on land seems to have been levied as a counterpart to the bounty; one object of which seems to have been to promote the culture of grain, in order to provide adequate supplies of so necessary an article, for which, in time of war, it would be dangerous to depend upon foreign sources. The other object was, probably, to raise or sustain rents; at least, as that was its tendency, the agricultural interest would favor the measure on this ground. But the result was the payment of a tax, by the nation, for the advantage of the export trade in corn; and the question then arose, whether the advantages, direct and incidental, of that trade, were sufficient to compensate for the tax; and, after a long experiment, the nation finally became convinced that they were not so, and the bounty was abolished. But they secured its objects, in some degree, by a prohibition of the importation of grain, except at times when the prices in the home market rose to an unusual height, which was specified in these acts, which have since been so modified, that, at a certain price in the home market, the importation becomes allowable at a certain duty, and, at a higher rate of prices, the duty is less. The supply of the home market is thus secured to the agriculturists, within certain limits of price, and they are previously certain of no other than domestic competition below those prices; in short, they have the monopoly of the home market as long as they throw into it a quantity sufficient to supply the consumption, and foreign grain is introduced only in case of a rise of price apparently indicating an inadequate stock in the country. The only way of making up the deficiency of scant crops is by importation. If an ordinary crop supplies a large export trade, a blight would leave a smaller, or perhaps no deficiency of the home production for the home consumption. But no regulation, except the public granary system, would provide against an occasional resort to foreign supplies. If the present regulations secure a production commensurate with the consumption, in ordinary years, it will be attended with nearly all the advantages of the
bounty system, without being liable to its objections, which arise from the direct purchase of a foreign export trade, without any means of making that particular trade reimburse the expenditure. This shows us one of the objections to the bounty system, which is a more rumorous and burdensome one than even that of monopolies, when applied directly and permanently to the supply of foreign markets. It can be advantageously applied only at the opening of such a trade, to meet a part of the expense of the experiment, and this is one of the proper objects of this species of encouragement. One other class of cases may, properly enough, be made the subjects of bounties or premiums; namely, the productions of extraordinary efforts of ingenuity and skill. A competition is in this way excited, by which none suffers, and all the effects of which are beneficial to a community. There is one other class of cases in which nations have offered bounties; namely, to species of industry in the prosecution of which the national security is supposed to be, in some measure, involved. The support of the British navy, for instance, is supposed to depend, in some degree, upon the fisheries, since these are considered to be one of the great schools of seamen. The British government, therefore, encourages this species of industry by bounties. This kind of bounties have the effect of reducing the price of fish in the British market. If the reduction of the cost of this article increases the consumption, and creates a large export, then the bounty lessens the effect of training more seamen in this branch of business than would otherwise resort to it. The advantages, however, obtained by the bounty, over what would result from the prohibition of foreign fish, are, probably, insensible, and are purchased at a high price. Bounties are a more expensive mode of encouragement than duties and prohibitions, as the money must be first collected by a tax, and then distributed in bounties—a process in which a loss of from 2 to 20 per cent. is sustained—that is, a bounty of 100 dollars costs the nation from 120 to 140 dollars, according to the collection and distribution of the revenue is more or less expensive.

**Bounty—Bourbon.**

The founder of this family, which has governed France, Spain, the Two Sicilies, Lucca and Parma (q. v.), is Robert the Strong, who, in 801, became Duke of Neustria, and, in 820, lost his life in a battle against the Normans. Some trace his descent from Pepin of Heristel, others from a natural son of Charlemagne, and others from the kings of Lombardy. It is certain that the two sons of this Robert were kings of France. The elder, named Eudes, ascended the throne in 888, and died in 898; the younger, Robert, in 922, and died 925. The eldest son of this Robert was Hugh the Great, Duke of the Isle of France, and Count of Paris and Orleans. Hugh Capet, son of Hugh the Great (great-grandson of Robert the Strong), founded the third French dynasty, in 987. (See Capet.) One of his descendants, named Robert, was the root of the elder line of the dukes of Burgundy, which became extinct in 1361. A descendant of this Robert, Henry of Burgundy, was first regent of Portugal in 1065, where his legitimate descendants became extinct in 1388. Pierre de Courtenay, a descendant of Hugh Capet in the fifth generation, was father and ancestor of many emperors of Constantinople. The house of Anjou, which was descended from Hugh Capet in the eighth generation, possessed the throne of Naples for two centuries, and, for some time, that of Hungary. Another descendant of Hugh Capet, in the tenth degree, founded the house of Navarre, which continued from 1328 to 1455. A second family of Anjou, descended from Hugh Capet in the 13th degree, gave some distinguished princes to Provence. In the same degree, the younger line of the powerful dukes of Burgundy, derived its origin from him. This line became extinct with the death of Charles the Bold, in 1477, whose successor, Maria, married Maximilian, archduke of Austria, and became grandmother of Charles V. All these lines, with the exception of that of Burgundy, are descended from Anna Jaroshwina, a Russian princess, wife of Henry I, in 1531. Robert, earl of Clermont, second son of Charles, married Beatrice, Duchess of B. In this way, the city of B. (Archambault, or B. les Bains, in the department of Allier [formerly Bourbonais]), became the birthplace of the house of B., and Louis I, Duke of B., son of Robert and Beatrice, its founder. Two branches took their origin from the two sons of this Louis. Duke of B., who died in 1341. The elder line was that of the dukes of B., which became extinct at the death of the constable of B., in 1537, in the assault of the city of Rome. The younger was that of the counts of La Marche, afterwards counts and dukes of Vendome. Of these, Charles duke of Vendome, who died in 1537, had two sons, who became the...
founders of the following lines. Anthony of Navarre, father of Henry IV, is the origin of the royal house of B.; the elder line of which governs France, and branches of the same rule in Spain (since 1701), in the Two Sicilies: (where a branch of the Spanish Bourbons was established in 1735), and in Lucania (Parma was ceded to the last branch in 1748); the younger line is the ducal house of Orléans. From the other son, Louis, is derived the ducal family of Condé, which is divided into the houses of Condé and of Coigny. The French revolution overthrew the house of Capet from 1792 to 1814 in France; from 1815 to 1830 in Spain; from 1801 to 1812 in Naples; from 1812 to 1817 in Parma; and also in Etruria, where a Bourbon ruled, by means of Napoleon, from 1801 to 1807. The throne of Ferdinand IV alone was upheld by the Bourbons. After the fall of Napoleon, in 1814, the Bourbons succeeded again to the throne of France. The history of the Bourbon race is connected with a great part of the history of Europe.

We shall here give a general view of the family of B. After the death of Charles IV the Fair, the last of the old branch of the Capets, in 1826, the house of Navarre came to the throne in the person of Philip IV. This house became extinct, in 1829, by the murder of Henry III. The younger of B. (king of Navarre), a descendant of Louis I, duke of B., in the eighth degree, succeeded to the throne by right of inheritance, and maintained his power by his own personal greatness. His father, Anthony, had obtained the kingdom of Navarre through his wife, who inherited it, and Henry now added it to the French dominions. Anthony's younger brother, Louis, prince of Condé, was the founder of the line of Condé. There were, therefore, two chief branches of the Bourbons—the royal, and that of Condé. The royal branch was divided by the two sons of Louis XIII, the elder of whom, Louis XIV, continued the chief branch, which, under his descendants Louis (the dauphin) and Philip V, was separated into the elder or royal French branch, and the younger or royal Spanish branch; whilst the younger, Philip I, founded the house of Orléans, which he received in a state of decay by Louis XIV. The kings of the elder or French line of the house of B. run in this way:—Henry IV, Louis XIII, XIV, XV, XVI, XVII, XVIII, and Charles X. (For the kings of the younger royal branch, see Spain.)—The house of B., consisted, in 1835, of the following branches and members:—A. The royal French line. 1. Charles X. (q. v.); 2. his son, Louis Anthony, dauphin, duke of Angoulême (q. v.); 3. the dauphiness, daughter of Louis XVI, Maria Theresa Charlotte, born Dec. 19, 1778; 4. Caroline Ferdinande Louise, born 1783, widow of the duke of Berri, second son of the present king Charles X, murdered in 1820, has a daughter, Louise, mademoiselle de France, born Sept. 21, 1819, and a son, Henry, duke of Bourbon, born Sept. 29, 1820, petit-fils de France, heir apparent, by whose birth the house of Orléans have lost their chance of succeeding to the throne of France, next after that of Orleans.) 1. The children of Charles IV, king of Spain (died at Naples, Jan. 13, 1819), and his wife, Maria Luisa of Parma (died at Rome, Jan. 2, 1809). These are at present: 1. Charlotte, born 1793, queen-dowager of Portugal, whose son, Peter of Alcantara, now emperor of Brazil, married Leopoldine, second daughter of Francis I, emperor of Austria; 2. the son of his daughter Maria Luisa, queen-dowager of Etruria (died March 13, 1824), Charles Louis, born at Madrid, 1799, duke of Lucca (afterwards of Parma), who married the second daughter of Victor Emmanuel, former king of Sardinia, and by her had a son, Ferdinand, Jan. 14, 1833; 3. Ferdinand VII (q. v.), king of Spain; 4. Charles, infant of Spain, born 1798, lives at Madrid, married Maria Francisca, third daughter of the late king of Portugal, who has borne him two sons—Charles, born Jan. 31, 1815, and Ferdinand, Oct. 19, 1824; 5. Isabella, born 1783, second wife of Francis I, king of the Sicilies, had five sons and six daughters; 6. Francis of Paula, infant of Spain, born at Madrid, 1794, married, in 1819, his niece, Luisa, second daughter of Francis I, king of the Two Sicilies, by his second wife, Isabella; he has had two sons—Francis, duke of Cadiz, born at Madrid, May 18, 1822, and Charles, duke of Seville, born June 12, 1824. II. Brothers of Charles IV. 1. Ferdinand I, king of the Two Sicilies.
BOURBON.

(q.v.), died Jan. 4, 1825. His children by his first wife, Caroline of Austria, are:

a. the present king, Francis I, whose daughter, by his first marriage with Clementina of Austria, is Caroline, widow of the duke of Berri and mother of the duke of Bourbon; b. Christina, wife of Charles Felix, who became king of Sardinia in 1821; c. Amalie, wife of the duke of Orleans, Louis Philip, mother of nine living children; d. Leopold, prince of Salerno, married Maria Clementina, third daughter of the emperor Francis I. 2. Gabriel Anthony Francis Xavier, infant of Spain, died in 1788; his son Peter married Therese, eldest daughter of the king of Portugal, died in 1812, at Rio Janeiro, leaving a son, Sebastian Maria, infant of Spain, born in 1811. From the marriage of the brother of Charles III, Louis Antoine Jacob, with Therese of Ballabriga and Drummond, duchess of Chinchon, daughter of an Arragonian captain of infantry, have sprung, don Louis Maria of Bourbon, archbishop of Toledo; Caroline Josephine, wife of don Manuel Godoy, prince of peace; and Maria Louise of Bourbon, who married, in 1817, the duke of San Fernando, grandee of Spain.

The collateral branch of the royal French line of Bourbon-Orleans, which, by the revolution, lost the peerage of that name, and which derives its origin from Philip I, brother of Louis XIV, is the following: 1. Louis Philip, duke of Bourbon-Orleans, born 1777.—D. Of the line of Condé, second branch of the house of B., the following individuals, of the branch of Bourbon-Condé, were living in 1839:—Louis Henry Joseph, duke of B., son of Louis Joseph, duke of B., prince of Condé (see Condé), who died in 1818. (His sister Louise Adelaide, princess of Condé, born in 1757, lived in England, in a convent at Norfolk; in 1768, was abbess at Remonville; entered a convent at Turin in 1793; became, in December, 1816, mistress of a convent at Paris, and died March 10, 1824.) Charles Clément, prince of Condé, had two natural daughters, afterwards legitimatized, one of whom, Charlotte Margaret Elisabeth, mademoiselle de Bourbon, married the count of Löwendal, now Danish major-general. The second branch, Bourbon-Conti, became extinct by the death of Louis Francis Joseph of B., prince of Conti, March 13, 1814. In 1815, Louis XVIII granted his two natural sons, the lords of Hattonville and Removille, permission to assume the name and arms of Bourbon-Conti. The princess of Mont-Cuir-Zaian, Gabrielle Louisa, is considered as the natural daughter of prince Louis of Bourbon-Conti. She was a knight of the order of the Holy Ghost, belonged to the legion of honor, and died at Paris, 70 years of age, March 29, 1825. She served in a regiment of dragoons with honor for some time. Goethe has taken the materials for his Eugenia, the Natural Daughter, from the biography of this lady, published in 1786. (See Histoire du Bourbonnais et des Bourbons, by Collier Demorec, member of the chamber of deputies, Paris, 1818, 2 vols.; and Achaintre's Histoire chronologique et généalogique de la Maison royale de Bourbon, Paris, 1824, 2 vols.) The Memoires relatifs a la Famille royale de France pendant la Revolution, publiés d'apres le Journal, &c. de la Princesse de Lamballe (Paris, 1826, 2 vols.), is, throughout, a miserable work.

Bourbon, Charles, duke of, or constable of Bourbon, son of Gilbert, count of Montpensier, and Clara of Gonzaga, was born in 1459; received from Francis I, in the 20th year of his age, the sword of constable. By the coolness with which he faced death in posts of the greatest hazard, he excited the admiration of his fellow-soldiers. When viceroy of Milan, he won all hearts by his frankness and affability. His fame was not yet tarnished, when the injustice of his king deprived him of his offices, banished him from France, and brought the family of Bourbon into disgrace, in which state it continued until the conclusion of the reign of Henry III. Some historians declare, that the duchess of Angouleme, mother of Francis I, had fallen in love with the young constable, and could not endure the contempt with which he treated her passion; others relate, that, influenced by avaricious motives, she laid claim to the estates of Charles of B., and obtained possession of them by a judicial process. What may be the true cause of her conduct, it is certain that she strove to invalidate a formal donation of Louis XII. The constable, enraged at seeing himself deprived of his estates by the mother of the king whom he had served with so much fidelity and zeal, listened to the proposals made him by Charles V and the king of England. He experienced the usual fate of deserters: he was well received while his services were needed, but narrowly watched to secure his fidelity. Exposed as he was to the contempt
of the Spanish nobility, and the jealousy of the generals of Charles V, nothing remained to him but his courage and repentance. His ability, however, induced the emperor to bestow upon him the command of an army, and to treat him with honor. He was already beyond the confines of France, when Francis I sent to demand the sword which he bore as constituent, and the badge of his order. His answer displays the anguish of his heart—refused to me: the badge of my order I left under my pillow at Chantelais." His flight was a misfortune to France; the expedition of Francis into Italy was arrested. Having been appointed to the command of the imperial troops, he made an unsuccessful attack upon Marseilles, but contributed greatly to the victory of Pavia. When Francis was carried a prisoner to Madrid, he went there in person, that he might not be forgotten in the treaties between the two monarchs; but Charles V declined to him, but his courage and resolution, to treat him as a prisoner of war, and B. discovered that he could not trust the emperor, who had even promised him his sister in marriage. Compelled to another his resentment, he returned to Milan, maintaining possession of Italy by the terror of his arms, and obtained so much authority as to become an object of suspicion to the emperor, who, in order to weaken him, refused to grant him the necessary supplies. In order to prevent the dispersion of his army, he led the soldiers to the siege of Rome, the plunder of which city he promised them. He was the first to mount the breach, and was killed, May 6, 1567, by a ball, shot, it is said, by Beuvre- nuto Cellini. He died excommunicated, without issue, in the 28th year of his age.

His body being conveyed to Gaeta, his soldiers erected over it a splendid monument, which was afterwards destroyed.

BOURBON, Louis, cardinal and archbishop of Toledo; born 1777; son of the infant Louis, brother of king Charles III of Spain, and the duchess of Chinchon. The marriage was concluded with the royal assent; nevertheless, it was doubted, after the death of Charles II, whether the prince would be lawful heir to the throne. Louis, a male descendant of the old line should be wanting. He therefore entered the church, and a cardinal's hat was given to him in 1800. After the imprisonment of Ferdinand VII at Valencia, he joined the party of the cortes, and became very influential. He offered, in 1814, the constitution of the cortes to Ferdinand VII for his signature; and, the king having altered his determination, B. lost his favor, and was deprived of the archbishopric of Seville. After the events which took place on the insurrection of the army at the island of Leon, he engaged in the revolution, and was president of the provisional junta before which the king swore, at Madrid, March 9, 1820, to abide by the constitution of the cortes of 1812. He died March 10, 1822.

BOURBON, Isle of; situated in the Indian ocean, about 400 miles east of Madagascar; lat. 20° 31' S.; lon. 55° 20' E. It is 48 miles long and 30 broad. It was discovered by Mascarenes, a Portuguese, in 1545, who called it by his own name. The French took possession of it in 1643, and gave it the name of B. At different periods of the revolution, it was called Réunion and Bonaparte. It was captured by the English in 1810, and restored to France in 1815. The population consists of 17,000 whites, 6,000 free Negroes, and 60,000 slaves. Its commerce is impeded by the want of good harbors. The principal articles of export are coffee, sugar, rice, tobacco, spices, indigo, pepper, maize, &c. The coffee was brought from Mocha, and is of an excellent quality. The capital is St. Denis, a pretty town, with about 8000 inhabitants. The heat is excessive from November to April; the evenings, however, are refreshed by the sea-breezes, and the mornings by the land-breezes. The island is of volcanic origin, and seems to be composed of two enormous volcanic mountains, in one of which the fire is extinct: the other is still in activity. The loftiest summit, le Piton de Neige, or the Snowy Spike, is about 10,000 feet above the level of the sea.

BOURBONNAIS; a province and government of Old France, with the title, first of a county, and afterwards of a duchy, lying between the Nivernais, Berry and Burgundy. It now forms the department of the Allier. It derived its name from the small town of Bourbon l'Archambault, from which the reigning family of France and the dukes of Bourbon also received their title. (See Bourbon.)

BOURDALOU, Louis, the reformer of the pulpit, and founder of genuine pulpit eloquence in France, was born at Bourges, in 1622, and was 16 years old when he entered the society of Jesus. His instructors successively intrusted him the chairs of polite letters, rhetoric, philosophy and moral theology. In 1639, he entered the pulpit, and extended his rep-
Bourdaloue—Bordeaux.

Bourdaloue (lon. 6° 34' W.; lat. 4° 59' 14" N.), in the Bordelee district of the ancient Guyenne or Aquitania, the metropolis of trade and chief city in the department of the Girond, and the head of an arrondissement containing 13 cantons, 1632 square miles, and 223,883 inhabitants, lies on the left bank of the Garonne, and is connected with the opposite side by the new bridge erected by Louis XVIII, 700 feet long, and supported by 17 arches, 16 leagues from the mouth of the river. It numbers 7800 houses and 100,000 inhabitants. It is an antique and gloomy city, having 13 gates, 12 of which lead to the river, and 7 to the adjacent country; also 2 suburbs (Les Chartrons and St. Severin), splendid public places, delightful promenades, 40 Catholic churches and 1 Protestant. Among the buildings deserving of mention are the cathedrals, the council-house of Lambriere (in which the ancient dukes of Guyenne resided, and the parliament afterwards held its sessions), the exchange, the hôtel des Fermes, the theatre, the Vauban, the palace built by Bonaparte in 1810, and a newly invented mill, with 24 sets of stones, put in motion wholly by the ebb and flow of the tide. B. is encircled by walls and strong towers. The small fortifications of Hain and St. Louis, or St. Croix, and the stronger works of the ebb and flow of the tide, which sometimes rises to the height of 12 feet; but it has been unhappily injured by the accumulation of sand. B. has more than 900 merchant-ships. It exports, on an average, 100,000 hogsheads of wine, and 20,000 of French brandy. Other articles of export are vinegar, dried fruits, ham, firewood, turpentine, glass bottles, cork, honey, &c. Among the articles of import are colonial wares, British tin, lead, copper and coal, dye-stuffs, timber, pitch, hemp, leather, herrings, salted meat, cheese, &c. B. has the greatest share of any city in France, except Nantes, in the French and American trade. It contains a bank, an insurance company, &c. Its fairs, in March and October, are of the utmost importance to all the west of France. Its merchants carry on the whale and cod fisheries through the harbors of Bayonne, St. Jean de Luce, and St. Malo. B. is the seat of an archbishop, a Protestant consistory, a prefect, and of the commander-in-chief of the 11th division of the militia. It has a royal court of justice, a chamber of commerce, a commercial court, a university (established in 1441), an academy of sciences (instituted in 1712, which has a library of more than 55,000 volumes), an academy of fine arts (founded in 1670, and renewed in 1768), a museum, a lyceum, a Linnæan society, an institution for the education of the deaf and dumb, a school of trade and navigation, &c. The most important manufactories are 14 sugar-houses, several glass-houses, potteries, manufactories of wooden and lace. B. is the Burdigala of the Romans. In the 6th century, it was in the possession of the Goths, and at length pillaged and burnt by the Normans. B. is the Burdigala of the Romans. In the 6th century, it was in the possession of the Goths, and at length pillaged and burnt by the Normans. By the marriage of Eleonora, daughter of William X, the last duke of Guyenne, to Louis VII, it fell into the hands of France. But, in 1153, the princess was repudiated by her husband, and afterwards united in marriage with the duke of Normandy, who ascended the...
thrones of England, and transferred B. to that crown. After the battle of Poitiers, Edward, the black prince, carried John, King of France, prisoner to B., where he resided 11 years. Under Charles VII, in 1451, it was restored again to France. In 1442, the citizens rebelled on account of a tax on salt, and the governor De Montmorency was put to death, for which the inhabitants disaffected to the government of Napoleon, so that they were the first to declare for the house of Bourbon, March 12th, 1814. The Roman poet Ausonius was a native of B. Montaigne was born in the neighboring country, and the latter lies buried there in the church of St. Bernard. (For the wines of Bourdeaux, see Bordelaise.)

Bourgeois, Sebastian; a celebrated French painter, born at Montpellier, in 1616. Being poor and without occupation, he enlisted as a soldier. After receiving his dismissal, he visited Italy, and studied under Sacchi and Claude Lorrain. In 1652, he was driven from the French kingdom by the religious troubles. He afterwards became distinguished in his own country by many great works, among which are the following:—the Dead Christ, the Adulteress, the Old Kings of Burgundy in the Senate-house at Aix. He had no peculiar manner, but he imitated others. He was a good engraver on copper. He died in 1671, while engaged in painting the ceiling of the Tuileries.

Bourges; a city of France, formerly the capital of the province of Berri, now of the department of the Cher, with a population of 16,330 inhabitants. The cathedral is one of the finest Gothic structures in France. The pragmatic sanction (a. v.) was published at B. by Charles VII. Louis XI was born there, and founded its university in 1465. It now contains one of the 26 academies of the university of France. There are some manufactories of silk, woollen stuffs, cottons and stockings in the city and its neighborhood, which are disposed of at its annual fairs. The inhabitants are principally supported by the nobility and students who reside in the town. It was anciently called Aevaricum, and afterwards Bituriges, and was one of the most ancient and best fortified cities of Gaul. It lies 155 miles S. of Paris; lat. 47° 5' N.; lon. 2° 23' E.

Bourgoigne. (See Burgundy.)

Boigny, Antoinette; a celebrated religious fanatic, born in 1616, at Lille, daughter of a merchant. At her birth, she was so deformed, that a consultation was held whether it would not be proper to destroy her as a monster. She made herself famous by her restless manner of life, her wanderings through France, Germany and Denmark, and by her fanaticism. A collection of her authentic works, in which she displays an animated eloquence, was published at Amsterdam, in 1686, in 21 volumes.

Boursault, Edme, was born in 1638, at Muci l'Eveque, in the province of Burgundy, grew up without education, and went, in 1651, to Paris, without understanding anything but his own provincial patois. Here he learned to speak and write French, and improved so fast, that the composition of a book for the instruction of the dauphin was committed to him. This work, La Veritable Etude des Sourrains, pleased the king so much, that he appointed B. assistant instructor of his son. B. declined the office, and also refused to offer himself as a candidate for admission into the academy, on account of his ignorance of Latin. In his youth, he undertook a poetical gazette, with which the king and court were so much pleased, that an annuity of 2000 livres was granted him. But, happening to satire, in this work, a ludicrous adventure, which had befallen a Capuchin, the confessor of the queen caused the journal to be suppressed, and B. himself escaped the Basile only by the influence of the prince of Condé. Another journal of his was suppressed soon after, on account of a satirical couplet on king William, with whom the French court then wished to negotiate. He was more fortunate in his writings for the stage, and many of his pieces met with permanent success; among others, Esco a la Ville, and Esco a la Cour, which still continue on the stage. His two tragedies Marie Stuart and Germanicus are forgotten. B. had the misfortune to quarrel with Molière and Boileau. He wrote a severe criticism on the Ecole des Femmes, under the title of Le Portrait du Peintre. Molière chastised him in his Improvisto de Versailles. To revenge himself on Boileau, who had ridiculed him in his satires, he wrote a comedy called Satyre des Satyres; but Boileau prevented its performance.
BOURSAULT—BOW.

B. afterwards took a noble revenge. He heard that Boileau struck his name from his satires. B. died in 1828.

Bourboune, entirely destitute: he hastened to see him, and compelled him to accept a loan of 200 louis d'ors. Touching by this generous conduct, Boileau struck his name from his satires.

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weapon. It was made of yew, ash, &c., of the height of the archer. The arrow being usually half the length of the bow, the *cloth-yard* was only employed by a man six feet high. The arbalist, or cross-bow, was a popular weapon with the Italians, and was introduced into England in the 13th century. The arrows shot from it were called *quarrels*. The bolt was used with both kinds of bows, but*the bow, and the distance to which it will carry, some remarkable anecdotes are related. Xenophon mentions an Arcadian whose head was shot through by a Cambodian archer. Stuart (Jibb. Hist. I) mentions a random shot of a Turk, which he found to be 554 yards; and Mr. Strutt saw the Turkish ambassador shoot 420 yards in the artillery ground near Bolling square. Lord Bacon speaks of a Turkish bow which has been known to pierce a steel target, and the hairs. It is evident that the size and ornamented piece of wood or ivory, called the *nut*, and fastened with a screw, which serves to regulate the tension of the *airs*. It is evident that the size and construction of the bow must correspond with the size of the species of *viol-instruments* from which the tone is to be produced.

**Bow Instruments** are all the instruments strung with catgut or goat-gut, from which the tones are produced by means of the bow. The most usual are the double bass (*violoncello*); the small bass, or *violoncello*; the tenor (*viola di braccio*); and the violin proper (*violin*, from *viola*). In reference to their construction, the several parts are alike; the difference is in the size. (See *Violin* and *Quartett*.)

**Bowdich, Thomas Edward;** an ingenious and enterprising man; one of the victims of the attempts to explore the interior of the African continent. He was born at Bristol, in June, 1763, and was sent to Oxford, but was never regularly matriculated. At an early age, he married, and engaged in trade at Bristol. Finding the details of business irksome, he obtained the appointment of writer in the service of the African company. In 1816, he arrived at Cape Coast Castle. Having been engaged, and having therefore no prospect of further employment, yet wishing ardently to return to Africa for the purpose of visiting its hitherto unexplored regions, he resolved to make the attempt with such assistance as he could obtain from private individuals. He, however, previously went to Paris, to improve his acquaintance with physical and mathematical science. His reception from the French literati was extremely flattering. A public eulogium was pronounced on him at a meeting of the institute, and an advantageous appointment was offered him by the French government. To obtain funds for the prosecution of his favorite project, he also published a translation of Molière's *Travels* to the Sources of the Senegal and Gambia, and other works; by the sale of which...
he was enabled, with a little assistance from other persons, to make preparations for his second African expedition. He sailed from Havre in August, 1822, and arrived in safety in the river Gambia. A disease, occasioned by fatigue and anxiety of mind, here put an end to his life, Jan. 10, 1824. B. is said to have been a profound classic and linguist, an excellent mathematician, well versed in most of the physical sciences, in ancient and modern history, and in polite literature. He was a member of several literary societies in England and abroad.

Bowdoin, James, a governor of Massachusetts, born, in the year 1727, at Boston, was the son of an eminent merchant. He was graduated, in 1745, at Cambridge (N. E.). In 1753, he was elected a representative to the general court, and, in 1755, became a member of the council. In his situation he continued until 1760, when he was negatived by governor Bernard, on account of his decided whig principles, but afterwards accepted by Hutchinson, because he thought his influence prejudicial "in the house of representatives than at the council board." In consequence of his being a member of the committee who prepared the answer to the governor's speeches, which asserted the right of Great Britain to tax the colonies, he was negatived by governor Gage, in the year 1774. In the same year, he was elected a delegate to the first congress, which was to meet at Philadelphia, but was prevented from attending by the state of his health. His place was afterwards filled by Mr. Hancock. In 1775, he was moderator of the meeting in which the inhabitants consented to deliver up their arms to general Gage, on condition of receiving permission to depart from the city unmolested, which agreement, however, was violated by the British commanders. Shortly after, he was appointed chief of the Massachusetts council, and, in 1778, was chosen president of the convention which formed the constitution of that state. In 1785, he was appointed governor of Massachusetts, and had the good fortune to crush, without a single execution, an insurrectionary movement against the government. Governor B. was a member of the convention of Massachusetts assembled to deliberate on the adoption of the constitution of the U. States, and exerted himself in its favor. He was ever an ardent lover of learning and science, and a benefactor to others of the same character. The university of Edinburgh honored him with the degree of doctor of laws, and the royal societies of Dublin and London, with several other foreign societies, admitted him among their members. He was the first president of the academy of arts and sciences, which was established, in 1780, at Boston, in a great measure through his influence and exertions, and to which he contributed several papers, printed in the first volume of their Transactions. His letters to doctor Franklin have likewise been published. He died at Boston, in 1790.

Box-tree. The box-tree (buxa-senepervenus) is a shrubby evergreen-tree, 12 or 15 feet high, which has small, ovate or opposite leaves, and grows wild in several parts of Britain. It has been remarked, that this tree was formerly so common in some parts of England, as to have given name to several places, particularly to Box-hill in Surry, and Boxley in Kent; and, in 1815, there were cut down, at Box-hill, as many trees of this sort as produced upwards of £10,000. This tree was much admired by the ancient Romans, and has been much cultivated, in later times, on account of its being easily clipped into the form of animals and other fantastic shapes. Trunks of a yellowish color, close-grained, very hard and heavy, and admits of a beautiful polish. On these accounts, it is much used by turners, by engravers on wood, carvers, and mathematical instrument makers. Flutes and other wind-instruments are formed of it; and furniture, made of box-wood, would be valuable were it not too heavy, as it would not only be very beautiful, but its bitter quality would secure it from the attacks of insects. In France, it is much in demand for combs, knife-handles and button-moulds; and it has been stated that the quantity annually sent from Spain to Paris is alone estimated at more than 10,000 livres. An oil distilled from the shavings of box-wood has been found to relieve the tooth-ache, and to be useful in other complaints; and the powdered leaves destroy worms.

Boxing. (See Gymnastics.)

Boyde11, John, born at Dorington, 1719, deserves a place in the history of the arts in England, on account of the influence which his enterprises had upon the advancement of the arts in that country. He was an engraver on copper; afterwards, a collector and seller of engravings. His greatest undertaking is his Shakespeare Gallery, for which he en-
employed most of the great painters and engravers of his time. He made some other collections of prints, among which the Houghton Gallery is conspicuous, which he bought by the empress Charlotte. To him we owe a work of high interest, Liber Veritatis, a copy of that precious volume in which Claude Lorraine sketched the designs of all his paintings. The original is owned by the duke of Devonshire. Of his Collection of Prints engraved after the best Paintings in England (19 parts), the two first volumes are excellent. B. enjoyed much respect. He was an alderman and lord mayor of London. He died in 1894.

BOYELIEU, Adrian; one of the most celebrated opera composers of France. He was born at Rouen, in 1775, and, at seven years of age, studied music with Broche, the organist of the cathedral of that place. About 1795, he went to Paris, and soon made himself known and esteemed by the composition and execution of his ballads. He was soon appointed professor of the piano-forte at the conservatory. At this time, he wrote several operas, among which Ma tante de Village (1813) and La Fête du Village Veiné (1816). A later opera, Le Chaperon Rouge, has lively music, but is not equal to John of Paris in originality, which was bought by the empress Catherine. To him we owe a work of high interest, Liber Veritatis, a copy of that precious volume in which Claude Lorraine sketched the designs of all his paintings. The original is owned by the duke of Devonshire. Of his Collection of Prints engraved after the best Paintings in England (19 parts), the two first volumes are excellent. B. enjoyed much respect. He was an alderman and lord mayor of London. He died in 1894.

Boyder, Jean Pierre, president of the island of Hayti, was born at Port au Prince, in that island, about the year 1786. He is a mulatto, although somewhat darker than most persons of that cast. His father was a shopkeeper and tailor of good repute and some property in the city of Port au Prince, and his mother a Negress from Congo in Africa, who had been a slave in the neighborhood. He joined the cause of the French commissioners Santhonax and Polverel, in whose company, after the arrival of the English, he withdrew to Jacmel. Here he attached himself to Rigaud, set out with him for France, and was captured on his passage by the Americans, during the war between France and the United States. After the conclusion of the war, being released, he resumed his voyage to France, where he remained until Le Clerc's expedition against St. Domingo was organized. Like many other persons of color, he took part in that expedition; but, on the death of Le Clerc, he joined Petion's party, and continued attached to that chieftain until his death. His rose, in the service of Petion, from the rank of his aid and private secretary to be general of the arrondissement of Port au Prince, and was finally named by Petion to be his successor in the presidency. Petion died March 29th, 1818, and B. was immediately installed in his office, and assumed the functions of government. When the revolution broke out in the northern part of the island, in 1820, he was invited by the insurgents to
place himself at their head; and, upon Christophe's death, the north and south parts of the island were united, under his administration, into one government, by the name of the republic of Hayti. In the course of the succeeding year, a similar revolution took place in the eastern or Spanish part, the inhabitants of which voluntarily placed themselves under the government of B., who thus became, in the course of a few years, by mere good fortune, and without any merit on his part, undisputed master of the whole island. Had his wisdom corresponded to his fortune, he might, by fostering the agricultural interests of the island, and strengthening its friendly relations with the United States and Great Britain, have accomplished much towards establishing the prosperity of the republic on a stable foundation. But he is represented as a vain and weak man; and, although more amiable in his temper than Christophe, is deri- tute of the energy of character and comprehensive views, by which that despot's policy was directed. The consequence has been the gradual decline of the agriculture, commerce and wealth of Hayti, and, finally, its total prostration, by the absurd arrangement concluded by B. with France in 1825.

He foolishly agreed to pay to France an indemnity of 150,000,000 of francs in five equal annual installments, in consideration of which, France merely recognised the actual government of Hayti; and the absolute inability of B. to make good his engagements places him at the mercy of France (See Hayti.)

BOYER, Robert; a celebrated natural philosopher; born at Lisnure, in Ireland, 1627, 7th son of Richard, the great earl of Cork. In 1658, he went to Geneva, under the care of a learned French gentleman, where he continued to pursue his studies for several years. In 1641, he made a journey to Italy. In 1642, he was left at Marseilles destitute of money, on account of the breaking out of the Irish rebellion. This circumstance did not allow him to return to England until 1644. During this period his father had died, leaving him considerable property. He now went to his estate at Stallbridge, where he devoted himself to the study of physics and chemistry. He was one of the first members of a learned society, founded in 1634, which at first went under the name of the philosophical college. On account of the political disturbances, this society retired to Oxford, but was revived after the restoration, under the name of the royal society. B. occupied himself, at Oxford, in making improvements in the air-pump. Like Bacon, he esteemed observation the only road to truth. He attributed to matter merely mechanical properties. Every year of his life was marked by new experiments. We are indebted to him for the first certain knowledge of the absorption of air in calcination and combustion, and of the increase of weight which metals gain by oxidation. He first studied the chemical phenomena of the atmosphere, and was thus the precursor of Mayow, Hales, Cavendish and Priestley.

In all his philosophical inquiries, he displayed an accurate and methodical mind, relying wholly upon experiments. At the same time, his imagination was warm and lively, and inclined to romantic notions, which were first produced, in his childhood, by the perusal of Amaelis of Gaul, and always exercised a visible influence on his character. He was naturally inclined to melancholy, and this temper of mind was increased by circumstances. The sight of the great Carthusian monastery at Grenoble, the wildness of the country, as well as the severe ascetic life of the monks, made a deep impression upon him. The devil, as he said, taking advantage of his melancholy disposition, filled his soul with terror, and with doubts concerning the fundamental doctrines of religion. This situation was so insufferable, that he was tempted to free himself from it by committing suicide, and was only prevented by the fear of hell. While endeavoring to settle his faith, he found those doctrines of the Christian religion, which had been published before his time, unsatisfactory. In order, therefore, to read the original works, which are considered the foundation of Christianity, he studied the Oriental languages, and formed connexions with Pococke, Thomas Hyde, Samuel Clarke, Thomas Barlow, &c. The result of his studies was a conviction of its truth, which was manifested not only by his theological writings, but by his benevolence and generous disinterestedness. He instituted public lectures for the defence of Christianity; and to this endowment we owe the convincing arguments of Samuel Clarke, on the existence of a God. B. did much for the support of the mission in India, and caused Irish and Gaelic translations of the Bible to be made and printed at his own expense. To his religious principles were united the purest morals, a rare modesty, and an active be-

Boylston, Zabdiel, was born at Brookline, Massachusetts, in 1684. He studied medicine at Boston, where, in a few years, he rose into extensive practice, and accumulated a considerable fortune. In 1721, when the small-pox broke out in Boston, and filled the whole country with alarm, doctor Cotton Mather pointed out to the physicians of the town an account of the practice of inoculation in the East, contained in a volume of the Transactions of the Royal Society. This communication was received with great contempt by the whole faculty, with the exception of B. Although this practice was unexampled in America, and not known to have been introduced into Europe, he immediately inoculated his own son, a child of six years of age, and two servants. Encouraged by his success, he began to extend his practice. This innovation was received with general opposition. The physicians of the town gave their unanimous opinion against it, and the selectmen of Boston passed an ordinance to prohibit it. But, supported by the conviction of the utility of this invention, and the countenance of several intelligent clergymen, he persevered; and, in 1721 and 1722, inoculated 257 persons; 39 more were inoculated by others, and of the whole number (386), only six died. During the same period, of 5730, who had the small-pox the natural way, 844, nearly one seventh, died. Still, however, his opponents maintained that his practice was wilfully spreading contagion; that, as the disease was a judgment from God on the sins of the people, all attempts to avert it would but provoke him the more, and that, as there was a time appointed to every man for death, it was impious to attempt to stay or to avert the stroke. Religious bigotry, being thus called into action, so exasperated many of the ignorant against B., that attempts were threatened against his life, and it became unsafe for him to leave his house after dusk. Time and experience at length came to the aid of truth, opposition died away, and that, as there was a time appointed to every man for death, it was impious to attempt to stay or to avert the stroke. Religious bigotry, being thus called into action, so exasperated many of the ignorant against B., that attempts were threatened against his life, and it became unsafe for him to leave his house after dusk. Time and experience at length came to the aid of truth, opposition died away, and that, as there was a time appointed to every man for death, it was impious to attempt to stay or to avert the stroke.

Boyné; a river of Ireland, running into the Irish channel, near which was fought a celebrated battle between the armies of James II and William III, in 1690; the latter was victorious, and James was obliged to flee to the continent.

Brabant, duchy of, in the kingdom of the Netherlands, having Holland on the north, Liege and Limburg on the east, Flanders on the west, and Hainault and Namur on the south. North B. contains 252,000 inhabitants, and South B. 306,000. B. was erected into a duchy in the 7th century. For some ages, it belonged to the Frankish monarchy, and subsequently became a German fief. At all periods in the history of the Belgic provinces, it appears to have been preeminent among the states, in the general assemblies of which its deputies held the first place, and gave their votes before the others. The last duke, a descendant of Charlemagne, dying in 1005, the duchy devolved on Lambert I, count of Louvain, his brother-in-law. Through his posterior, it descended to Philip II, duke of Burgundy, and afterwards came, in the line of descent, to the emperor Charles V. In the 17th century, the republic of Holland took possession of the northern part, which was thence called Dutch B. The other part belonged to Austria, and was occupied by the French in 1716, but restored at the peace of Aix-la-Chapelle. It was again occupied by them in 1797, and their possession confirmed by the treaties of Campo Formio (1797) and Luneville (1801). Dutch B. was united to the French empire in 1810. Austrian B., while under the dominion of Austria, had its own states, consisting of 2 bishoprics and 11 abbeys, with the barons, and 7 deputys, chosen by the cities of Brussels, Louvain and Antwerp. Since the formation of the kingdom of the Netherlands in 1815, North B. sends 7, and South B. 8 members to the representative assembly. The province of Antwerp, which

many years, but yet found time for literary and philosophical pursuits, and contributed several valuable papers to the Transactions of the royal society. He died March 1, 1766. His only publications, besides his communications to the royal society, are, Some Account of what is said of Inoculating, or Transplanting the Small-pox, by the learned doctor Emanuel Timonius, and Jac. Pylarinus, (a pamphlet, Boston, 1721), and An Historical Account of the Small-pox inoculated in New England, &c. (London 1736).
formerly belonged to the duchy, sends 5.

Much of the soil, especially in the southern part, is fertile, produces large quantities of grain, and affords excellent pasturage. In the north, considerable tracts are covered with moor, heath and woods; but others yield large crops of wheat, hops and flax. There are manufactures of cloth, lace, linen, &c. The chief rivers are the Dummel, the Dyle and the N诟le, which, with the canals, form a convenient system of navigation. In the northern part, the inhabitants are Protestants; in the southern, chiefly Catholic.

Bracteata. (See Gymnosophists.)

Bracteatae: thin coins of gold or silver, with irregular figures on them, stamped upon one surface only, so that the impression appears raised on one side, while the other appears hollow. It seems most probable, that these coins, being circulated in great quantities under the name of the coins of the 15th century. He studied civil and canon law at Oxford, and, about the year 1544, Henry III made him one of his judges itinerant. Some writers say, that he was afterwards chief justice of England; but his fame at present is derived from his legal treatise, entitled De Legibus et Consuetudinibus Angliae, which was first published in 1569, folio, but of which a more correct edition was published in 1640, 4to. It is possibly to the unsettled nature of the times, and the alternate ascendency of the crown and barons of the duchy.

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Bracteatum. Henry de, one of the earliest writers on English law, flourished in the 13th century. He studied civil and canon law at Oxford, and, about the year 1544, Henry III made him one of his judges itinerant. Some writers say, that he was afterwards chief justice of England; but his fame at present is derived from his legal treatise, entitled De Legibus et Consuetudinibus Angliae, which was first published in 1569, folio, but of which a more correct edition was published in 1640, 4to. It is possibly to the unsettled nature of the times, and the alternate ascendency of the crown and barons of the duchy.
in this office. On the attorney-general of the U. States being promoted to the office of secretary of state, B. was appointed to the vacant office, Jan. 28, 1794. This office he held till his death. In 1793, he published an Inquiry how far the Punishment of Death is necessary in Pennsylvania. This performance justly gained him great credit. His death was occasioned by an attack of the bilious fever. He died August 23, 1795, in the 40th year of his age.

Bradley, James, a celebrated astronomer, was born at Shireborn, England, in 1692. He studied theology at Oxford, and took orders; but his taste for astronomy soon led him to change his course of life. His uncle instructed him in the elements of mathematics, his own industry did everything else, and, in 1721, he was appointed professor of astronomy at Oxford. Six years afterwards, he made known his discovery of the aberration of light. (q.v.) But, although this discovery gave a greater degree of accuracy to astronomical observations, and although the discrepancies of different observations were much diminished, yet slight differences remained, and did not escape his observation. He studied them during 18 years with the greatest perseverance, and finally discovered that they were fully explained by the supposition of an oscillating motion of the earth's axis, completed during a revolution of the moon's nodes, i.e., in 18 years. He called this phenomenon the nutation of the earth's axis; and published it in 1742 (Philos. Trans. No. 275), his account of the apparent motion of the fixed stars, with his theory which rendered the unhappy sovereign more amenable; and although nothing was done, both for and by him, to give weight and dignity to this extraordinary tribunal. He rendered himself obnoxious to Cromwell, when the latter seized the protectorate, and was deprived of the chief justiciary of Chester. On the death of Cromwell, and the restoration of the long parliament, he obtained a seat in the council, and was elected president. He died in 1659, and, on his deathbed, asserted that, if the king were to be tried and condemned again, he would be the first to agree to it. He was magnificently buried in Westminster abbey, where his body was ejected, and hanged on a gibbet at Tyburn, with those of Oliver and Ireton, at the restoration.

Braga. (See Mythology, northern.)

Braganza; one of the oldest towns of Portugal. It was made a duchy in 1442, and from its dukes the present reigning family of Portugal are descended. The town and surrounding district still belong to the king of Portugal as duke of Braganza. Lat. 41° 44' N.; lon. 6° 25' W. (See Portugal.)

Brahm; one of the greatest professional singers England has ever produced. His tenor is unrivalled for power, compass, and flexibility. His compass extends to about 19 notes, to each of which he knows how to give almost any degree of strength; and his falsetto, from D to A, is so entirely within his control, that it is hardly possible, in the ascent and descent of the scale, to distinguish at what note
the natural voice begins and ends. His inspiration may be called perfect, so far as respects the strength and quality of a note, and his tone readily takes the character of whatever he wishes to express. His articulation is equally excellent, and not a syllable escapes the ear. On this account, he particularly excels in recitative. The flexibility of his organs, and his rapidity of execution, are incredible. He goes rapidly through the whole compass of his voice, and the boldest leaps from the highest to the lowest notes, and makes chromatic runs with incredible velocity. The hearer is never troubled with the fear of his failing; and this unlimited power is used with extravagant liberality. B. enters into every composition with a glow of feeling which gives the performance the liveliest coloring, and brings into full action all his natural powers. Always enthusiastic, his imagination pours itself out most profusely on sentiment, passion, melody, expression and ornament. But it is in this that he overleaps the bounds of art, and often excites more of wonder than pleasure, often dissatisfies more than delights, and, indeed, too often destroys the general effect. From this manner of his arise that indescribably perverted and contaminated tone, those sudden stops, vehement bursts, and immoderate heaping together of notes, which injure the singing; and hence also proceeds his sing by turns. B. has had numerous imitators: the whole kingdom resonates with them; and a generation must pass away before the bad taste, which his errors have occasioned in every corner of England, shall be destroyed. Although he is one of the greatest singers which any age has produced, yet it is not easy to find united in one individual such extraordinary powers and such glaring faults. He still sings at Drury lane theatre with great applause. He is also a composer; as, for example, of the Cabinet, in which he performs the principal part.

BRAHILOW, BRAHLOW, or BRAILA, a strongly-fortified Turkish town in Walachia, on the northern bank of the Danube, with 30,000 inhabitants, governed by a pasha of three tails, lies in a Turkish military district, which is similarly organized to the adjacent frontier districts of Austria. The town is situated at the confluence of the Sera and the Danube, which divides itself there into three arms, embracing a piece of neutral territory between the dominions of the Turks and the Russians. From this place much grain, raised in Walachia, is sent to Constantiopole. The fishery of sturgeon in the Black sea carried on from B. is considerable. 

Lon 28° 10' E.; lat. 43° 10' N.

BRAHMA-BRAIN. (See Brahmin.)

BRAILOW. (See Brailow.)

BRAILS; certain ropes passing through pulleys on the mizen-mast (q. v.), and afterwards fastened, in different places, on the hinder edge of the sail, in order to haul it up to the mast, as occasion requires. - Brails is likewise a name given to all the ropes employed to haul up the bottoms, lower corners and skirts of the great sails in general. The operation of drawing them together is called brailing them up, or hauling them up to the brails.

BRAIN. The brain is a soft substance, partly reddish-gray and partly whitish, situated in the skull, penetrated by numerous veins, and invested by several membranes. Democritus and Anaxagoras dissected this organ almost 3000 years ago. Haller, Vieq d'Azir, and other anatomists in modern times, have also dissected and investigated it without exhausting the subject. Between the skull and the substance of the brain three membranes are found. The outer one is called the dura mater. This is strong, dense and elastic. It invests and supports the brain. The next which occurs is the arachnoid. This is of a pale white color, yet in some degree transparent, very thin, and, in a healthy state, exhibits no appearance of vessels. The membrane below this is called the pia mater. It covers the whole surface of the brain. It is very vascular, and the larger portion of the blood which the brain receives is spread out upon its surface in minute vessels. The brain consists of two principal parts, connected by delicate veins and fibers. The larger portion, the cerebrum, occupies, in men, the upper part of the head, and is seven or eight times larger than the other, the cerebellum, lying behind and below it. It rests on the bones which form the cavities of the eyes, the bottom of the skull and the tentorium, and projects behind over the cerebellum. On the whole exterior of the cerebrum there are convolutions, resembling the windings of the small intestines. The external reddish substance of the brain is soft and vascular, and is called the cortical substance; the internal is white, and is called the medullary substance of the brain. This medulla consists of fibres, which are very different in different parts.
BRAIN—BRAINERD.

The cerebellum lies below the cerebrum, in a peculiar cavity of the skull. By examining the surface, it is seen to be divided into a right and left lobe, by the spinal marrow lying between, but connected at the top and bottom. Like the cerebrum, it is surrounded by a vascular membrane, reddish-gray on the outside, and composed of a medullary substance within. In proportion to its size, also, it has a more extensive surface, and more of the vascular membrane, than the cerebrum. In a horizontal section of it, we find parallel curved portions of the cortical and the medullary substances alternating with each other. Between the cortical and the medullary substance, there is always found, in the cerebellum, a third intermediate yellow substance. All the medulla of the cerebellum is also united in the middle by a thick cord. Experience teaches that, in the structure of the brain, irregularities are far more uncommon than in other parts of the human body. It is worthy of observation, that every part of the brain is exactly symmetrical with the part opposite. Even those which lie in the middle, and are apparently single (the spinal marrow, lying between, but connected at the top and bottom), are really double portions. The total weight of the human brain is estimated at two or three pounds. It is larger and heavier in proportion to the youth of the subject; and in old age it becomes specifically lighter. In delirious affections, it is sometimes harder and sometimes less solid and softer. The brain is the organ of sensation, and consequently, the material representative of the soul, and the holiest organ of the body. (See Serres’s Anatomie comparée du Cerveau dans les quatre Classes des animaux Vertébrés, &c. (Comparative Anatomy of the Brain in the four Classes of vertebral Animals, &c.); Paris, 1824, with engravings. It received the prize of the French institute.)

BRAINERD, David, the celebrated missionary, was born in April, 1718, at Hadley, Connecticut. From an early period, he was remarkable for the serious and religious turn of his mind, devotional exercises occupying a considerable portion of his time, though, as he says, his piety was originally prompted by the fear of punishment, and not by the love of God. In 1739, he became a member of Yale college, where he was distinguished for application and general correctness of conduct; but was expelled, in 1742, in consequence of having said, in the warmth of his religious zeal, that one of the tutors was as devoid of grace as a chair— an expression which reached the ears of the rector, who commanded B. to make a public confession in the hall. Thinking the order unjust to humble himself before the whole college for what he had uttered in private conversation, he refused to comply, and, on this account, as well as for having gone to the separate religious meetings at New Haven, after being prohibited to do so by the authority of the college, he was dismissed. In the spring of 1742, he began the study of divinity; and, at the end of July, he was licensed to preach, for which a thorough examination had shown him qualified. He had for some time entertained a strong desire of preaching the gospel among the heathens, which was gratified by an appointment as missionary to the Indians from the society for propagating Christian knowledge. At Kaumameck, an Indian village of Massachusetts, situated between Stockbridge and Albany, he commenced his labors, in the 25th year of his age. He remained there about 12 months, at first residing in a wigwam among the Indians, but afterwards in a cabin, which he constructed for himself, that he might be alone when not engaged in his duties of preaching and instruction. On the removal of the Kaumamecks to Stockbridge, he turned his attention towards the Delaware Indians. In 1744, he was ordained by a presbytery at Newark, New Jersey, and took up his habitation near the forks of the Susquehanna river. His exertions, however, were attended with little success, until he went to the Indians at Crosswicksung, near Freehold, in New Jersey. Before the end of a year, a complete reformation took place in the lives of the savages, 78 of whom he baptized within that time. They became humble and devout; and it was not unusual for the whole congregation to shed tears and utter cries of sorrow and repentance. In 1747, he went to Northampton, in Massachusetts, where he passed the short residue of his life in the company of the celebrated Jonathan Edwards. He died in 1775, after great sufferings. B. was a man of vigorous intellect and quick discernment. He was gifted with a strong memory, a happy eloquence, and a sociable disposition, that could adapt itself with ease to the different capacities, tempers and circumstances of men, which, together with an intimate knowledge of human nature, as well as of theology and worldly
sciences, peculiarly fitted him for the business of instruction. He was remarkably composed and resigned during the approaches of death, and left this world in the full hope of a glorious immortality. His publications are a narrative of his labors at Kaunnahck, and his journal, or account of the rise and progress of a remarkable work of grace among a number of Indians in New Jersey and Pennsylvania, 1746.

BRAINERD: a missionary station among the Cherokee Indians, in the district of Chickamaugah, within the chartered limits of Tennessee, near the boundary line of Georgia, on Chickamaugah creek, a few miles above its entrance into the river Tennessee; 150 miles S. E. of Nashville, 43° N. W. August, 1822. This missionary station was commenced in 1817, and it is the oldest establishment formed by the American board of missions among the Cherokees. The property belonging to the mission, in 1822, was estimated at $17,390, and there are between 30 and 40 buildings of various descriptions, mostly of logs. The labors of the missionaries here have been remarkably successful in imparting to the Cherokees a knowledge of the rudiments of learning, and of the arts of civilized life, as well as of the principles and duties of religion.

Braakensberg, Kemper, a well-known Dutch painter, distinguished for his rustic scenes, family pieces, &c., was born at Haerlem, in 1649. The time of his death is not known: it took place at Friesland. His paintings are true to nature.

Brama; the first person in the Trinity, or Trimurti, of the Hindoos, consisting of Brama, the creator, Vishnu, the preserver or redeemer, and Siva, the destroyer. He is represented with four heads and as many arms, and the swan is consecrated to him. His name signifies knowledge of the laws, in allusion to his creative power. He is the god of the fates, master of life and death, and, by some, has been represented as the supreme eternal power; but he is himself created, and is merely the agent of the Eternal One. He is believed to die, according to some, annually, or, according to others, after a longer period, and to rise again. His character is no better than that of the Grecian Jupiter. He is considered as the author of the Vedas, and as the lawgiver and teacher of India. The worship of Brama is regarded as the oldest religious observance in that country. (For a more particular account, see Indian Mythology.)

Bramante of Urbino, Francesco Lazari, shares with Brunelleschi the credit of being the restorer of architecture. He was born at Castel Durante, in the duchy of Urbino, in 1444. He applied himself first to painting; but his passion for architecture soon gained the ascendency. At length he went to Milan, and there his whole time was spent at the cathedral. Pope Alexander VI named him his architect, and Julius II made him superintendent of his buildings. At the command of the latter, he united the Belvedere with the palace of the Vatican. He persuaded the pope to order the church of St. Peter to be torn down, and another to be erected in its place, which should not have its equal in the world. In 1513, the foundation of this edifice was laid, according to the plan of B. It is considered the greatest production of modern architecture. B. died in 1514, without living to see this work completed. He had begun the edifice with incredible despatch; but his successors, Raphael, Julius of San Gallo, Peruzzi and Michael Angelo altered the original plan, and left nothing of B.'s workmanship standing, except the arches which support the tower of the dome. His writings, part prose, part verse, first discovered in 1756, were printed the same year at Milan.

Bramins; the first of the four castes of the Hindoos. They proceeded from the mouth of Brama, which is the seat of wisdom. They form the sacred or sacerdotal cast, and its members have maintained a more absolute and extensive authority than the priests of any other nation. Their great prerogative is that of being the sole depositaries and interpreters of the Vedas or sacred books. There are seven subdivisions of the Bramins, which derive their origin from seven penitents, personages of high antiquity and remarkable purity, who are said to have rebuilt the gods themselves for their debaucheries. The great body of the Bramins pay equal devotion to the three parts of the mysterious trinity, but some attach themselves more particularly to one person of the triple godhead. Thus the Vishnuites are distinguished by an orange-colored dress, and the mark called a lingam on their foreheads. The devotees of Siva wear the lingam, and are distinguished from the former by their great abstemiousness. A Bramin should pass through four states. The first begins at about seven, when the duty of the young novice, or Brachmacari, consists in learning to read and write, studying the Vedas, and becoming familiar with the
privileges of his cast, and all points of corporeal purity. Thus he is taught his right to ask alms, to be exempted from taxes, from capital and even corporal punishment. Earthen vessels, belonging to Brahmins, when used by profane persons, or for certain purposes, must be broken. Leather and skins of animals, and most animals themselves, are impure, and must not be touched by them. Flesh and eggs they are not allowed to eat. The Brahmin is also taught to entertain a horror of the defilement of the soul by sin; and rules for purification by ablation, penances, and various ceremonies, are prescribed. The second state begins at his marriage, when he is called Grihastha. Marriage is necessary to his respectability. His daily duties become more numerous, and must be more strictly performed. Regular ablutions, fasting, and many minute observances, become requisite. The Brahmins, however, engage in secular employments, political, commercial, &c. The third state is that of the Vana-Prasthas, or inhabitants of the desert, which is now, however, seldom reached. They were honored, by kings, and respected even by the gods. Retiring to the forest, green herbs, roots and fruit were their food: reading the Vedas, bathing morning, noon and evening, and the practice of the most rigorous penances, were prescribed. "Let the Vana-Prastha," says Brähmananda, in the Institutes, "slide backwards and forwards on the ground, or stand the whole day on tip-toe, or continue rising and sitting down alternately; in the hot season, let him stand on his head, in the rain, let him stand uncovered; in the cold season, let him wear wet garments; then, having stored up his holy fires in his mind, let him live without external fire, and feeding on roots and fruit. When he shall have thus become void of fear and sorrow, and shaken off his body, he rises to the divine essence." The fourth state is that of a Sannyasi, in which new and severer penances are to be performed. Suppressing the breath, standing on the head, and other such ceremonies, are performed, till the devout patient rises to a participation of the divine nature. The sanctity and inviolability of a Brahmin are maintained, in the eyes of his countrymen, by the most severe penalties. The murder of one of the order, robbing him, &c., are inexpiable sins: the killing of his cow can only be expiated by a painful penance. To some travellers it appears that the number of Brahmins respectable for knowledge and virtue is very small; that the great body of them are devoted to ambition, intrigue and voluptuousness, and that their character is disgraced by avarice, meanness and cruelty. Their charity extends only to those of their own cast. The objects of their worship, besides their innumerable gods, are almost every species of animals, and a variety of malignant demons. The transmigration of souls is one of their essential doctrines, and they believe in the existence of a hell. Some of the ceremonies of the Brahminical worship are horrible: some are more licentious than the orgies of Bacchus. The sacrifices commonly consist of vegetables, but animals are sometimes sacrificed, and the burning of widows is a relic of the horrid practice of offering human victims. (See Indian Mythology.)

BRANDENBURG, mark or marquisate of; one of the most extensive districts in the former circle of Upper Saxony. The soil is, in some parts, fertile, but mostly sandy, and fit for grain. It is rich in wood, fish, flax, hemp, hops, tobacco, and pastures, particularly for sheep; it also produces lime, salt-petre, turf, and some iron, &c. B. carries on an active trade in manufactured articles, and is well situated for commerce, since it has many canals, rivers, lakes, and many towns lying on them. Most of the inhabitants profess the Lutheran faith; the rest are Calvinists. From 1855 to 1868, many French refugees, Walloons, and inhabitants of Lorraine and of the Palatinate, settled in the mark. During the reign of Frederic II, prior to 1777, more than 10,000 families took up their residence there. The country is watered by the Elbe, Spree, Havel, Oder, Wartha, Netze and Ucker. The district of B. is divided into the Electoral Mark and the New Mark. 1. The former includes, 1. the Old Mark (capital Stendal); 2. the Pregnitz (capital Perieberg); 3. the Middle Mark (capital Berlin); 4. the Ucker Mark (capital Prenzlau). II. The New Mark (capital Custrin) receives its name from this circumstance, that the electorate Frederic II redeemed it, in 1455, from the knights of the Teutonic order, to whom it had been pledged until that period. At present, B. is the most important of the Prussian states, including, as it does, the capital (Berlin), and the governments of Potsdam and Frankfort. It contains, upon 13,800 square miles, 1,335,160 inhabitants, and 150 towns, &c. The first people who are known to have inhabited B. were the Suevi. They were succeeded by the Slavonians, a barbarous people, whom Henry I conquered.
and converted to Christianity in the early part of the 10th century. The government was first conferred on a Saxon count, and did not become hereditary till the time of Alfric, whose son was raised to the dignity of elector in 1100. The race becoming extinct, Charles IV assigned the electorate to his son Sigismund, who became emperor in 1413, and sold the region to Frederic, burggrave of Nuremberg, the ancestor of the present reigning family. Frederic William the Great made various acquisitions to the territories of his ancestors, and obliged the king of Prussia, in 1663, to declare Prussia an independent state. The Old Mark was ceded to Napoleon in 1807, and formed part of the kingdom of Westphalia; but it was restored to Prussia in 1814. The elector of Brandenburg held the seventh rank among the electors of the empire, and had five votes in the council of princes.

Brandenburg; capital of the province of the same name (q. v.), on the Havel, 30 miles west of Berlin, formerly the residence of the reigning family of Prussia. It contains 12,000 inhabitants.

Brandes, Ernest: a learned and able German scholar and statesman, born at Hamburg, who, during a course of experiments on urine, for the purpose of discovering a solvent which would convert silver into gold, accidentally produced phosphorus, in 1667 or 1668. He communicated his discovery to another chemist, who showed it to Leibnitz and Boyle.

Brandy, Nicholas or Sebastian; a German chemist of the 17th century, usually considered the discoverer of phosphorus. Leibnitz mentions him as a chemist of Hamburg, who, during a course of experiments on urine, for the purpose of discovering a solvent which would convert silver into gold, accidentally produced phosphorus, in 1667 or 1668. He communicated his discovery to another chemist, who showed it to Leibnitz and Boyle.

Brandt, Sebastian (named Thilo), born at Strasbourg in 1458, died there in 1520. He studied law at Strasbourg, was graduated; and delivered lectures on this science, for many years, with great applause. He was still more distinguished for his poetical talents, and the emperor Maximilian I invited him, several times, to his court. He has immortalized himself by a poem called The Ship from the Land of Folly, which satirizes the crimes and follies of his age, first published at Bale, 1474. Four editions appeared in one year. It has since been repeatedly printed and translated into all the languages of Europe. In Germany, it was, for about a century, a truly national book, so well known and esteemed by all classes, that the celebrated preacher Gueler of Kaisersberg delivered public lectures upon it from the pulpit at Strasbourg. In this work, we find a collection of moral instructions, and satires upon the crimes, vices and abuses common both in public and private life. The book is divided into 113 chapters, which, however, have no connexion with each other. The descriptions are not, in general, poetic, but still contain many happy and beautiful passages, often display learning, and not seldom vigor; and the Ship of Fools will always be a valuable book, full of sound reasoning, pure morality, clear and bold thoughts, and knowledge of mankind. It has been republished by Hagen in his Fool's Books.
BRANDYWINE—BRAUWER.

wine flour-mills form the finest collection of the kind in the U. States.—This river is noted for giving name to a battle fought near it, Sept. 11, 1777, between the British and Americans, in which the latter were defeated, with the loss of about 300 men killed and 600 wounded.

Brattleboro', a post-town in Windham county, Vermont, on the Connecticut, 41 miles N. of Northampton, 110 S. of Montpelier; population in 1820, 2,017. It is one of the most considerable and flourishing towns in Vermont, and contains two parishes, in each of which there is a handsome village. The village in the west parish contains an academy; that in the east parish has a large printing establishment, various manufactories, and a flourishing trade.—In the south-east corner of B. was fort Dummer, which was established in 1724, and was the first settlement formed by Anglo-Americans in Vermont.

Brauer, Brau, or Brauwer, Adrian; a celebrated painter, of the Dutch school, born at Haerlem, in 1608, or, more probably, at Oudenarde, where his father was a painter of common paper-hangings. Poverty contributed, perhaps, to form his talents. When a child, he painted flowers and birds to be stitched on caps, which were sold by his mother. Francis Hals, a skilful painter, expecting to profit by the talents of the young artist, took him to Haerlem. Here, amidst wearisome labors and poor diet, B. spent the greater part of his time in a garret, occupied in making little paintings, of the value of which he was ignorant, while Hals kept the profits of them for himself. Two pretty paintings of his, The Five Months and The Twelve Months, were mentioned as belonging to that period. By the advice of Adrian of Ostaad, his fellow pupil, he escaped to Amsterdam, where he was surprised to hear, that his paintings were esteemed. He now gained considerable sums by his labors; but, instead of devoting himself to his art, he made the inn his workshop, never profiting by the talents of the young artist, having been, provided with materials, he painted his hostess insured upon payment. He threw into the fire a painting for which he did not receive the price demanded, and began a new one with more care. Having gone to Antwerp during the wars of the Low Countries, he was thrown into prison as a spy. He declared that he was a painter, appealing to the duke of Ahrenberg, who was likewise imprisoned there; and, at the prince's intercession, having been provided with materials, he painted his guards engaged in playing cards, with so much expression and truth, that Rubens, at the sight of the picture, exclaimed, "This is B.'s work; none but he can succeed so well in such subjects." Rubens effected his release by bending bale for him, clothed him, and received him into his house and at his table. B., however, instead of being grateful for this generosity, escaped secretly, to plunge into still greater extravagances. He took lodgings with a baker, Cresbeke, who became a skilful painter by his instructions. This man, whose
inclinations agreed with those of B., had a handsome wife, and the connexion between these three persons became so intimate, that they were obliged to flee from justice. B. went to Paris, but, finding no employment there, returned to Antwerp, where he died in the hospital, in 1640.

Rubens, who remembered only his talents, caused him to be honorably arrested, and the connexion being unsuccessful in the contest for the presidency, was chosen vice-president; and, from that period, has been regarded as the leader of the opposition party in Mexico. During the year 1827, it is well known, the struggle between the party in favor of the present constitution, and the party opposed to it, daily increased in violence and bitterness, the former being distinguished by the party name of Yorktown, the latter by that of Escoceses. But, Dec. 23, 1827, lieutenant-colonel Manuel Montano raised the standard of rebellion at Otumba, and the government immediately despatched a strong body of troops, under general Guerrero, to disperse the insurgents. A few days after he marched, several officers, known to be violent Escoceses, clandestinely left Mexico, and joined Montano; and, at length, the vice-president, B., followed them. Their whole force, at this time, did not exceed 130 men. They proceeded to Tulancingo, immediately on B.'s joining them, where they fortified themselves; but, after a feeble resistance, were compelled to surrender. B., and 25 other officers, were taken prisoners, and thus terminated this desperate attempt. B.'s great merits in the cause of independence secured to him the lenity of the government; and he was merely sentenced to seven years' banishment from the republic. No authentic account has yet transpired of B.'s motives and particular inducements in taking this step; and, in the absence of such evidence, it is difficult to believe that a man of his tried patriotism can have dreamed of restoring the Spanish authority in Mexico. (See Ward's Mexico, &c.)

BRAVO, Nicholas, one of the most prominent leaders in the Mexican revolution, was a native of New Spain, and son of don Leonardo Bravo. He became identified with the patriot party at an early period of their struggle for independence, and adhered to it through all their vicissitudes of fortune. At the period of Hidalgo's career, B. made common cause with Morelos, commanding a division of the latter's army in 1812, at which period he was particularly distinguished among other achievements, by a victory over the Spanish general Musitu. When Iturbide's deception of the royalists gave him the means of promoting the revolution, in 1821, B. was one of the first to take advantage of circumstances, and to raise anew the standard of revolt, undeterred by past misfortunes. Iturbide endeavored in vain to acquire the confidence of B., who, like Victoria, suspected his ambitious purposes long before he suffered them openly to appear. Victoria and B. steadily opposed the projects of the usurper, and, at length, became so far committed in their opposition as to be arrested and imprisoned by him, while president of the executive junta. They were subsequently released, and B. took arms against the emperor at the earliest opportunity.—Upon the establishment of a provisional republican government in 1823, subsequently to the fall of Iturbide, the executive consisted of generals Victoria, B. and Negrete. During the discussions relative to the formation of a constitution, B. maintained the necessity of a central system, like that of Colombia, in opposition to the federal party, which finally prevailed in organizing the government in imitation of that of the U. S. The new constitution was solemnly sworn to in the capital, Feb. 2, 1824; and, in the ensuing elections, B., being unsuccessful in the contest for the presidency, was chosen vice-president; and, from that period, has been regarded as the leader of the opposition party in Mexico.—During the year 1827, it is well known, the struggle between the party in favor of the present constitution, and the party opposed to it, daily increased in violence and bitterness, the former being distinguished by the party name of Yorktown, the latter by that of Escoceses. But, Dec. 23, 1827, lieutenant-colonel Manuel Montano raised the standard of rebellion at Otumba, and the government immediately despatched a strong body of troops, under general Guerrero, to disperse the insurgents. A few days after he marched, several officers, known to be violent Escoceses, clandestinely left Mexico, and joined Montano; and, at length, the vice-president, B., followed them. Their whole force, at this time, did not exceed 130 men. They proceeded to Tulancingo, immediately on B.'s joining them, where they fortified themselves; but, after a feeble resistance, were compelled to surrender. B., and 25 other officers, were taken prisoners, and thus terminated this desperate attempt. B.'s great merits in the cause of independence secured to him the lenity of the government; and he was merely sentenced to seven years' banishment from the republic. No authentic account has yet transpired of B.'s motives and particular inducements in taking this step; and, in the absence of such evidence, it is difficult to believe that a man of his tried patriotism can have dreamed of restoring the Spanish authority in Mexico. (See Ward's Mexico, &c.)

BRAVO AIR; an air so composed as to enable the singer to show his skill in execution by the addition of embellishments, striking cadences, &c. It is sometimes used for the style of execution.

BRAY; a small village in the county of Berks. The church is a vicarage in the gift of the bishop of Oxford. The vicar of Bray lived in the reigns of Henry VIII, Edward VI, Mary and Elizabeth, and...
was first a Papist, then a Protestant, then a Papist, and finally a Protestant again. Being accused of inconstancy, "It is not so," he replied; "for I always keep to my principle, which is this—to live and die vicar of Bray." A well known song is founded on this incident.

BRAY, François Gabriel, count de; in 1809, Bavarian ambassador at St. Petersburg; since 1820, at Paris; was born in Normandy, where his father belonged to the nobility of the province; assisted, as knight of St. John of Malta, in a bloody attack upon Algiers. He prepared himself for the diplomatic career at Ratisbon, where, previous to the overthrow of the German empire, French diplomats were bred for the courts of Northern Europe.

In the revolution, he entered the Bavarian service, and, while ambassador at St. Petersburg, wrote his able work, Essai Critique sur l'Histoire de la Levant, suivi d'un Tableau de l'Etat actuel de cette Province (1817, Dorpat, 3 vols.)

BRAZIL; a country of vast extent, and one of the richest regions of the earth, comprising the eastern and central parts of South America; bounded N. by Colombia, Quito, Buenos Ayres, and the United Provinces of La Plata, Bolivia and Peru.—The following table exhibits the population of the several capitanias, or provinces, estimated by Mr. Brackenridge, who visited South America in the years 1817 and 1818:

<table>
<thead>
<tr>
<th>Province</th>
<th>Pop.</th>
<th>Chief Towns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pernambuco</td>
<td>550,000</td>
<td>Pernambuco</td>
</tr>
<tr>
<td>Bahia</td>
<td>500,000</td>
<td>St. Salvador</td>
</tr>
<tr>
<td>Minas Geraes</td>
<td>390,000</td>
<td>Villa Rica</td>
</tr>
<tr>
<td>Rio Janeiro</td>
<td>400,000</td>
<td>Rio Janeiro</td>
</tr>
<tr>
<td>St. Paul</td>
<td>300,000</td>
<td>St. Paul</td>
</tr>
<tr>
<td>Rio Grande</td>
<td>250,000</td>
<td>Portalagre</td>
</tr>
<tr>
<td>Maranhon</td>
<td>200,000</td>
<td>St. Luis</td>
</tr>
<tr>
<td>Para</td>
<td>150,000</td>
<td>Para</td>
</tr>
<tr>
<td>Matto Grosso</td>
<td>100,000</td>
<td>Cuyaba</td>
</tr>
<tr>
<td>Goyas</td>
<td>170,000</td>
<td>Villa Boa</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,000,000</td>
<td></td>
</tr>
</tbody>
</table>

In 1821, the country was divided anew, so as to constitute nineteen provinces. Of the population, as stated by Mr. Brackenridge, 1,000,000 are supposed to be of European origin or descent, 1,200,000 Negroes, and 800,000 subdued Indians; the unsubdued Indians not being included. A later estimate makes the number of Negro slaves, 1,800,000. Malte-Brun estimates the population of B. at 3,500,000; Hassel and Humboldt, at 4,000,000.—The principal rivers are the Amazon, Madeira, Topayas, Xingu, Topantas, Negro, St. Francisco, Paraguay, Parma, and Uruguay.—There is scarcely to be found on the globe a finer country than B.; one blessed with a more genial climate, or a more fertile soil; more happily diversified with wood and water, or with abundance of navigable rivers; or more famed for its precious produce of gold and diamonds. It comprises within its limits nearly all the most valued productions of the earth. Viewed from the sea, the country appears rugged and mountainous; but, on a nearer approach, its appearance is highly romantic and picturesque, clothed as it is with the most luxuriant vegetation, its hills covered with thick woods, and its valleys with a verdure which never fades. Towards the interior, the land rises, by gentle gradations, to the height of from 3 to 6,000 feet above the level of the sea; and, in these temperate regions, European fruits and grain are raised in abundance, while the intermediate valleys are extremely favorable to the production of sugar, coffee, and all kinds of tropical produce. A large part of the interior is overspread with an immense forest, the trees being closely interwoven with brushwood and shrubs, and covered with creeping plants, adorned with beautiful flowers, thus giving a peculiar and rich appearance to the scenery. The forests abound in a great variety of useful and beautiful wood, adapted for dyeing, cabinet-work and ship-building. They contain numerous wild animals. The climate, in the neighborhood of the Amazon and in the northern parts, is hot, but tempered by the humidity of the air; in the southern parts, it is temperate, and generally healthy.—B. has been long celebrated for gold and diamonds, which abound in the higher regions of the interior, and are chiefly found in the beds of the mountain torrents, where the stream is most rapid. Most of the streams that rise from the chain of mountains which extend through the province of Minas Geraes are rich, especially near their sources, in gold and diamonds. The towns of St. Paul, Villa Rica, Cuyaba, and others in the interior, have grown out of mining establishments. Tejuco is the chief town of the principal diamond district.—Brazil was discovered by Pedro Alvarez Cabral. Emanuel, king of Portugal, had equipped a squadron for a voyage to the East Indies, under the command of Cabral. The admiral, quitting Lisbon, March 9, 1500, fell in accidentally, April 24, with the
continent of South America, which he at first supposed to be a large island on the coast of Africa. In this conjecture he was soon undeceived, when the natives came in sight. Having discovered a good harbor, he anchored his vessels, and called the bay Puerto Seguro. On the next day, he landed with a body of troops, and, having erected the cross, took possession of the country in the name of his sovereign, and called it Santa Cruz; but the name was afterwards altered by king Emanuel to the name of Brazil, from the red-wood which the country produces.—The Portuguese entertained, for some time, no very favorable opinion of the country, not having been able to find there either gold or silver; and accordingly, they sent neither men but convicts, and women of abandoned character. Two ships were annually sent from Portugal, to carry to the new world the refuse of the human race, and to receive from thence cargoes of parrots and dye-woods. Ginger was afterwards added, but, in a short time, prohibited, lest the cultivation of it might interfere with the sale of the same article from India. In 1549, the Jews of Portugal, being expelled to Brazil, procured sugar-canes from Madeira, and began the cultivation of that article. The court of Lisbon began to perceive that a colony might be beneficial without producing gold or silver, and sent over a governor to regulate and superintend it. This was Thomas de Souza, a wise and able man. De Souza found it very difficult to succeed in inducing the natives to fix on settled habitations, and to submit to the Portuguese government. Dissatisfaction caused, which at length terminated in war. De Souza did not bring with him a sufficient number of men to conclude hostilities speedily. By building St. Salvador, in 1549, at the bay of All Saints, he established a central and rallying point for the colony; but the great object of reducing the Indians to submission was effected by the Jesuits, who gained their affections by presents and acts of kindness. The increasing prosperity of Brazil, which became visible to Europe at the beginning of the 17th century, excited the envy of the French, Spaniards and Dutch, successively. The latter, however, were the principal enemies with whom the Portuguese had to contend for the dominion of Brazil. Their admiral, Willem Claus, in 1624, took possession of the country in the name of the United Provinces. Having plundered the people of St. Salvador, he returned to Europe, leaving a strong garrison. The Spaniards next sent out a formidable fleet, had siege to St. Salvador, and compelled the Dutch to surrender. When the affairs of the Dutch assumed a more favorable aspect at home, they despatched admiral Henry Lous, in the beginning of 1630, to attempt the entire conquest of Brazil. He succeeded in reducing Pernambuco, and, on his return to Europe, left behind him troops which reduced, in 1633, 1634 and 1635, the provinces of Tucuman, Paria and Rio Grande. These, as well as Pernambuco, furnished yearly a large quantity of sugar, a great deal of wood for dyeing, and other commodities. The Dutch now determined to conquer all Brazil, and intrusted Maurice of Nassau with the direction of the enterprise. This distinguished officer reached the place of his destination in the beginning of 1637, and subjected Sera, Sergipe, and the greater part of Bahia. Seven of the fifteen provinces which composed the colony had already, submitted to them, when they were suddenly checked by the revolution, which removed Philip IV from the throne of Portugal, and gave to the Portuguese independence, and a native sovereign. The Dutch, then, as enemies of the Spaniards, became friends to the Portuguese, and the latter confirmed the title of the Dutch to the seven provinces, of which they were in possession. This division gave rise to the name of Brazil, in place of the former appellation. The Dutch government soon began to oppress the Portuguese, who, after an obstinate contest, drove them out of several of the provinces. Finding they were not able to retain possession of the country, the Dutch ceded all their interest to the Portuguese for a pecuniary compensation. The dominion of Portugal was now extended over all Brazil, which, during the 18th century, remained in the peaceful possession of the Portuguese.
In 1640, by the kings of the house of Braganza, to the younger sons of the Portuguese nobility, whom the system of entail excluded from the prospect of inheritance. These grantees enlisted adventurers, purchased Negro slaves by thousands, and subjected the original inhabitants, or drove them from their districts, and ruled their dominions with almost unlimited sway. The missions of the Jesuits also received similar donations from the kings. They organized a brave militia from the converted savages and their descendants, and bore the sword and the cross farther and farther into the interior. Equally independent with the secular lords of the soil, they united the clergy, too, were very much dissatisfied, because, even while the court resided in Bahia, whence it transferred its residence to Rio Janeiro, the Portuguese by birth continued to have the preference, in the high offices of state, before the chief native families; and the system of taxing the productions of B., and the importation of articles needed by the Brazilians, was the new empire.—The removal of the Portuguese government to B., Jan. 19, 1808, all the ports of B. were open for the unconditional entrance of all friendly and neutral vessels, and for gold, or for diamonds, in case of any future discovery of such treasures, should be the property of the crown, or, at least, the object of high taxation. In the grants of the ancient plantations, the crown had not indeed provided for such a contingency, and had reserved no such rights. Even the humanity of the government, in attempting to ameliorate by laws the condition of the slaves, was a subject of offence, because it appeared to the lords to be an injury to their legal property to proceed in such a matter without their consent. Out of Rio Janeiro, in the more northern and more fertile section, the number of young merchants in the large maritime cities and their vicinity was greatly increased by emigrations from states where more freedom of thought was enjoyed than in B. Many came even from Germany. These adventurers, bent on gain, naturally felt burthened by the heavy system of taxation, and by the monopolies of the crown. They carried on the smuggling trade to such a degree, that they lived, in fact, in open war with the government. In addition to these malcontents, there were many disband soldiers, who had embarked from Portugal, in the hope of being rewarded by the court for their services, but, from the poverty of the finances, found that they could obtain nothing but land, which was of no value to these warriors. Moreover, many Europeans emigrated to Bahia and Paraíba, who, though destitute, were not altogether uninformed, and who desired to make their fortune there, some way or other. The lower class of the native clergy, too, were very much dissatisfied, because, even while the court resided in B., Portuguese noblemen received the most important ecclesiastical offices. Without ascribing to the Brazilians any democratic propensities, all these circumstances must have awakened the desire of independence in their breasts, as much as it augmented their hatred of the Portuguese. From these two causes, a conflict of parties of several years' duration has lately taken place, the result of which is the new empire.—The removal of the Portuguese government to B., Jan. 19, 1808, when the royal family landed in Bahia, whence it transferred its residence to Rio Janeiro in March, till the departure of king John VI to Lisbon, April 23, 1821, was the commencement of the prosperity of B. As early as Jan. 25, 1808, all the ports of B. were opened for the unconditional entrance of all friendly and neutral vessels, and for
BRAZIL.

the exportation of Brazilian productions, under certain duties, with the sole exception of Brazil wood. But the want of industry, at that time, rendered the means of living in the capital and neighborhood extremely dear, while the total absence of highways, and other means of facilitating transportation, deprived the products of the interior of almost all their value. Without a considerable capital, no foreigner can cultivate the land bestowed on him, and B. is as yet far removed from that equality of rights, which secures to each one the full use of his means, as well as the freedom of conscience to every creed. The royal decree of March 16, 1820, which encourages the settlement of foreigners, by an exemption from taxes for four years, will never, therefore, while these impediments exist, produce the results which have followed the colonization of North America—a country, in other respects, less inviting. The foreign relations of B., of late years, have not been altogether of a peaceful nature. After the conclusion of the congress of Vienna, Spain refused to cede Olivenza to Portugal; on which account, the Banda Oriental, with its capital, Monte Video, an important portion of the Spanish province of Buenos Ayres, was taken possession of by B., and maintained with effect against the claims of the republic of Buenos Ayres, after it had attained independence. An insurrection in Pernambuco, in April, 1817, where a party raised the republican standard, was suppressed by the Portuguese troops stationed in B. But when the revolution broke out in Portugal, Aug. 1820, having for its object the establishment of a constitution, the Portuguese troops in B. also obtained a constitution in behalf of the latter country. Don Pedro, the crown-prince, proclaimed the acceptance of the Portuguese constitution in the name of himself and father, Feb. 26, 1821. King John VI now commanded the choice of deputies (March 7th) to meet with the cortes assembled in Lisbon, and was desirous to embark with them for that city. But, the bank being unable to make the necessary advances of money, a bloody insurrection ensued. The king therefore changed the bank into a national bank, and, to defray the sums loaned, appropriated to it the charge of the diamond mines, and the regulation of the trade in diamonds. The king soon after (April 21 and 22) saw himself compelled to order the military to disperse the assembly of electors, who demanded the adoption of the Spanish constitution. On the other hand, he repeated the rati-
BRAZIL.

247

fication of the (then incomplete) Portuguese constitution, and, April 22, appointed his son, don Pedro, prince-regent of B. He now embarked for Portugal, April 20. But, as the Portuguese cortes was not willing to grant the entire equality of civil and political relations demanded by the Brazilians, and, finally, had expressly declared, that B. was to be divided into governments, and ruled by the ministry of state at Lisbon, and the prince-regent was to be recalled to Portugal,—such violent convulsions were excited in Rio Janeiro, and various parts of B., Dec., 1821, that it was explicitly declared to the prince-regent, that his departure would be the signal for establishing an independent republic. The prince, therefore, resolved to remain in B., and gave a public explanation of his reasons, Jan. 9th, 1822, to his father, to the cortes in Portugal, and to the people of B. The Portuguese troops were removed from B. The prince-regent assumed the title of perpetual defender of B., and, in June, convened a national assembly, composed of 100 deputies, to frame a separate constitution for the country. The cortes in Lisbon, on the other hand, declared this constitution void, Sept. 19th, 1822, and demanded the return of the prince-regent to Europe, on pain of forfeiting bis right to the throne. Meanwhile, the national assembly of B. had declared the separation of that country from Portugal. Aug. 1, 1822, and, Oct. 12, appointed don Pedro the constitutional emperor of B. The new emperor retained, at the same time, the title of perpetual defender of B. Soon after the establishment of the empire, began the struggle with the republican party. In this party were many free-masons. Don Pedro, who had proclaimed himself, shortly before, grand master of all the free-masons in B, ordered that all the lodges should be closed, and the congress, which he had promised to assemble for the purpose of framing a constitution, was not convened. At that time, the two brothers Andrade, Jose Bonifacio, minister of foreign affairs and of the interior, and Martin F. Ribeiro, minister of finances, especially the former, possessed the entire confidence of the emperor. The most difficult matter was to effect his recognition in Europe; for don Pedro had acquired the new dignity in consequence of the principle of the sovereignty of the people in a colony separated from the mother country; and it was also made a question, whether he should not renounce his claims to the crown of Portugal. His father, indeed, when he left B., April 20, 1821, had given him full powers to do all that might be necessary to preserve his country to the house of Braganza. The mission, nevertheless, of major Schaffler to Vienna, could not procure the acknowledgment of the new emperor by his father-in-law, the emperor of Austria. The Brazilian troops, in the meantime, conquered Monte Video, which still had a Portuguese garrison, in Dec., 1823, after which the Banda Oriental was united with B., under the name of Exeter, also Bahia, which was defended by a Portuguese garrison, under general Madeira. Lord Cochrane, the Brazilian admiral, blockaded the harbor from March 26, 1823, Madeira, compelled to surrender by famine, sailed, during the negotiation, in the night of July 2, to Europe, and the Brazilian troops entered the place. At home, don Pedro had to contend with—the ancient Portuguese, which was the weaker, and the republican, the stronger. The latter was especially powerful in Pernambuco. The brothers Andrade sought to gain both parties by the proposal of a free constitution, formed after the model of the English; but the obstacles of all kinds, and the violent opposition with which their administration was harassed, compelled them to resort to arbitrary measures and arrests. They treated the malcontents as Carbonari, and thereby excited the suspicion, that the emperor aspired to absolute authority. They finally convoked the cortes of B., the session of which was opened by the emperor, May 3, 1823. Of the 20 members, who constituted the opposition, out of the 60 (instead of 160) present, Aranjo Lima was the most eloquent. The ministers succeeded in causing secret societies to be prohibited, by which means they gained a pretence for imprisoning many, whose sentiments were republican. This augmented the public dissatisfaction, and, when the emperor, having been severely injured by a fall from a horse, did not appear in public for a month, the enemies of the ministers became more bold in their outcries, and even sent threatening representations to the emperor. The imprisoned were acquitted by the supreme court of justice, and the emperor found himself compelled to dismiss the two Andrade, July 16,
1823. Don Joao de Carneiro Campos (formerly professor of mathematics at the college of Lisbon) received the department of foreign affairs, and don Man. Jacint. Figueira da Gama that of the finances—both adherents to the political principles of the Andrade, and patrons of the other; and they were accused, in general, of being at the head of a rebellious party. The emperor, therefore, refused to receive the envoy of the king his father, the count de Rio Mayor, Sept. 6, 1823, because he could not give assurance of the acknowledgment of the independence of B. At the same time, the congress authorized a loan of £2,500,000 in London, which has subsequently been increased about £700,000. (75 per cent. only was paid in specie, at 6 per cent. interest.) The constitution of Aug. 10, 1823, which the national assembly had accepted with some alterations, was finally laid before the emperor, but, in consequence of a revolution which suddenly ensued, not accepted, because it resembled the Spanish and Portuguese constitutions, and restricted too much the authority of the sovereign. Since the fall of the Andrade, the republican party had gained strength, and attacked, in their journals, with particular violence, the Portuguese in the Brazilian service, and demanded their expulsion. Two officers, in revenge of the injury, Nov. 8, to an apothecary at Rio, who laid their complaints before the congress. The two ex-ministers Andrade, and their third brother, don Antonio Carlos, likewise a deputy, demanded that congress should investigate the matter; others desired that it should be referred to the courts of justice. This gave rise to a violent tumult on the 10th; the people took part in it; the ministers of the interior, and the departure of all the Portuguese, were loudly required. The ministers gave in their resignation, and the emperor collected the troops at his palace San Christovao, four leagues from the city. The congress hereupon declared itself permanent. Nov. 13, it was informed, by a message from the emperor, that all the officers regarded themselves as injured by two journals, of one of which the three Andrade were editors, and patrons of the other; and they were accused, in general, of being at the head of a rebellious party. The president recorded it on the journals, with particular violence, the deputies separated, Nov. 12, 1823. But while departing, and subsequently, many were arrested; among them the three Andrade, who were eventually transported. In a decree of the same day, the emperor termed the assembly perjured, but, on the following day, limited this expression to the faction of the Andrade.

The provinces, also, were the theatre of many turbulent scenes. In Pernambuco, the violent dissolution of the congress gave rise to much dissatisfaction, and it was difficult to appease the hatred of the Brazilians against the Andrade. A second national assembly was finally convened at the end of Nov., 1823, and the emperor caused a constitution, drawn up by his council of state, to be laid before the cabildo (the municipality) of the capital, Dec. 11, 1823, which collected the votes of the citizens respecting it in writing. As all assented to this constitution, the oath was administered Jan. 9, 1824.

The same course was pursued in the provinces: but here many citizens voted against the constitution; among others, the president, Man. de Carvalho Paes d'Andrade of Pernambuco. March 25, 1824, the oath to observe the constitution was also taken by the emperor and empress. In its fundamental principles, this constitution coincided with those previously projected. The four branches of civil authority—the legislative, the mediative, the executive and the judicial—are administered by the representatives of the people. The government is monarchical, hereditary, constitutional and representative. The representation of the Brazilian nation consists of the emperor and the general assembly, a body composed of two chambers—that of the deputies, chosen for four years, and that of the senators, chosen by the emperor from the election-lists. With the former rests the power of originating bills for the imposition of taxes and the levying of soldiers; as well as of proposing a change of dynasty. The latter retain their dignity for life. The sessions of these chambers are public. The majority of votes decides. The senate has jurisdiction of the misdeemors of the members of the royal family, of the ministers, deputies and council of state. The two chambers pos-
The king of Portugal was to resign the
into the interior of the country. In ~he
imilar negotiations afterwards took place in
Brandt and the chev. de Carneiro to Lon-
extraordinary, sir Charles Stuart, who
recognised as an independent empire,
between B. and Portugal, Aug. 29, 1825,
separate from Portugal and Algarvia. 2.
sovereignty of B. in favor of his son and
on the following terms: 1. B. should
be negotiated there, with the Portuguese
minister, the marquis de Villareal,
inhabitants, made an obstinate resistance;
but, on the 17th of Sept., 1824, the city
was taken by assault. Carvalho had fled
to an English ship of war; the others
were taken up arms, for the sake of a
union with the United Provinces of the
Plata. The insurgents took Maldonado.
General Lecor (viscount de Laguna),
however, maintained himself in Monte
Video. On the other hand, the republic
of the Plata formally received the Banda
Oriental into its confederacy, and, at the
close of the year 1825, had held
two points in the Banda Oriental—Monte
Video and the colony del San Sagramen-
to. A question of much importance now
arose, whether the emperor don Pedro
should succeed his father, king John VI,
in the kingdom of Portugal. The king
died March 10, 1826, having appointed
his daughter, the infanta Isabella Maria,
provisional regent. According to the
constitution of B., don Pedro could not
leave the country without the consent of
the general assembly. He therefore en-
tered upon the government of Portugal,
and gave this kingdom a representative
constitution, but renounced the crown
of Portugal in his own person by the act
of abdication of May 2, 1826, and resign-
ed his right to his daughter donna Maria
da Gloria, princess of Beira, born in 1819,
who was to marry her uncle don Miguel,
born in 1802; meanwhile, the emperor
confirmed the present regent of Portugal.
(For a further account of Maria, Miguel,
and the state of Portugal, see Portugal.)
Soon after, May 8, he opened the second
constitutional assembly of B. at Rio. He
had previously, April 16, 1826, founded
the new Brazilian order of Pedro I.—
The war with Buenos Ayres was contin-
ued in the Banda Oriental with little
vigor, and with little prospect of advan-
tage to either party, but with a ruinous
charge upon the finances of both. A ne-
gotiation for peace was at length opened,
under the mediation of Great Britain, which terminated in the execution of a treaty, Aug. 27, 1828. In this treaty, the emperor of Brazil and the government of the United Provinces unite in declaring the Cisplatino, or the province of Monte Video, which had been the chief object of controversy, a free and independent state, under such form of government as it might deem most suitable to its interests, wants and resources. It was stipulated, that, for the purpose of forming this government, the existing government of the Banda Oriental should, immediately on the ratification of the treaty, convene the representatives of the part of the province subject to it, and the government of Monte Video its citizens, to make choice of a proportional number of delegates, and that these representatives and delegates should constitute a provisional government, whose duty it should be to form a political constitution for the new state. After the meeting of this provisional government, the functions of the previously existing governments were to cease. The independence of the province of Monte Video was guaranteed by the contracting parties. This treaty was duly ratified, the blockade of the La Plata was immediately raised, and the troops of the two belligerents were withdrawn from the contested territory. By an act of the legislature, passed in 1827, the celibacy of the clergy has been abolished in B. (For further information, see Banda Oriental.)

The national debt of B. is considerable, including the English loan of £3,200,000. The principal ecclesiastical dignitaries are an archbishop, who resides at Bahia, and 16 bishops, of the Roman Catholic, the established religion. In all the large towns, the government supports elementary and high schools. In the former, the system of mutual instruction is introduced. In Bahia and Rio Janeiro, there are institutions for teaching surgery, medicine, engineering and law, and for imparting commercial information. Rio has an academy for the instruction of officers intended for the naval service; also an observatory. This city and Bahia, also, contain academies for the promotion of the fine arts, public libraries, &c. In 1826, 300 young Brazilians were pursuing their studies in France. The army consisted, in 1824, of 30,000 regular troops and 50,000 militia, besides a regiment of free Negroes. The navy, in 1826, consisted of 96 ships, including 1 ship of the line and 4 frigates. The revenue of B. has been lately estimated, by the minister of finances, at about $16,200,000. Of this sum, about $7,200,000 are all which come into the hands of the general government for the supply of the general expenses. The remainder is consumed in the internal administration of the provinces in which it is collected. The whole estimate, however, is vague, and not much to be depended on. Notwithstanding the many natural resources of B., it must long remain weak, in a political view; for its inconsiderable population is too unequal in its advantages and too divided in its views. 1,800,000 are Negro slaves, ignorant and barbarous; the Indians are of no advantage to the industry of the country. They live, for the most part, retired in the wilderness. The Mulattoes seem to combine in themselves the vices of the savage and the European. Both sexes give themselves up, without shame, to the impulses of their passions, and their cruelty to their slaves is often horrible. The Europeans and the Creoles form, to some extent, the aristocracy of the country. Most of them are planters or miners, or overseers in the colonies, and, in this way, are scattered far over the country, with little communication with each other, without knowledge and education. The most cultivated persons are found in the maritime cities. But, even in Rio, the merchants, according to Mathison, are men of very little information. They take no interest in any thing but what immediately concerns their business. The clergy Mathison found so dissolute, that he was ashamed to give a description of their morals. Of men of higher character, capable of administering public offices, there are but few, and they are chiefly Portuguese. (See the Corografia Brasileira of Manoel Ayres de Carvalho, Rio Janeiro, 1817, 2 vols. 4to.; Southey's History of Brazil, London, 1818, 2 vols. 4to.)

Breach; the aperture or passage made in the wall of any fortified place, by the ordinance of the besiegers, for the purpose of entering the fortress. They should be made where there is the least defence, that is, in the front of or face of the bastions. In order to divide the resistance of the besieged, breaches are commonly made at once in the faces of the attacked bastions, and in the ravelin. This is effected by battering, and, at such places as the cannon do not reach, by the aid of mines.—Breach-Battery. (See Battery.)—The breach is called practicable, if it is large enough to afford
BREACH—BREAD-FRUIT.

In the earliest antiquity, we find the flour or meal of grain used as food. The inconvenience attending the use of the grain in its natural state, and, perhaps, the accidental observation, that, when bruised, and softened in water, it formed a paste, and, when dried again, a more compact, mealy substance, led, by degrees, to the artificial preparation of bread. Easy as it seems to us, it must have been a long time before it was completely successful. The grain was first bruised between stones, and, from the meal mixed with milk and water, a dry, tough and indigestible paste was made into balls. This is yet the chief food of the caravans in the deserts of Northern Africa. The Carthaginians, also, ate no bread, and hence were called, pippines (pottage-eaters). After many attempts, or, perhaps, accidentally, it was observed that, by bringing the paste into a state of fermentation, its tenacity is almost entirely destroyed, and the mass becomes bread, porous, agreeable to the taste, digestible, and, consequently, healthy. The process pursued is the following: Some old dough, called levain, which, by a peculiar spiritual fermentation, has swelled up, become spongy, and acquired an acid and spirituous smell, is kneaded with the new dough, and produces, though in an inferior degree, a similar fermentation in the whole mass. The whole thus becomes spongy; a quantity of air or gas is developed, which, being prevented from escaping by the tenacity of the dough, heaves and swells it, and gives it a porous consistency. This is called the working of the dough. In this state, the dough is put into the heated oven, where the air contained in it, and the spurious substance, are still more expanded by heat, and increase the porosity of the bread, making it materially different from the unbaked dough. The best and most wholesome bread is baked in some parts of Sweden, the bread is composed, in part, of the bark of trees, during the winter. In Westphalia, a kind of very coarse, black bread is made, of which the peasants bake one large loaf for the whole week. This is divided for use with small saws. It is called ‘pumpernickel,’ and is sometimes exported. In many parts of Germany, bread is made of grain nearly core; and but just bruised, which is very coarse and frequently forms part of the food of the horses. Bread is found wherever civilization has extended. It is made of wheat, rye, maize, barley, oats, spelt &c. The want of bread has often occasioned public commotions, particularly in Paris and ancient Rome.

BREAD-FRUIT. The bread-fruit is a large, globular berry, of a pale-green color, about the size of a child’s head, marked on the surface with irregular six-sided depressions, and containing a white and somewhat fibrous pulp, which, when ripe, becomes juicy and yellow. The tree that produces it (artocarpus incisa) grows wild in Otaheite and other islands of the South seas, is about 40 feet high, with large and spreading branches, and has large, bright green leaves, deeply divided into 7 or 9 spear-shaped lobes.—We are informed, in captain Cook’s first voyage round the world, that the eatable part of this fruit lies between the skin and the core; and that it is as white as snow, and somewhat of the consistence of new bread. When gathered, it is generally used immediately: if it be kept more than 24 hours, it becomes hard and choky. The inhabitants of the South sea islands prepare it as food by dividing the fruit into three or four parts, and roasting it in hot embers. Its taste is insipid, with a slight tannery, somewhat resembling that of the crumb of wheaten bread mixed with Jerusalem artichoke. Of this fruit, the Otaheitans make various messes by mixing it with water or the milk of the cocoa-nut, then beating it to a paste with a paddle, and afterwards mingling with it ripe plantains, bananas, or a sour paste made from the bread-fruit itself, called mahie. It continues in season eight months, and so great is its utility in the island of Otaheite, “that,” observes captain Cook, “if, in those parts where it is not spontaneously produced, a man plant but 10 trees in his whole lifetime, he will as completely fulfill his duty to his own and to future generations, as the native of our less temperate climate can do by ploughing in the cold of winter, and reaping in the summer’s heat, as often as these seasons return; even if, after he has procured bread for his present household, he should convert the surplus into money, and lay it up for his children.” Not only does
this tree supply food, but clothing, and numerous other conveniences of life. The inner bark, which is white, and composed of a net-like series of fibres, is formed into a kind of cloth. The wood is soft, smooth, and of a yellowish color, and is used for the building of boats and houses. In whatever part the tree is wounded, a milky juice issues, which, when boiled with cocoa-nut oil, is employed for making bird-line, and as a cement for filling up cracks in such vessels as are intended for holding water; some parts of the flowers serve as tinder, and the leaves are used for wrapping up food, and other purposes.—As the climate of the South sea islands is considered not very hardy possible that of the West Indies; it was, about 43 years ago, thought desirable, that some of the trees should be transferred, in a growing state, to the English islands there. His majesty’s ship H.M.S. Bounty sailed, in 1787, for this purpose, to the South seas, under the command of lieutenant, afterwards admiral, Bligh. But a fatal mutiny of the crew at that time prevented the accomplishment of his design. The commander of the vessel, however, returned in safety to his country, and a second expedition, under the same person, for the same purpose, was fitted out in the year 1791. He arrived in safety at Otaheite, and, after an absence from England of about 18 months, landed in Jamaica, with 322 bread-fruit-trees, in a living state, having left many others at different places in his passage thither. The best are made of earth; in some parts of the body, it being perceived from that of the free use of both hands in the employment of offensive weapons was important, the defensive armor was attached to the body, and received different names from its position, use, &c.; as, for instance, breast-plate, breast-wheel, breast-plate of judgment, because it contained the Urim and Thummim. These different species of defensive armor are of little use against fire-arms, and have, therefore, generally fallen into disuse in modern war. (See Cuirass.)—Breast-plate, in Jewish antiquity, was a folded piece of rich, embroidered stuff, worn by the high-priest. It was set with 12 precious stones, bearing the names of the tribes. It was also called the breast-plate of judgment. The rule of Cugnot is, that the breast-work should be so high, that nothing but the sky and the tops of trees can be seen within cannon shot from the interior of the fortification. If this rule cannot be followed, on account of the height of neighboring mountains, the interior of the fortification ought to be secured by traverses.
the lungs, during respiration (q. v.),
through the nose and mouth. This opera-
tion is performed without effort, but
still it causes a motion in the external
air, before the nose and mouth. The air
expired is the vehicle of sound and speech.
A smaller portion of oxygen and a larger
portion of carbonic acid is contained in
the air which is exhaled than in that
which is inhaled. There are also, aque-
ous particles in the breath, which are
precipitated, by the coldness of the ex-
ternal air, in the form of visible vapor;
likewise other substances which owe
their origin to secretions in the mouth,
nose, wind-pipe and lungs. These cause
the dregs in the breath, which may be
known by the smell, like the other quali-
ties of the air. In youth, the breath is
insipid, and contains acid: it loses these
qualities after the age of puberty, and be-
comes more agreeable. With advancing
age, it becomes again unpleasant. A bad
breath is often caused by local affections
in the nose, the mouth, or the wind-pipe:
viz. by ulcers in the nose, cancerous polv-
piles, by discharges from the mouth, by
sore on the lungs, or peculiar secretions
in them. It is also caused by rotten
tooth, by impurities in the mouth, and by
many kinds of food (viz. horse-radish, oni-
ions, and also by flesh, if used to the
exclusion of other food), and by fevers.
In the last case, it often varies with the
character of the disease. The remedy
for this complaint must depend on the
causes which produce it. Substances of
an aromatic kind, which have a strong,
rich smell, should be chewed to diminish
its offensiveness. (See Menge's Tra-
tamen Physiologicum de respirat (Edin-
burgh, 1726).) But it is often impossible
to remove this unpleasant disorder. Ac-
cording to the Russian code, a bad breath
furnishes ground for a divorce.

BREATHING. (See Respiration.)

BRECCIA; a term applied to a rock
composed of angular fragments cemented
together.

BRECHIN: a town of Scotland, 83 miles
north of Edinburgh, with 5006 inhabit-
ants. It is more distinguished in history
than for its present importance. David I
founded a bishop's see at B. in 1156, and
some remains of its cathedral still exist.
The steeple is a fine tower, surmounted
by a spire, and is 120 feet high. Near it
is one of those old towers common in
Ireland, 103 feet high, and 15 feet in
diameter at the base. Nothing is known
of the uses of these towers, or of the time
of their erection. The Culdees (q. v.) had
a cell or convent here. There was, for-
merly, a strong castle at B., which sir
Thomas Maule defended against Ed-
ward I.

BREDA, in the Netherlands; capital of
a district of the same name, has 9600
inhabitants, is connected with the Meuse
by the navigable river Merk. B., being a
strong frontier fortress, was formerly of
the greatest importance to Holland, and
is still of great military value as the chief
point of the line of fortresses before the
Meuse. The fortifications consist of 15
bastions, as many ravelins, and 5 horn-
works, besides the citadel. The chief
strength of this fortress lies in its marshy
environs, which may easily be laid under
water. B. became a town in 1334: since
that time, it has often been a subject of
contention between the Dutch, Spaniards
and French. It was taken by surprise
by Bardinont in 1581, and by Maurice
of Orange after one of 4 months. During
the French revolutionary war, Dumouriez
made himself master of the city and for-
tress in February, 1793, and would there-
by have prepared the way for the con-
quiest of Holland, had he not been forced,
by the loss of a battle at Neerwinden, to
evacuate the city and fortress, April 4.
In September, 1794, B. was attacked by
the army of Pichegru, but did not sur-
render till all Holland was conquered,
in the winter of 1794. On the approach
of the Russian van-guard, under general
Beckendorf, in Dec., 1813, the French
garrison made a sally, and the patriotic
citizens profited by the occasion, rose en
masse, shut the gates, and prevented the
French from returning into the town. A
peace was concluded at B. between Eng-
land and Holland in 1667.

BREDEW, Gabriel Godfrey, professor of
history in Breslau, born in Berlin, in
1773, of poor parents, was, for a time,
professor at Ettin, and a colleague of the
celebrated Voss; afterwards professor at
Helmstadt, and, still later, at Frankfort
on the Oder, whence he went to Breslau on
the removal of the university to that
place. He died in 1814. He is the author of
Chronik des neunzehnten Jahrhunderts

VOl. II. 22
BREDOW—BREISLAK.

(Chronicle of the Nineteenth Century),
Epitola Parisiensi (he went to Paris in 1807, to collect all that has been left to us by the Greek geometers), Untersuchungen über Geschichte, Geographie und Chronologie (Researches on History, Geography and Chronology), and of the very useful Historische Tabellen (Historical Tables), which have been translated into English.

BREE, Matthew van, first painter to the crown-prince of the Netherlands, member of the national institute of the Netherlands, born at Antwerp in 1773, cultivated his talents in this city, and afterwards in Paris, under the direction of Vincent, and in Italy. As early as 1798, his Death of Cato was admired. This great painter, being accustomed to sketch his ideas rapidly, was able to present Napoleon out of them. On the fleet on the Scheldt before Antwerp, a few hours after they took place. With almost equal rapidity, he made a painting of Napoleon's entrance into Amsterdam, at the moment chosen, being that when the magistrates are delivering to him the keys of the city. In architecture and in sculpture, B. also exhibited considerable talents.—Philip James van B. is likewise a celebrated painter, and lives at Pavia. Several of his works have been purchased in France for the Louvre, St. Cloud, &c. He was born in 1786.

BREECHES; an article of clothing in use even among the Babylonians, and which, with them, were made so as to cover the foot, and supply the place of stockings. In Europe, we find hose first used among the Gauls; hence the Romanus called a part of Gaul breeched Gaul (Gallia breccata). In the 5th century, they had become fashionable in Rome; but the breeches-makers were expelled from the city by an imperial edict, it being considered unworthy of the lords of the world to wear these barbarous investitures. The stockings were separated from them some centuries since. Sometimes they were worn small, and sometimes large, as the fashion changed. In some instances, an immense quantity of cloth was put in them. The poor stuffed theirs out with such substances as they could procure. Joachin II, elector of Brandenburg, who had forbidden the wearing of these enormous integuments, made a person, whom he saw with a pair, rip them open, when some bushels of bran fell out of them. Osander (in his Hofbrautstefel) and Musculus (in his Hosentuefel) raised their voices against this preposterous fashion. The modern breeches were first introduced during the reign of Louis XIV.

BREECHING; a rope used to secure the cannon of a ship of war, and prevent them from recoiling too much in the time of battle. It is of sufficient length to allow the muzzle of the cannon to come within the ship's side to be charged.

BREEZE, SEA, LAND AND MOUNTAIN.

(Bree, Sea, Land and Mountain.

(See Wind.)

BREGUET, A. L., maker of time-pieces for the royal marine in France, member of the academy of sciences and the bureau des longitudes, of the society for the encouragement of national industry, the royal council of arts and manufactures, and the legion of honor, born at Neufchateau, in 1747, contributed to the perfection of the art of watch-making, as well as of mechanics in general, by a number of useful inventions, for instance, astronomical double watches, double chronometers, marine watches, a sympathetic thermometer, &c. He likewise improved the telegraph. He has a son, who possesses a large share of his father's talents, and has been concerned with him in the execution of many of his great works.

BREXON; an ancient Irish magistrate. The office appears to have been hereditary. Each tribe had one brexon, whose judgments were given in the open air on the hill-tops; many spots are yet called Brevons' chairs. The office was abolished under Edward III. Some fragments of the brexon law are yet extant. [See Ledwich's Antiquities of Ireland, 1789.]

BREISGAU. (See Brisgau.)

BREISLAK, Scipio, born in Rome, 1763, and destined for the church, for which reason he is mentioned as an adept in the works of Spallanzani, was one of the most ingenious geologists of our times, and opposed to the Neptunian system, without, however, implicitly adopting the Vulcanian. He was professor of natural philosophy and mathematics at Ragusa. He was afterwards professor in the collegio Nazareno, at Rome, made a scientific tour through Naples, and went to Paris, where he formed an intimacy with Fourier, Chaptal, Cuvier, &c. Napoleon appointed him inspector of the saltpetre works and powder-mills in the kingdom of Italy. He was also a member of the institute and many other literary societies.

The first work, by which he made himself known to the public as an observer...
of nature (e.g. his treatise on the solfatura in the vicinity of Naples, in the neighborhood of which he lived for years as director of the establishments for boiling alum), contains indications of the principles which he afterwards developed in his system. The first extensive work, which he composed at Florence in 1582, was the Topografia Fisica della Campagna (Physical Topography of Campania). After some time spent in the examination of this region, he returned to Rome, examined the adjoining country in a geological point of view, and confirmed his former opinion, that the seven hills are chiefly the remains of an extinct volcano. Leaving his native city on account of political disturbances, he went to France, where he made himself known to the mineralogists, in 1601, by a new edition of the above-mentioned work (disfigured, indeed, by many misprints), with additional remarks, supplements and corrections, under the title Voyages Physiques et Lithologiques dans la Campanie, 2 vols. A topographical-mineralogical description of the environs of Rome is added to it. It contains the results of 12 years' researches. Till then, there had been no systematic treatise on the mineralogy of mount Vesuvius. Earlier writings on this volcano, merely the history of single eruptions, and the only mineralogical work on this subject, by Conini, is nothing but a catalogue. B. was the first who examined geologically the regions described in his work. This valuable work has been translated into several languages; into French by general Pommeret, into German by Fr. Ambr. Reuss (Leipsic, 1602, 2 vols. with engravings).—B. took advantage of his residence in France to examine the regions of Auvergne famous for the Puya (volcanic mountains), and his observations there contributed not a little to the formation of his theories on the effects of volcanoes. In Milan, he wrote his Arte di Salutare (Art of manufacturing Salt petre), and, in 1811, published his Introduzione alla Geologia (Introduction to Geology), 2 vols., which was, in 1813, followed by an edition in French, almost a new work, under the title Institutioni Geologiche, 3 vols., likewise published at Milan. In 1822, his beautiful geological description of the province of Milan appeared. He died at Turin, Feb. 15, 1825, at the age of 78. He left his celebrated cabinet of minerals to the family of Borromeo.

BREITKOPF, John Gottlob Emmanuel; born at Leipzig, in 1710. He pursued, at first, a literary career. During his studies, the works of Albert Dürer, in which the proportions of letters are mathematically calculated, fell into his hands. He was pleased with this subject, and, during his whole life, labored with zeal to improve the German characters. An attempt was once made, to introduce into Germany the Latin characters instead of those commonly used in that country. B. was one of the most zealous opponents of the plan. In 1755, he essentially improved the art of printing music with movable characters. His invention of a method of printing maps, pictures, and even Chinese characters, by means of movable types, is ingenious, though less useful than the other. Although the pope, as well as the academy in Paris, testified their great approbation of this invention, yet no practical use has yet been made of it. He was engaged in writing a history of the art of printing, but died in 1794, before this work was finished. B. was a man of great probity.

BREMEN, on the Weser, situated in a territory formerly an archbishopric, but erected into the duchy of Bremen in 1648, was one of the leading members of the Hanseatic league. At the reformation, the city embraced the Lutheran religion, and expelled the archbishop. Since 1592, Calvinism has been the prevailing religion. By the peace of Westphalia, the crown of Sweden came into possession of the secularized archbishopric, under the title of a duchy. When the elector of Brunswick gained possession of the duchy in 1731, the prerogatives of a free city were confirmed to B. B. is divided by the Weser into the old and the new towns. The fortifications have been demolished, and on the ground where they stood a garden, in the English style, was laid out in 1802, extending, in a semicircle, round the old town, from one bank of the Weser to the other; the garden is provided with running water, and wide, clean walks. Outside of each of its gates is a retired place, planted with fir-trees, affording sheltered walks, and room for sports of various sorts. There is, also, much taste displayed in the arrangement of the trees, shrubs and plants. Adjoining it are the finest houses, which have a good view of the river, the city, and the surrounding country. The principal buildings, besides the churches, are the senate-house, with its cellar of Rhenish wine, the former archiepiscopal palace, converted, in 1819, into the city hall; the exchange, a museum, theatre, hospital,
city library, and two orphan asylums. The water-works furnish the old town with pure, soft water. The number of inhabitants is estimated at 39,000; that of the houses is 25,600. The city contains a gymnasiuim (academy), and, for scientific instruction, a pedagogium. The magistrates (two of whom may be Lutherans), are 4 burgomasters and 24 senators, composed partly of the learned and partly of the mercantile professions. If matters of general moment arise, the Wiltbelt (wisdom), consisting of all the citizens who pay taxes, is convoked. The territory belonging to the city is about 74 square miles, and contains 43,500 inhabitants.

From 1810 to 1813, B. was the capital of the French department of the Mouths of the Weser. The congress of Vienna admitted it into the German confederacy, as a free city, with one vote in the general assembly. B. and the three other free cities have, together, a vote in the diet. The revenues amount to 400,000 florins; the debt, to 4,500,000 florins. The constitution is, like that of Hamburg and Lübeck, a relic of other times. A thousand antiquated forms render the government of this small city a complicated web of jarring interests. These free cities do not even possess the liberty of the press, and their existence depends on the mutual jealousy of the powers which surround them, with whose whims they must always comply. The only advantage of which they can boast is the comparative lightness of the taxes. The chief points deserving of remark in the political constitution of these cities are, that they have four burgomasters chosen for life, a senate, chosen from among the citizens, also for life; likewise meetings of the citizens, either in primary assemblies or by delegation; opinion and consent, that are seldom asked, except when new taxes are to be imposed; and, finally, a number of subjects not represented. In 1820, the toll at Elsfleth was abolished; but the accumulation of sand between Vegesack and B. has not ceased, and vessels deeply laden can go up the river only to Brücke and Elsfleth, or, at most, to Vegesack. Their cargoes are, therefore, discharged into lighters, which is inconvenient and expensive. The herring and whale fisheries carried on from this city are important, and the trade, principally in German linen, to St. Thomas and South America, is increasing. Others and Heerew were born at B. B. lies in lon. 8° 48' 30" E.; lat. 53° 4' 45" N.

The water-works furnish the old town rising between Innsbruck and Sterzing, and the three other free cities have, together, a vote in the diet. The revenues amount to 400,000 florins; the debt, to 4,500,000 florins. The constitution is, like that of Hamburg and Lübeck, a relic of other times. A thousand antiquated forms render the government of this small city a complicated web of jarring interests. These free cities do not even possess the liberty of the press, and their existence depends on the mutual jealousy of the powers which surround them, with whose whims they must always comply. The only advantage of which they can boast is the comparative lightness of the taxes. The chief points deserving of remark in the political constitution of these cities are, that they have four burgomasters chosen for life, a senate, chosen from among the citizens, also for life; likewise meetings of the citizens, either in primary assemblies or by delegation; opinion and consent, that are seldom asked, except when new taxes are to be imposed; and, finally, a number of subjects not represented. In 1820, the toll at Elsfleth was abolished; but the accumulation of sand between Vegesack and B. has not ceased, and vessels deeply laden can go up the river only to Brücke and Elsfleth, or, at most, to Vegesack. Their cargoes are, therefore, discharged into lighters, which is inconvenient and expensive. The herring and whale fisheries carried on from this city are important, and the trade, principally in German linen, to St. Thomas and South America, is increasing. Others and Heerew were born at B. B. lies in lon. 8° 48' 30" E.; lat. 53° 4' 45" N.
garrison; but several aged citizens of rank, priests, ex-consuls and generals, amounting in the whole to about forty, had resolved to remain in the city, and devote themselves to the infernal deities. Attired in their sacerdotal, consular and triumphal robes, like victims decorated for the sacrifice, they seated themselves in their chairs of office, in the middle of the forum, awaiting death. When B. arrived at the forum, he was struck with astonishment at their venerable aspect. The Gauls looked upon them as so many statues of deities, and feared to go near them. At last one ventured to approach M. Papirus, and stroke his beard, upon which the latter struck him with his ivory sceptre, and was immediately massacred, together with his companions, by the infuriated Gauls. Rome was sacked, and all the inhabitants who yet remained in their houses were slain. B. then assaulted the capital, and, being repelled with considerable loss, he set fire to the city, and levelled it with the ground. The capital, however, was so strong, that he resolved to reduce it by famine. Detached parties, at the same time, plundered the plain country, and exacted contributions from the neighboring cities. Such a party appeared before Ardea, the place where the valiant Camillus lived in exile. This magnificent patriot persuaded the senate of Ardea to defend their city, and declared the treaty, void. A battle ensued: after having sustained an inconsiderable loss, the Gauls retreated, and, in the succeeding night, abandoned their camp. On the following day, Camillus pursued and defeated them. Those who escaped death in battle were slain by the inhabitants of the country, so that not one of them returned to his native land. Another B., likewise a leader of the Gauls, invaded Macedonia, about 100 years later, with an immense army (150,000 foot and 50-40,000 horse), and, after having defeated Sosthenes, directed his march through Thessaly and Greece, towards Delphi, where he plundered, or was on the point of plundering, both city and temple; but, as several writers assert, he was repelled by a terrible storm accompanied by lightning and earthquakes: a Greek army drew near, and a general defeat of the Gauls ensued. B. himself put an end to his life.

Brentano, Clement, born at Frankfurt on the Maine, in 1777, has made himself known by several literary works. Among them is Des Knaben Wunderhorn (The Boy's wondrous Horn, 3 vols., 1826), a collection of German popular songs, which he published with his friend Achim von Arnim.

Brentford, a town in Middlesex, Eng., seven miles W. of London. It has a weekly market and two annual fairs. Here Edmund Ironside defeated the Danes, under Canute, in 1016; and Charles I a part of the parliamentary forces, in 1642. The magnificent edifice of the duke of Somerset, where lady Jane Grey resided, now belonging to the duke of Northumberland, was built here, on the site of a suppressed monastery.

Brescia: capital of a delegation comprising 314,000 inhabitants, and 3200 square miles, in the Milanese, at the foot of a mountain rising between the lakes Garda and Iseo, on the rivers Meda and Gurara. This latter river divides the city into two parts, in which respect it resembles most of the cities of Lombardy. It is a manufacturing place, containing 3438 houses and 31,960 inhabitants. It is commanded by a citadel, elevated on a rocky height, and is adorned with a magnificent cathedral. This, as well as the splendid library in the episcopal palace, it owes to cardinal Quirini. It has also a philharmonic society, a cabinet of medals, and a theatre. The last is to be found in almost all Italian cities of equal importance, because, in Italy, many possessors of landed estates, hav-
ing no other pursuit than pleasure, spend their income in the cities. In this city (for many centuries called Armata) and in Bergamo were the chief manufactories of arms of every description, to answer the demand of the Low Country, where much luxury is displayed in this article. Venice, for a long time, sent thither supplies of beautiful and costly arms. The guns of B., and the steel prepared there, are celebrated in the East. Il. has also manufactur- 
es of oil, fistian, linen, silk, paper and hardware. Much silk, wine, flax and cloth is conveyed into the interior; for the artificial irrigation, by the aid of Alpine ice, the taxes were very light; neverthe-

less, the inhabitants of B., and its territory were very unruly subjects of the republic, whose police was so lax, as scarcely to punish those who undertook to revenge themselves. An end has been put to the disorder caused by banditti in the territory of Venice, by the French and Aus-

trian government in Italy. In 1826, a number of remarkable antiquities were found buried in a vault near B.

Breslau, capital of Silesia, on the river Oder, at its junction with the Oder, has 75,800 inhabitants, among whom are 4600 Jews. B. is the residence of both the military and civil governors of Silesia, and the seat of a superior council of adminis-

tration, a superior court of justice, &c. It contains more than 20 Catholic churches, of which the cathedral of St. John on the Dominisal island of the cathedral is the seat of the bishop of B. Among 84 literary institutions, there are four distinguished gymnasia; two Lutheran, one Reform-
ed and one Catholic. Among the libraries worthy of notice are the royal library, the library of the university, and the library of Riediger, which belongs to the city, and is remarkable for its rich collection of manuscripts. The city possesses, in its senate-house, and in the church of the cross, standing on Sandinsel Sindy island) two magnificent monuments of ancient German architecture, and, in public places as well as private collections, contains many exquisite works of art. It has also a theatre. B. carries on a considerable commerce, which has, however, been diminished by late events.

The two annual fairs of wool are numerously attended. Among the misfortunes that have befallen the city in modern times, the siege in 1806 and 1807, by the French and the troops of the confedera-
tion of the Rhine, must be noticed. After the capture, the French began to destroy the fortifications, which have since been entirely demolished. The spacious walks and new buildings, which occupy the place of the works, have very much contributed to embellish B. The Catholic university was established under Leopold II, in 1702, by the Jesuits, and, in 1811, combined with the Protestant university of Frankfort on the Oder. In 1835, it contained more than 850 students. The Prussian government has done much for this institution, as well as for the other new universities in Berlin and Breslau.

Brest (anciently Brivetca Portus, and Gosbrieto); a seaport in France, and principal place of a district in the department of Finisterre, in the former province of Brittany, 23 parts N. W. Vannes, 624 W. Paris; lon. 4° 29' W.; lat. 49 23' N.; pop., 23,805; houses, 2600. It has one of the best harbors in France, and a safe road, capable of containing 500 men-of-war, in 8, 10 and 15 fathoms at low water, and it is the chief station of the French marine. The harbor and magazines were constructed in 1631, by Richelieu. The coast, on both sides, is well fortified. The entrance is narrow and difficult, with covered rocks, that make it dangerous to those not well acquainted with it. It contains two parishes and a marine seminary. The arsenal is an immense and superb building, and the dock-yards are well constructed. It is the seat of a governor, of an admiralty board, and a municipality. The climate of B. is wet and uncomfortable, and the sky is almost always obscured. June 1, 1794, the French fleet was beaten off Brest by the English, under Howe, who took from them six ships of the line, and sunk a seventh.

Breton. (See Brittany.)
BRETEUIL—BREVE.

olution. After the 14th of July, he escaped the fate of Foulon by a hasty flight. In 1790, Louis XVI intrusted him with several secret negotiations at the principal northern courts. The convention issued a decree against him. In Bertrand de Moleville's history of the revolution, there is valuable information with respect to his last diplomatic labors. In 1802, he returned, with the permission of the government, to France, and died at Paris, in 1807.

BRETSCHNEIDER, Henry Godfrey von; born at Gena, March 6, 1720, died at the castle of Krzinitz, near Pilsen, Nov. 1, 1810. He was a soldier, a provincial counsellor, librarian at Ofen and Lemberg, the adviser and confidant of Joseph II, a travelling adventurer, a poet, a writer of songs, a collector of engravings and pictures, an author of reviews and satires, a Peregrinus-Proteus, in a hundred different colors; yet, withal, an upright friend to his last fools and hypocrites. He received his first instruction in the academy at Ebersdorf, under the care of the Bohemian brethren, where he was taught by hunger to steal, and, by hypocritical cant, to doubt all that is holy. He has written a great deal, and no folly of the times escaped him. All were boldly exposed and fiercely attacked. His Journey to London and Paris (1817) was translated and published in the Edinburgh Magazine. If B. had written nothing but the Alma of the Saints, for the year 1788, in which, in compliance with the wish of the emperor Joseph, he unmercifully attacks priests and priestcraft, he would deserve, for this work alone, to be known to enlightened foreigners.

BREUER; the name of a celebrated Dutch family of painters, the first of whom adopted this name from a village not far from Breda. This was Peter B., also called, from the character and subject of most of his representations, the Droll, or the Peasants' B. He was born in 1510 (according to Meichel, in 1530), was a pupil of Peter Koeck van Aelst, travelled into Italy and France, copying the beauties of nature, and, after his return, fixed his residence at Antwerp, where he was received into the academy of painters in that place. He subsequently married the daughter of his instructor. Koeck, and removed to Brussels, where he died in 1570 (according to some, in 1590). In his rural weddings, his rustic feasts and dances, he strikingly represents the gayety of the villagers, as he himself had frequently observed them, in disguise, in his youth. He also etched, but many of his pictures have been engraved by others. He left two sons—Peter and John. The former, (called the Younger B.), preferring subjects affording striking contrasts, painted many scenes in which devils, witches or robbers are the principal figures. This particular turn of genius procured him the name of Hell B. Among his pieces are Orpheus playing on his Lyre before the Infernal Deities; also, the Temptation of St. Anthony. The former picture hangs in the gallery of Florence. The second brother, John, was distinguished by his landscapes and small figures. From his usual dress, he received the title of Velvet B. He also painted for other masters landscapes, as back-grounds to their pieces, and sometimes little figures in them. He was a very prolific artist. In connexion with Rubens, he represented Adam and Eve in Paradise. The figures in this picture and painted by Rubens. This piece, his Four Elements, also Vertumnus and Pomona, which were all executed jointly with Rubens, are among his principal performances. He is said to have been born in 1568. He visited Italy, and enriched his imagination with beautiful scenery. He is said to have died in 1640. Other members of this family, belonging to a later period, are Ambrose and Abraham, who, for a time, resided in Italy, and died in 1690; the brother of the latter, John Baptist, who died in Rome; and Abraham's son, Caspar B., known as a painter of flowers and fruits.

BREVE; a note of the third degree of length, and formerly of a square figure, as \( \square \); but now made of an oval shape, with a line perpendicular to the stave on each of its sides: \( \square \). The breve, in its simple state, that is, without a dot after it, is equal in duration to one quarter of a large, or to two semibreves, and is then called imperfect; but, when dotted, it is equal to three eighths of a large, or to three semibreves, which being the greatest length it can assume, it is then called perfect.
place in every seed that is successfully and not in one which is frozen, burned, of familiar occurrence, being what takes place in every seed that is successfully planted. The seeds of wheat, rye, barley, &c. consist principally of starch. If a grain of these is examined, we find near one end of it a small body, which is the rudiment of the future plant, and the microscope shows us that this consists of two parts—the plumula, which is destined to ascend through the earth to form the stalk, and the radicle, which is to be spread abroad below, and form the root. Whenever a grain of barley, oats, or certain other of the gramineous seeds, is exposed to water, it begins to swell and absorb the moisture; and, at the same time, if the temperature of the air is not too cold, the radicle thrusts itself out at the lower end; the plumula, on the other hand, pushes itself along beneath the husk of the grain to the other end, before it thrusts itself out. There are several curious considerations in regard to this process. The one which concerns us at present is this, that, as the plumula is passing along through the husk, the part of the seed along which it passes becomes changed into the substance known in chemistry by the name of starch sugar; that is, when the plumula has passed along one third of the length of the grain, that third is starch sugar, while the remaining two thirds are still starch; and so with the rest. The starch sugar seems to be some combination of starch and water. The final cause of the change is undoubtedly the support of the growing plant, sugar being evidently necessary to the growth of plants, as it is always found in their sap, and sometimes, as in the sugar maple, in great quantities. The moment, however, the plumula begins to protrude beyond the end of the grain, the sugar diminishes, as it is consumed by the young stalk; and the substance of the seed is also consumed, though by no means to the same extent, by the growth of the root. To produce this change in seeds, and thereby to fit them for yielding a sweet fluid, when mixed with water, is the business of the maltster; and it is an operation of great delicacy, upon the successful performance of which the success of a manufacturer of ale or beer in a great measure depends. The first operation in making is, to plunge the barley, or other grain to be malted, into a large cistern, containing water enough to cover the whole mass. The barley immediately separates into two parts; one is heavy, and remains at the bottom of the water, while the lighter portion, consisting of chaff, defective grains, &c. floats on the top. This latter is skimmed off as of no use. The heavier part, or sound barley, is suffered to remain till it has absorbed a portion of the water, sufficient for the purpose of enabling it to germinate. This is steeping. It is the first process, and usually occupies about two days. When the grain is sufficiently steeped, the water is let off, and the grain thrown out of the cistern, and piled in a heap, or, as it is technically called, a couch. After a few hours, the bottom and inner part of the heap begin to grow warm, and the radicle or root to make its appearance; and the germination thus commenced would go on rapidly but for the labor of
the maltster, who, with a view of making all the grains grow alike, checks the growth of such as are in the middle of the heap by turning them to the outside, and vice versa. For this reason, malting cannot be performed, with any success, in summer, which would, at first sight, seem to be the finest season. On the contrary, that season is turned backwards and forwards for equal and regular. Thus the grain is turned backwards and forwards for 14 days, at the end of which period the acropire, as it is called, or the plumula, having nearly reached the end of the grain, and the latter having acquired a sweet taste, the process of growth is suddenly and effectually stopped by spreading the whole upon a kiln, which is a floor of iron or tiles, perforated with small holes, and having a fire beneath it. There the life of the grain is destroyed, and it is thoroughly dried.—The malt thus made is ground, or rather crushed, by passing it between a pair of iron rollers. It is then prepared for brewing. The first step in brewing is called mashing. It consists in stirring up the malt with a quantity of hot water, which suspends the starch sugar of the malt, and forms a sweet liquor called wort, similar to the must, or sweet juice of the grape, from which wine is made. The manufacture differs, however, in some essential particulars, at this stage of the process, from that of wine; for, if the wort were allowed, as the must is, to ferment without obstruction, it contains so much of the mucilage and starch of the grain, that it would run into the aërous, and from thence into the putrefactive fermentation, and would be fixed, as it is technically termed; that is, it would become ill-smelling vinegar instead of beer. To prevent this, it is first boiled. This process renders it stronger, by evaporating a portion of the water; and, further, it coagulates or cures the mucilage, which habit has rendered injurious ingredient. While boiling, a portion of hops is added. One object of this is to give a aromatic, bitter taste to the liquor, which habit has rendered agreeable. The principal object of adding the hops, however, is, to check the tendency to the aërous fermentation, which is always far greater, in liquor so compound in its character as beer, than in the simpler liquors, as wine and cider. It is further a common opinion, that hops add to the intoxicating qualities of the article, and this opinion is probably well founded. After the wort is sufficiently boiled, they are poured out into large shallow cisterns or coolers, till they become cool, and deposit much of the curdled mucilage. They are then allowed to run into a vat or vat to ferment. If left to themselves, however, the process would take place very imperfectly, and it is therefore assisted by the addition of yeast. The true nature of this substance, which demands much attention and some laborious analyses, is not yet understood. It excites fermentation, however, which continues for a period of time longer or shorter, according to the fancy of the brewer, and is thus checked by drawing off the liquor into barrels or hogsheads. In these the fermentation still goes on, but it is now called by brewers cleansing. With a view to take advantage of this process, the casks are placed with their bung-holes open, and inclined, a little, to one side. The scum, as it rises, works out at the bung, and runs over the side, and thus the beer is cleansed from a quantity of mucilage, starch, and other unfermented matters. What does not run out at the bung subsides to the bottom, and constitutes the lees. After this cleansing is completed, the clear beer is racked off into barrels, and preserved for use. The scum and lees are collected, and the former constitutes the yeast for the next brewing.—Such is the general history of brewing, whether the product is to be beer, ale, porter or wine. To prevent this, it is first bottled. Every successive fermentation causes some lees, from which the beer may be racked off, and, by repeated racking, the fermentative matter may be completely removed, and such beers become clear, transparent, and somewhat like the German wines, as, for instance, that commonly called hock. But, the disposition to ferment being thus entirely destroyed, they are, like these wines, perfectly still, and have no disposition to froth by being bottled. Hence old sound beers may remain in bottles for years without coming up, as it is technically called. The object of the brewer is
to produce an agreeable beverage, distinguished not so much for absolute strength, or quantity of alcohol, as for color, flavor, transparency, vivacity, and power of keeping well. Some of these qualities are not compatible with the development of the greatest quantity of alcohol or ardent spirit, which is the main object of the whiskey-distiller. To effect this purpose, he makes a kind of beer, which is called wash. This differs from brewers' beer in some important particulars. In the first place, the grain is not all malted; in England, only a part of it is so; in the United States, generally, none at all. In the next place, it is ground a great deal finer than in brewing. If the brewer were to grind his grain as fine as the distiller, he would run great risk of setting his mash, as the phrase is; that is, he would make paste of his grain, and entangle the solution of sugar so effectually, that he could not get it out again. The distiller does not run the same risk, because he does not use such hot water as the brewer, and he can mash and stir his goods a great deal longer without injury, and even with advantage. Again, he does not need to boil or add hops to his worts, for he does not care about precipitating the mucilage, or making his beer keep. In the next place, he adds a great deal of yeast, which ferment the sugars violently and rapidly, so as to decompose the sugar as quickly as possible, and is quite indifferent whether the worts even become somewhat sourish in the process, as, when sufficiently fermented, the alcohol is removed at once by distillation. If raw grain be ground, mixed with water at a certain heat, and allowed to stand, the change of the starch into starch sugar, or the combination of starch and water, takes place in the same way as in malting. It takes some time, however, and hence the distillers' mashes stand longer than the brewers'. It would seem, therefore, from this, that the malting of grain is not necessary for the making of beer; and, accordingly, this method of proceeding has been recommended by an eminent chemist, one who has paid much attention to this subject, and who can be doubted that a certain description of small beer may be so made. But the process is not applicable to the finer and more valuable kinds of malt liquors, for reasons which it would require too many details to explain perfectly.

Besides the kinds of beer and wash already mentioned, there are others in very common use in the United States. These are made by mixing honey, molasses or sugar with water, and fermenting with yeast, or some other leaven. Beers made in this way are commonly mingled with some vegetable substance, as ginger, spruce, sarsaparilla, &c. to give them a particular flavor, and are familiar to all by the names of ginger beer, spruce beer, sarsaparilla mead, &c. &c. The wash of this kind is made from molasses and water, fermented in large vats under ground, by means, not of yeast, but the remains or returns of former fermentations. The liquor thus fermented is pumped up at once into the still, and the product is common under the name of rum. Of the beers manufactured from grain, as an article of consumption in that state, there are a great many varieties. These, however, may be all comprehended under three principal ones—beer, ale and porter. Beer differs from the other two in the circumstance of its being made for immediate consumption. There are two or three kinds of it, known by the names of strong beer, table beer, half-and-half, &c. These differ only in their relative strength, being all brewed upon the same general principle, and adapted to be used soon after they are made. It is of no consequence, so far as regards the principle of brewing beer, whether the malt of which it is made be of one color or another: it may be pale, or high-dried, or amber, or any thing else. It is not even of the first consequence whether the malt be good or bad, for the beer is drunk soon after it is made, and if it is not, it is lost; so that there is little opportunity to discover any particular flavor. Moreover, it is a common and necessary practice to color it so highly with burned molasses or sugar, that the original taste of the liquor is, in a great measure, concealed. There is also a sort of fulness of taste which is given to beer, by this practice in part, but still more by the mode of fermentation. This mode is to stop the progress of the latter before the sweet taste is entirely gone, by removing the beer from the fermenting tun to the smaller casks. In some places, indeed, where the beer is to be sent out very weak, it does not go into the fermenting tun at all, but the yeast is mingled with the worts in the small casks, and it is sent out at once in full fermentation, and drank up, in fact, before this has time to subside entirely. Ordinarily, however, it is fermented a little in the tun, and then cleansed and racked in a very short time. When beer is sent out in this state, it is always necessary to mingle with it a quantity of what are called finings, that is to say,
BREWING.

...
admitted, that no brewery, either in England or elsewhere, has been able to make porter equal to the large porter-breweries of London. This superiority has been attributed to the use of the Thames water; but, in the first place, the small London breweries, which do not make good porter, have this advantage in common with the larger ones; and, secondly, these last have long since ceased to use the water of the river, as it contains too much vegetable matter, and is liable to cause acidity in the liquor. The superiority, as far as it exists, is doubtless owing to command of capital, and consequent power of choice in the malt-market, and system in conducting the business: as to the rest, a wealthy concern, like a London brewing company, has always means of persuading bottlers and retailers of all descriptions, that it is for their advantage to sell and praise their porter in preference to that of a small establishment, whose liquor may be equally good, but not quite so cheap. Of the two stock liquors, porter is generally considered more wholesome, and more easily digestible. It keeps better, and, in London, is generally preferred for common use. The ale manufactured in many parts of the U. States are colored by the addition of brown malt or burnt sugar. This is to suit the taste of the consumer, who obstinately associate the idea of strength and body with high color. It is impossible that ales thus colored should be without a harsh taste, which is a defect. Ales, to be perfect, must be pale, and the fine English ales always are so. No very good porter is made in the U. States, so far as is known, with 100 arms and 50 heads, the son of Uranus and Terra. His two brothers, Cottus and Gyges, were formed in a similar manner; and their formidable appearance struck their father with such terror, that he imprisoned them, at their birth, in the bowels of the earth. (Hes. Theog. 147.)

Brewer; David; secretary of the royal society of Edinburgh; born about 1785. The great number of treaties which he has written, on various subjects in natural philosophy, are chiefly inserted in the Transactions of the Edinburgh Royal Society. He is the author of the much esteemed Edinburgh Encyclopedia. He is also the principal editor of the Edinburgh Philosophical Journal, which appears quarterly. His fame became general by his invention of the kaleidoscope, (q.v.) Among the many learned men who render a residence in Edinburgh agreeable to foreigners, B. is one of the most eminent, as he has a great fund of general information, and is a man of the most polite manners.

Bribe, marquis de; grand master of ceremonies at the court of Louis XVI; known in consequence of the famous reply of Mirabeau to the message which he brought, June 23, 1789, from the king to the deputies of the tiers état, ordering the dissolution of their body: "Tell your master," said Mirabeau, in a voice of thunder, "that we are here by the will of the people, and that nothing but the bayonet shall drive us out." The court, intimidated by this bold answer, which produced the highest enthusiasm in the assembly and the public, became wavering and irresolute in its measures. Mirabeau, on the other hand, taking advantage of the excitement, carried the decree declaring the persons of the deputies inviolable, and that whoever should dare issue or execute a warrant of arrest against a part or the whole of them should be deemed guilty of treason. The marquis de B. followed Louis XVIII abroad, and, after the restoration, was reinstated in his former office.

Briareus (also called Egypton); a giant with 100 arms and 50 heads, the son of Uranus and Terra. His two brothers, Cottus and Gyges, were formed in a similar manner; and their formidable appearance struck their father with such terror, that he imprisoned them, at their birth, in the bowels of the earth. (Hes. Theog. 147.) In the war with the Titans, Jupiter set them free, and, by their assistance, gained the victory. When Juno, Neptune and Minerva conspired to bind the sovereign of the gods, Thetis brought Briareus from the depths of the sea (how he came there is not known) to the relief of the trembling Jove. (H. a. 403.) Virgil places B. in the vestibule of hell. (En. vi. 267.) He was employed, with his hundred-handed brothers (Centinami), in watching the Titans in Tartarus. (Hes. Theog. 734.)

Bribe; a reward given to a public officer, or functionary, to induce him to violate his official duty for the benefit or in compliance with the wishes of the party by whom, or on whose behalf, the bribe is given or promised. The term bribery is applicable alike both to the receiving and to the giving of the reward. A corrupt bargain for the votes of electors in the choice of persons to places of trust under the government is bribery. In this instance, the electors, as such, are a kind of public functionaries. Particular species of bribery are expressly forbidden.
with penalties, by the positive laws of every state that is governed according to a written code. The corrupt discharge of a public trust, in consideration of bribery, is punishable at the common law, though not prohibited by any positive statute. A clerk to the agent for French prisoners in England was indicted and punished for taking bribes given for the purpose of inducing him to procure them to be exchanged out of their regular turn. An attempt to influence jurymen in giving their verdict, by rewards, is a species of bribery, denominated embracery. Even offering a reward to a revenue officer, to induce him to violate his duty, though the reward was not received, has been held to be an indictable offence. (2 Dallas's Reports, p. 384.) A similar doctrine is held in England. (3 Coke's Institutes, part third, p. 147, and 4 Burrus's Reports, p. 350.) The same was held of a promise of money to a member of a corporation, to induce him to vote for a mayor. (2 Lord Raymond's Reports, p. 1377.) The British laws, as well as those of the U. States, specially prohibit bribery of the officers of the revenue; and the forfeiture, on the part of the offender offering the bribe, in England, is £500; the officer receiving the bribe incurs the like forfeit and is disqualified for public employment, civil or military. Under the U. States' laws, the party offering or receiving a bribe, in such case, incurs a pecuniary penalty, and becomes disqualified for any public trust under the government. The laws of many of the U. States contain special provisions against bribery of judges or jurymen, or of electors in the choice of public officers. Barreiro Menendez, Pedro, was born in 1792, in Varinas, capital of the province of that name in Venezuela, of a wealthy and distinguished family. At the commencement of the Colombian revolution, he was pursuing the study of law in Caracas. Having concluded his studies there, he returned to Varinas in 1812, and obtained the office of chief secretary to the provincial legislature. But the success of Monteverde occasioned that body, and compelled him to emigrate into New Grenada. Here he joined Bolivar after his victories in Cucuta, and, making a tender of his services as a volunteer, Bolivar appointed him his secretary. In this capacity, Briceño served through the campaigns of 1813. After the disastrous battle of La Puerta, he followed Bolivar back to Carthagena, and continued attached to him, as secretary, through all his vicissitudes of fortune, until the formation of the congress of Angostura, in 1819. At this period, he was made secretary of war and the marine, with the rank of colonel, and accompanied the liberator in his campaigns, as before. In 1821, he received the same appointment under the constitution, but remained at the seat of government when Bolivar departed for the campaign of Quito, after having been confidentially attached to his person for eight years. In 1823, he became general of brigades, and in 1825, resigned his office of secretary of war, and was succeeded by general Souillotte. (Restrepo's Colombia, vi, 29.) Brick is a sort of artificial stone, made principally of argillaceous earth, formed in moulds, dried in the sun, and baked by burning. The use of unburnt bricks is of great antiquity. They are found in the Roman and Greek monuments, and even in the ruins of Egypt and Babylon. They were dried in the sun, instead of being burned, and mixed with chopped straw, to give them tenacity. On account of the extreme heat and dryness of the climate, they acquired a great hardness, and have lasted for several thousand years; but they are unsuitable for more northern latitudes. The most common bricks, among the Romans, were 12 inches long and 11 broad, and, in later periods, they were burned. Modern bricks are generally about twice as long as they are broad, and twice as broad as they are thick; their length is ordinarily about 10 inches. The best are made of a mixture of argillaceous earth and sand. Their red color is owing to the presence of oxide of iron, which is turned red by burning. The best season for making them is spring or autumn, since the process of drying then takes place more gradually and equably. The clay should be dug in autumn, and exposed to the influence of frost and rain. It should be worked over repeatedly with the spade, and not made into bricks until the ensuing spring, previously to which it should be well tempered by treading it with oxen, or by a horse mill, till it is reduced to a ductile and homogeneous paste. The clay may have too great or too small a proportion of argillaceous earth or of sand to form a paste of proper consistency; it will then be necessary to add the one or the other, as the case may be. When the mass has thus been thoroughly mixed, the moulder throws it into the mould, presses it down till it fills all the cavity, and removes the surplus with a stick. The bricks are then arranged on
hacks to dry, disposed diagonally, to allow a free passage to the air. In about nine or ten days, they are ready for the burning, for which purpose they are placed in a machine, and subjected to a free passage to the air. In about two hours, after which it is kept at a uniform height for several days and nights till the bricks are sufficiently burned. Much care is necessary in regulating the fire, since too much heat vitrifies the bricks, and too little leaves them soft and friable. Compressed bricks are those which, after being moulded in the common manner, are placed in a machine, and subjected to a strong pressure, by which they become regular in shape, and smooth, and more capable of resisting the action of the atmosphere. Floating bricks are so called on account of their property of swimming on the water. They are made of Agaric mineral, or fossil farina, which is found in some parts of the U. States. Their infusibility at the highest temperatures renders them useful in constructing reverberatory furnaces, pyrometers, and magazines of combustible materials. Their lightness and non-conducting property render them particularly useful for the construction of powder-magazines on board of ships.

BRIDGE. It is needless to investigate ancient authors for a description of the primitive bridge, as its origin and elements are to be found in uncultivated nations of modern times. Stepping-stones, in shallow rivers, covered with plants from stone to stone, exhibit the incipient principles of piers and arches, which science has brought to their present perfection. In deeper rivers, an accumulation of stones forms a lofty pier, and, where the openings were sufficiently narrow, and the slabs of stone sufficiently long, or the art and strength of the untaught architect sufficient to the task, a roadway was formed from pier to pier, like the Vitruvian architrave of the primitive Tuscan temple. With the Greeks, who were a more maritime people, and more accustomed to navigation than the Romans, there is no doubt that ships and boats preceded, if they did not supersede, the use of bridges. In their brightest days, when their fine style of architecture was complete, when their porticoes were crowded with paintings, and their streets with statues, the people of Athens walked or ferried over the Cephisus, for want of a bridge. The Greeks do not seem to have valued the construction of the arch sufficiently to excel in bridge-building. No people of the ancient world carried the power of rearing the stupendous arch and the magnificent dome to such an extent as the Romans. After the construction of their great sewers, their aqueducts, and the cupola over the Pantheon of M. Agrippa, a bridge over the Tiber was of easy execution; and the invention of the architecture of stone bridges, as practised in its best and most effectual manner, must be conceded to this great and indefatigable people.

The most celebrated bridges of ancient Rome were not distinguished by the extraordinary size of their arches, nor the peculiar lightness of their piers, but, like the rest of the magnificent works of this city, as far as construction is concerned, they are worthy of study from their excellence and durability. The span or chord of their arches seldom exceeded 70 or 80 feet, and the versed sine or height was nearly half of the chord, so that they were mostly semicircular, or constituted a segment nearly of that form. Among the most celebrated bridges in modern times, or those built subsequently to the destruction of the Roman empire, are those of the Moors in Spain, who imitated and rivalled the best constructions of the Romans. The bridge of Cordova, over the Guadalquivir, is an eminent example of their success. The bridge over the Rhone, at Avignon, is one of the most ancient bridges of modern Europe. It was built by a religious society, called the brethren of the bridge, which was established upon the decline of the second, and the commencement of the third race of French kings, when a state of anarchy existed, and there was little security for travellers, particularly in passing rivers, on which they were subject to the rapac-
ties of banditti. The object of this society was, to put a stop to these outrages, by forming fraternities for the purpose of building bridges and establishing ferries and caravansaries on their banks. The bridge of Avignon was commenced in 1176, and completed in 1178. It was composed of 18 arches. The length of the chord of the largest was 110 feet 9 inches, and its height 45 feet 10 inches. France can boast of many fine bridges, built during the last two centuries.—In Great Britain, the art of building bridges appears to have been diligently studied from early times. The most ancient bridge in England is the Gothic triangular bridge at Croyland in Lincolnshire, said to have been built in 880. The ascent is so steep that none but foot-passengers can go over it. The longest bridge in England is that over the Trent at Burton in Staffordshire, built in the 13th century, of squared free-stone. It consists of 34 arches, and is 1545 feet long. London bridge was commenced in 1176, and was incumbered with houses for many years. These were removed between 1758 and 1768. The other bridges over the Thames are highly ornamental, as well as necessary, to the metropolis. Blackfriars bridge is both novel and handsome in design, and its elliptical arches are well suited to its situation, but its material is bad and perishing. This bridge was designed and erected by Robert Milne, an able Scotch architect. It was commenced in 1760, and completed in 1771. It is 905 feet long, and 43 feet 6 inches broad between the parapets. The centre arch is 100 feet in span, and 41 feet 6 inches in height. Waterloo bridge is one of the greatest architectural works of our times. It is the only bridge over the Thames which has a flat surface in its whole course. Its length is 1350 feet. It consists of 9 elliptical arches, each of 120 feet span, and 32 feet in height. Westminster bridge is one of the handsomest as well as most scientifically constructed bridges in Europe, and forms an era in English bridge architecture, from the success of the method employed in laying the foundations in deep water and a rapid current. It was commenced in 1740, and completed in 1750. It is 1220 feet long, and 44 feet between the parapets, has 13 large and 2 small arches, all semicircular. The middle arch is 76 feet in span.

Metal bridges are the invention of British artists. The true elements of their construction are as yet but imperfectly understood. The first bridge of cast-iron ever erected is that over the Severn, about two miles below Colebrookdale, in Shropshire. It is an arch composed of five ribs, forming the segment of a circle. Its chord is 100 feet long, and its height 45 feet. It was erected in 1777. The second cast-iron bridge was designed by Thomas Paine, the famous political writer, and was intended to have been taken to America; but, the speculator failing in his payments, the materials were afterwards used in constructing the beautiful bridge over the river Wear at Bishop's Wearmouth, in the county of Durham. The chord of the arch is 240 feet long; the height, 30 feet. The Southwark or Trafalgar bridge over the Thames at London is, at present, the finest iron bridge in the world. It consists of three arches. The chord of the middle arch is 240 feet long, and its height 24 feet. There are several other fine bridges of this kind in England. Mr. Telford proposed an iron arch of much larger dimensions than any now existing, to take the place of London bridge. The length of the chord was to be 600 feet, and its height 75. The plan has not been executed.

Timber bridges. Timber is the most ready, and perhaps the most ancient material used for the construction of bridges. The earliest timber bridge on record is that thrown by Julius Caesar over the Rhine, and described in his Commentaries. Germany is the school for wooden bridges, as England is for those of iron. The most celebrated wooden bridge was that over the Rhine at Schaffhausen. This was 364 feet in length, and 18 feet broad. The plan of the architect was, that the bridge should consist of a single arch. The magistrates of the place, however, required that he should make it of two, and use the middle pier of a stone bridge, which had previously stood there. He did so, but contrived to leave it doubtful whether the bridge was at all supported by the middle pier. It was destroyed by the French, in April, 1799. The same architect and his brother have also erected several other fine arched wooden bridges. Several others have been erected, in Germany, by Wiebeking, perhaps the most ingenious carpenter of our times.—In the United States, the Trenton bridge over the Delaware, erected by Burr in 1804, is the segment of a circle 345 feet in diameter. Its chord measures 200 feet; its height, or versed sine, is 32 feet, and the height of the timber framing of the arch, at its vertex, is no more than...
2 feet 8 inches. The timber bridge over the Schuylkill, at Philadelphia, is of the extraordinary span of 310 feet. The versed sine is only 20 feet, and the height of the wooden framing, at the vertex, 7 feet. Its architect was Wernwag, who built it in 1813. The bridge built by Palmer, over the Piscataqua, near Portsmouth, New Hampshire, in 1794, is the segment of a circle 600 feet in diameter. Its chord line measures 590 feet, its versed sine 27 feet 4 inches, and the height of the timber frame-work of the arch 18 feet 3 inches. It is put together with wooden keys. The same ingenious mechanic erected two other wooden bridges, one over the Merrimack, at Deer Island, near Newburyport, of 160 feet diameter, finished in 1792, and the other at the Schuylkill at Philadelphia, of 194 feet chord, and 12 feet versed sine, being the segment of a circle 796 feet in diameter. This was finished in 1803.

Pedestal bridges, or bridges of suspension, although held, by some persons, to be a modern invention, or derived from the rope bridges of South America and the East Indies, were in use in Europe in the time of Scamozzi, as may be seen in his Del Idea Archi, 1615; yet the principles requisite to determine the structure of this kind of bridges had not been made public before the time of Bernouilli. The use of these bridges is of great antiquity in mountainous countries. The most remarkable bridge of suspension in existence is that lately constructed by Mr. Telford over the Menai strait, between the isle of Anglesea and Caernarvonshire in Wales. It was finished in 1825. The roadway is 100 feet above the surface of the water at high tide. The opening between the piers of suspension is 509 feet. The platform is about 30 feet in breadth. The whole is suspended from 4 lines of strong iron cables by perpendicular iron rods, 5 feet apart. The cables pass over rollers on the tops of pillars, and are fixed to iron frames under ground, which are kept down by masonry. The weight of the whole bridge, between the points of suspension, is 489 tons. There are several other bridges of this class in Great Britain. In 1814, a chain-bridge, 1600 feet long, was projected by Mr. Telford, to cross the Mersey at Liverpool, but it has never been executed.—In the U. States, such bridges are few, though not of the dimensions of the English. That over the Merrimack, at Newburyport, is a curve whose chord measures 244 feet. That over the river Brandywine, at Wilmington, has a chord of 143 feet; that at Brownsville, over the Monongahela, measures 146 feet between the points of suspension. Another, in its vicinity, forms an inverted suspended arch, with a chord of 112 feet. Besides these there are some others.

The following remarks on the construction of bridges are from Bigelow's Technology, (Boston, 1829):—The construction of small bridges is a simple process, while that of large ones is, under certain circumstances, extremely difficult, owing to the fact, that the strength of timber materials does not increase in proportion to their weight, and that there are limits, beyond which no structure of the kind could be carried, and withstand its own gravity. Bridges did not in their construction, and in the materials of which they are composed. The principal varieties are the following:—1. Wooden bridges. These, when built over shallow and sluggish streams, are usually supported upon piles driven into the mud at short distances, or upon frames of timber. But, in deep and powerful currents, it is necessary to support them on strong stone piers and abutments, built at great a distance as practicable from each other. The bridge, between these piers, consists of a stiff frame of carpentry, so constructed, with reference to its material, that it may act as one piece, and may not bend, or break, with its own weight and any additional load to which it may be exposed. When this frame is straight, the upper part is compressed by the weight of the whole, while the lower part is extended, like the ties-beam of a roof. But the strongest wooden bridges are made with curved ribs, which rise above the abutments in the manner of an arch, and are not subjected to a longitudinal strain by extension. These ribs are commonly connected and strengthened with diagonal braces, keys, bolts and straps of iron. The flooring of the bridge may be either laid above them or suspended by trussing underneath them. Wooden bridges are common in this country, and some of them are of large size. One of the most remarkable is the upper Schuylkill bridges at Philadelphia, already mentioned.—2. Stone bridges. These, for the most part, consist of regular arches, built upon stone piers constructed in the water, or upon abutments at the banks. Above the arches is made a level or sloping road. From the nature of the material, these are the most durable kind of bridges, and many are now standing, which were built.
by the ancient Romans. The stone piers, on which bridges are supported, require to be of great solidity, especially when exposed to rapid currents, or floating ice. Piers are usually built with their greatest length in the direction of the stream, and with their extremities pointed or curved, so as to divide the water, and allow it to glide easily past them. In building piers, it is often necessary to exclude the water by means of a coffer-dam. This is a temporary enclosure, formed by a double wall of piles and planks, having their interval filled with clay. The interior space is made dry by pumping, and kept so till the structure is finished.—3. Cast-iron bridges. These have been constructed, in England, out of blocks or frames of cast-iron, so shaped as to fit into each other, and, collectively, to form ribs and arches. These bridges possess great strength, but are liable to be disturbed by the expansion and contraction of the metal with heat and cold.—4. Suspension bridges. In these the flooring or main body of the bridge is supported on strong iron chains of each hand, hanging, in the form of an inverted arch, from one point of support to another. The points of support are the tops of strong pillars or small towers, erected for the purpose. Over these pillars the chain passes, and is attached, at each extremity of the bridge, to rocks or massive frames of iron, firmly secured under ground. The great advantage of suspension bridges consists in their stability of equilibrium, in consequence of which a smaller amount of materials is necessary for their construction than for that of any other bridge. If a suspension bridge be shaken, or thrown out of equilibrium, it returns by its weight to its proper place, whereas the reverse happens in bridges which are built above the level of their supports.—5. Floating bridges. Upon deep and sluggish water, stationary rafts of timber are sometimes employed, extending from one shore to another, and covered with planks, so as to form a passable bridge. In military operations, temporary bridges are often formed by planks laid upon boats, pontons, and other buoyant supports. Bridgetown; a seaport town, and capital of the island of Barbadoes, in the West Indies, lying in the S. W. part, and in the parish of St. Michael. Lon. 59° 40' W.; lat. 13° 5' N. Population, 15 or 20,000. It is situated on the innermost part of Carlisle bay, which is large enough to contain 500 ships, being 4 miles in breadth, and 3 in depth; but the bottom is foul, and apt to cut the cables. It suffered greatly by fire, on Feb. 8th, 1756; May 14th, 1766, and Dec. 27th, 1767, when the greatest part of the town was destroyed; before which time, it had about 1500 houses, mostly brick, very elegant, and said to be the finest and largest in all the Carribee islands, the greatest part of which have been rebuilt. It has a college, founded liberally, and endowed by colonel Codrington. Here are commodious wharves for loading and unloading goods, with some forts and castles. The town is subject to hurricanes. On the east side of the town is a small fort of eight guns, where the magazines of powder and stores are kept under a strong guard. This is the seat of the governor, council, assembly, and court of chancery. Bridgewater; a borough town in the county of Somerset, England, on the Parrett, over which is an iron bridge. Although the town is 12 miles from the sea, the tide rises six fathoms at high water, and flows in with such impetuosity as frequently to injure the shipping. This rapid motion is called the bore, and is not uncommon in the rivers which flow into the Bristol channel. (q. v.) It has little coasting, but considerable foreign trade. In the castle built by king John, the duke of Monmouth lodged, and was here proclaimed king, in 1685, before the battle of Sedgemoor, which was fought about three miles from the town. It then became the theatre of Faversham's and Jefferys' barbarity. The borough sends two members to parliament. Population, 6155. Lon. 2° 59' W.; lat. 51° 7' N. Bridgewater Canal. (See Canal.) Bridge; the headstall, bit and reins, by which a horse is governed. The origin of it is of high antiquity. The first horsemen guided their horses with a little stick, and the sound of their voice. A cord drawn through the nose is sometimes used for other animals. The ancient Thes­salian coins often represent a horse with a long rein trailing on the ground. The Romans were trained to fight without bridges, as an exercise in the manege. On Trajan's column, soldiers are thus represented at full speed. The parts of a modern bridle are the snaffle or bit; the headstall, or leathers from the top of the head to the rings of the bit; the fillet, over the forehead, and under the fore-top; the throat-band, which buttons under the throat; the reins; the nose-band, buckled under the cheeks; the trench, the cevalan, the maringal and the claih-halter. Brid; from the French bref, which comes from the Latin brevis, denotes a
thing of short extent or duration. It is more particularly used for a summary or The way to Paris and the overthrow of an abridgment of the client's case, made the battle at Bar-sur-Aube (Jan. 24, 1814), where the allied armies met with the first resistance after their entry into France by the way of Switzerland, they advanced rapidly. Napoleon, having left Paris, compelled Blücher to retreat, on the 29th, near Vitry, before superior numbers, and concentrated his forces on the 28th at B.; Schwarzenberg took up his position at Chaumont, Blücher at St. Dizier, Wrede at Andelot, and Wittgenstein at Vaux. On the 29th, the French made an impetuous attack on the allies. The struggle on both sides was obstinate and bloody. Night came on, but the flames of B., which had been set on fire, shed their light over the field of battle. General Chateauneuf, with two battalions, had taken the castle of B., but was soon forced to relinquish it. The battle continued till 11 o'clock. It was renewed on the following day, and Blücher was compelled, by superior numbers, to fall back upon Trannes. On the 31st, Napoleon arrayed his whole force in the plains between La Rothière and Trannes. The corps of the crown-prince of Württemberg, count Giulay, and the Russian reserves of grenadiers, having effected a junction with Blücher on the 1st of Feb., prince Schwarzenberg gave orders to commence the battle. About noon, Blücher's forces advanced in three columns: general Sacken leading one upon La Rothière, Giulay another upon Dienville, and the crown-prince of Württemberg another upon Chaumont. In the mean time, general Wrede took up his line of march from Doulevent upon B. Only a few field-pieces could be brought into action, on account of the nature of the ground; but the courage of the soldiers compensated for this deficiency. The crown-prince of Württemberg first drove the enemy from his position, which was covered by woods, and deprived him of the important point of La Gibrac. Although he was immediately assailed in this position, he remained in possession of it after a struggle of more than an hour. Giulay took Unienville, and Sacken forced his way to La Rothière. By 3 o'clock, all the lines were brought into action. A heavy snowstorm silenced for a moment the fire of the artillery, but could not paralyse the activity of the combatants. Napoleon directed all the operations of his army, and repeatedly exposed his person, with a full conviction of the importance of success.
The allied monarchs, also, encouraged their troops by their presence in the field. La Rothière was repeatedly taken, lost and recovered. Sacken renewed his efforts to gain possession of it; the cavalry of the enemy had already encountered the bayonets of his infantry, when he received succor. The French cavalry was forced back as far as Old B., and threw the infantry into disorder. Sacken took 32 pieces of cannon. Meanwhile, Blücher had brought up fresh troops against La Rothière, and captured that position. The crown-prince of Württemberg got possession of the town of Chaumont, Giulay of Dien ville. The victory was decisive for the allied powers. During the night, the French retreated on all sides upon the road of B., leaving a small detachment as a road guard, which, however, on the following morning, was compelled to retreat with the main army. The loss was great on both sides. The allies took 60 pieces of cannon and a considerable number of prisoners.

BRIENNE, cardinal de Lomenie de. (See Lomenie.)

Brig, or Brigantine; a square-rigged vessel, with two masts. The term is applied to different kinds of vessels, by mariners of different countries. The term brigantine is also applied to a light, flat, open vessel, with 10 or 15 oars on a side, furnished also with sails, and able to carry upwards of 100 men. The rowers, being also soldiers, have their muskets lying ready under the benches. Brigantines are frequently made use of, especially in the Mediterranean, for the purpose of piracy, from which they derive their name. They are very fast sailers.

Brigade; in general, an indeterminate number of regiments or squadrons. In the English army, a brigade of infantry is generally composed of 3 regiments; a brigade of horse, of from 8 to 12 squadrons; and one of artillery, of 5 guns and a howitzer. In the U. States' army, the brigade is commonly composed of two, but sometimes of more regiments. A number of brigades form a division, and several divisions an army corps. A brigade-major is the chief of the brigade-staff. A brigadier-general is the officer who commands a brigade. In the British service, this rank is now abolished.

In the U. States' service, he is next in rank to the major-general, who is the highest officer under the president, as commander-in-chief. Brigadier-general is also the title of the chief of the staff of an army corps. In the French military language, brigade, in the cavalry, signifies a corporal's guard. Hence brigadier signifies a corporal.

Brigantine; a kind of defensive armor, consisting of thin, jointed scales of plate, and plant and easy to the body.

Brigandine. (See Brig.)

Brigella. (See Mask.)

Bright, in painting; a picture is said to be bright, when the lights so much prevail as to overcome the shadows, and are kept so clear and distinct as to produce a brilliant appearance.

Brighton, in England. (See BRIGHTHELMSTONE.)

Brighton; a seaport town in the county of Sussex, England, much resorted to for sea-bathing. It was not long since a mere village of fishermen; but, under the patronage of George IV, when prince of Wales, it rapidly increased, and, by the return of 1821, the population was 24,420. It is situated on a gentle eminence, at the base of which is the Steine, a lawn surrounded with elegant buildings. The Steine and marine parade are fashionable promenades. The esplanade, extending from the Steine to the pier, which is 1154 feet long, and supported by 8 chains, is 1250 feet in length. The king has a palace here, called the marine pavilion, and numerous and well paved, and the hotels numerous and well fitted up. Travellers embark hence, in the steam-packets, for France. The number of visitors is greatest towards the end of July. B. is 52 miles south of London.
BRILLIANT. (See Diamond.)

BRILLIANT. Sulphur (q.v.), as first obtained, is mixed with foreign bodies, and, for the purpose of purification, is melted in a close vessel, by which the impurities are allowed to subside. It is then poured, in the liquid state, into cylindrical moulds, in which it becomes hard, and is known in commerce by the name of roll brimstone.—The Jewish history (Gen. xix, 24) relates that Sodom and Gomorrah were destroyed by fire and brimstone from heaven. Showers of fire have been observed by Bergmann (occasioned by electricity) (Geog. Physique, 45, § 115), and showers of brimstone may be produced from the sulphuric acid which exists in the atmosphere.

BRINDLEY, James, a native of Tunsted, near Wormhill, Derbyshire, an eminent engineer and mechanic, was born in 1716. The poverty of his family prevented his receiving more than the rudiments of education, and, at 17, he became apprentice to a millwright. On the expiration of his indentures, he commenced business as an engineer, and, in 1732, displayed great talent in contriving a water-engine for draining a coal-mine. A silk-mill, which he constructed on a new plan, and other works of the same description, introduced him to the patronage of the Duke of Bridgewater, then occupied in planning a communication between his estate at Worsley and the towns of Manchester and Liverpool by water. This immense work, the idea of which was ridiculed by most of the scientific men of the period as impracticable, B. undertook, and, by means of an aqueduct over valleys, rivers, &c., completed, so as to form a junction with the Mersey. This success caused him to be employed in 1766, to unite the Trent and Mersey, upon which he commenced the "grand trunk navigation canal," but, dying before its completion, the work was finished, in 1777, by his brother-in-law, Mr. Henshaw. From this main branch B. also cut another canal near Haywood in Staffordshire, uniting it with the Severn in the vicinity of Bewdley, and finished it in 1772.

BRINKMANN, Charles Gustavus, one of the most eminent living scholars of Sweden, born in 1764, was for a long time ambassador in France (in the time of the republic), England and Germany. He now lives retired in Stockholm, and keeps up an extensive correspondence with many of the most distinguished persons of our times. He carried on a lively correspondence with the baroness de Stael.

BRION, Luis, a native of the island of Curaçao, distinguished for his love of freedom, early took part with the patriots of Carthagena. When Bolivar set foot on the celebrated enterprise against Margarita, the command of the maritime forces was intrusted to Brion, who, being possessed of considerable property, contributed largely from his private resources towards defraying the expenses of the expedition. He had previously served on board the republican flotilla, and received the privileges of citizenship in acknowledgment of his bravery and conduct, and continued to be actively engaged in the naval operations of the patriots until near the close of the war. (See Colombia.)

BRISACH, Old; a town of the grand-duchy of Baden, once included in the Brigau, formerly on the west side of the Rhine, but, since the river changed its course, near the east bank. It was for-
merely a very strong place, and has sustained several sieges.—New B. is in the department of the Upper Rhine, in France, on the west side of the river. Vauban fortified it in 1699, and it is considered one of his master-pieces. It is 30 miles south of Strasburg.

**BRISSE.** (See **Achille**.)

**BRISSEAU** or **BRISSEAU,** with the district of Ortenau, formerly constituted a landgraviate in the south-western part of Swabia, between the Schwarzwald and the Rhine. This is one of the most fertile parts of Germany, containing 1,273 square miles, and 140,000 inhabitants. Though chiefly in possession of Austria since the 15th century, it was governed by its own laws. At the peace of Lunéville, 1801, Austria ceded B., one of the oldest possessions of the house of Hapsburg, to the duke of Modena, after whose death it fell to his son-in-law, the arch-duke Ferdinand of Austria, as duke of Brisau. By the peace of Presburg, 1805, it was assigned to Baden, with the exception of a small part, and still belongs to the grand-duchy.

**BRISSAC.** (See **Cosse**.)

**BRISSOT DE WARVILLE,** Jean Pierre; born in 1734, at Ouarville, a village in the vicinity of Chartres, where his father, a pastry-cook, and keeper of an ordinary, possessed a small estate. This circumstance led him to assume the surname d'Ouarville, which he afterwards, while in England, changed into de Varville. At the age of 20, he had already published several works, for one of which he was thrown into the Bastile, in 1784. Madame de Genlis, in her memoirs, says, that she procured his liberty through her influence with the duke of Chartres. He married one of the household of madame d'Orleans, and went to England, where he was in the pay of the lieutenant of the police in Paris. At the same time, he was engaged in literary pursuits, and attempted to establish a lyceum in London; but, being disappointed in his plans, he returned to France. In 1788, he traveled in America, as it is asserted, to study the principles of democracy. After his return, he published, in 1791, a work on study— the French Patriot. When the municipal government of Paris was established, July, 1789, he was one of the members, and was one of the principal instigators of the revolt of the Champ de Mars, where the dethronement of Louis XVI and the establishment of a republican constitution were demanded. He constantly displayed a hostile disposition towards foreign powers, and the first declaration of war against Austria was owing to him. On the 10th of August, the new ministry was almost entirely composed of his partisans. In the convention, he was at the head of the diplomatic committee, in the name of which he made a motion for war against England and Holland. On the trial of Louis XVI, he endeavored to refer the sentence to the decision of the people, and voted for the king's death, proposing, at the same time, that the execution should be deferred till the constitution should be sanctioned by the whole people in primary assemblies. In the midst of the revolutionary ferment, the ground whereon his party stood was insensibly undermined. After several charges had been brought against him, Robespierre accused him, May 28, 1793, of favoring a federalist constitution, with two parliaments, &c., and demanded that he should be brought before the revolutionary tribunal. The 31st of May completed his ruin. He endeavored to reach Switzerland in the disguise of a merchant of Neuchâtel, but was arrested at Mulins, and led to the guillotine, in Paris, October 31, at the age of 33. He was a great admirer of the Americans, assumed the habits of the Quakers, and introduced the fashion of wearing the hair without powder. His personal qualities were below his fame; he was indeed a leader among the Girondists, but many others of this party were far superior to him in courage and talents.

**BRISSOTINS, or BRISSOTISTS;** a name sometimes given to the Girondists (q. v.), from the subject of the preceding article.

**BRISTOL;** a city and county of England; situated on the Avon. The river is here deep and rapid, and the tide flows to the height of 40 feet, so that a vessel of 1000 tons can come up to the city. It was constituted a bishop's see by Henry VIII, and part of a monastery founded by Stephen, in 1140, has been converted into a cathedral. The church of St. Mary's, Redcliffe, is one of the finest Gothic structures in the kingdom. The city has long been distinguished for its well conducted and extensive charities, and has adorned with many handsome public buildings. Manufactories of glass and sugar, distilleries and brass-works, the largest in England, give employment to many of its inhabitants. Its foreign trade is also considerable, principally to the...
West Indies. It returns 2 members to parliament, and is governed by a mayor, 2 sheriffs, 12 aldermen, and 28 common councilmen. Here the famous Chatterton was born: his father was sexton of St. Mary's. About a mile from B. stands the village of the Hot-Wells, famous for its medicinal spring, the temperature of which is from 77° to 78°; it discharges 60 gallons a minute. The Hot-Wells, and the village of Clifton, on the hill above, are fashionable resorts. At the time of the earthquake at Lisbon, in 1755, the water of the spring became red and turbid, the tide of the Avon flowed back, and the water in the vicinity turned black, and was unfit for use for a fortnight. The extensive commerce and fine harbor of B. rendered it desirable to obviate the inconvenience attending ships lying aground at every tide. By constructing extensive works, and opening a new channel for the Avon, the flux and reflux of the tide at the quays have been prevented, and merchant-ships of any burden may now constantly lie afloat. B. is very ancient. Gildas mentions it, in 430, as a fortified city. By the Britons it was called Caer Brido, and by the Saxons Brightsowr, or Pleasant Place. It was erected into an independent county by Edward III, in 1372, and has since been endowed with various privileges. All persons are free to trade here, and the markets are unequalled in plenty and variety by any in England. Many of the houses in the older part of the town are built of wood, and crowded together in narrow streets, but those of more recent erection are of brick and stone, and disposed in spacious streets and squares. The common sewers, which run through the town, render it remarkably clean. Carts are not admitted into the city for fear of damaging the arches of vaults and gutters under the streets, and every thing is conveyed by sledges. The population, in 1821, including the suburbs, was 53,889. It is 117 miles west from London; lon. 2° 49' W.; lat. 51° 30' N.

Bristol, (Indian names, Pocanocket and Soames); a seaport town, and capital of a county of the same name in Rhode Island, on the continent; 15 miles S. of Providence, 15 N. Newport, 56 S. S. W. of Boston; lon. 71° 12' W.; lat. 41° 38' N.; population, in 1820, 3197. It is a very pleasant town, finely situated, and handsomely built, has a safe and commodious harbor, and is a place of considerable trade. The shipping belonging to this port in 1830 amounted to 10,701 tons. The trade is chiefly to the West Indies and to Europe. It contains a court-house, a jail, a market-house, a masonic hall, an academy, a public library, containing about 1400 volumes, and four houses of public worship. Great quantities of onions are raised here for exportation. Mount Hope, which lies two miles N. E. of Bristol, within the township, is a pleasant hill of a conical form, and is famous for having been the residence of the Indian king Philip.

Bristol Channel; an arm of the Irish sea, extending between the southern shores of Wales and the western peninsula of England, and terminating in the estuary of the Severn. It is about 90 miles long, and from 15 to 50 miles wide. It is remarkable for its high tides and the rapidity with which they rise. (See Bridgewater.)

Britain, according to Aristotle, was the name which the Romans gave to modern England and Scotland. This appellation is, perhaps, derived from the old word brit, party-colored, it having been customary with the inhabitants to paint their bodies with various colors. According to the testimony of Pliny and Aristotle, the island, in the remotest times, also bore the name of Albion. (q. v.) The sea, by which B. is surrounded, was generally called the Western, the Atlantic, or the Hesperian ocean. Until the time of Cesar, B. was totally unknown to the Romans. But the Phrygians, Greeks and Carthaginians, especially the first, were acquainted with it from the earliest period, being accustomed to obtain tin there. On this account, they called it Tin island, as Herodotus informs us. Cesar undertook two expeditions to B. He defeated the inhabitants, whom he found entirely savage, and continued short time on the island. It was not, however, until the time of Claudius, that the Romans gained a firm footing there. At that period, they extended their possessions in the country, and called the territory under their dominion Britannia Romana. The most important acquisitions were afterwards made under Adrian and Constantine. At last, the inhabitants assumed the manners of their conquerors. The country was very populous in the time of Cesar, and, according to the testimony of Tacitus, fertile. It was divided into Britannia Romana and B. Barbarica. The Romans, from the time of Adrian, anxiously endeavored to secure the former against the invasions of the barbarians, by a wall or rampart of earth fortified
BRITAIN—BRITANNICUS CAESAR.

with turrets and bulwarks. Lollia Urbicus, in the reign of Antoninus, extended this wall; but Septimius Severus restored its former limits. In his time, the Roman province was divided into the eastern (prima, or superior) and the western part (secunda, or inferior). Two provinces were added by Constantine. The inhabitants of ancient B. derived their origin partly from an original-colony of Celts, partly from a mixed body of Gauls and Germans. The Celtic colonists, or the Britons, properly so called, living in the interior of the country, had less intercourse with foreign merchants than the Gauls, who lived along the coasts. They are therefore represented by the Romans as less civilized. The Gallic inhabitants, who had settled nearer the sea-coast, possessed some property, and were therefore more easily intimidated than those tribes that were dispersed through the forests. None of them cultivated the ground: they all lived by raising cattle and hunting. Their dress consisted of skins. Their habitations were huts made of wicker-work and covered with rushes. Their priests, the Druids, together with the sacred women, exercised a kind of authority over them. (For the modern history of B. see Lalandier's Voyage, 2 vols., 4to., 1785.)

BRITAIN, New; a vast country of North America, lying round Hudson's bay, north and north-west of Upper and Lower Canada, comprehending Labrador, New North Wales and New South Wales, attached to the government of Lower Canada, and belonging to Great Britain. The face of the country is various. On the south-west of Hudson's bay, from Moose river to Churchill's river, in some parts, for the distance of 600 miles inland, the country is flat, marshy, and wooded, in many parts, with pines, birch, larch and willows. North of Churchill's river, and on the eastern coast, it is high, rocky and barren, every where unfit for cultivation, covered with masses of rock of amazing size, composed of fruitless valleys and frightful mountains, some of them of great height. The valleys are full of lakes formed by rain and snow, and are covered with stunted trees, pines, fir, birch and cedar, or juniper. The mountains have here and there a blighted shrub, or a little moss. The climate is extremely severe, and, in lat. 6°, vegetation ceases. The principal rivers are Mackenzie's river, Copper-Mine river, Nelson's, Churchill's, Albany, Moose, Seal, Severn, Rupert and Policerkeko. The most considerable lakes are Winnipeg, Slave lake, Great Bear lake, and Atiapescow. The principal article of trade is fur. The trade is carried on by two companies, who have several forts, viz. forts Prince of Wales, Chipgoon, Alexandria, Churchill, Albany, Nelson, Severn, &c. The wild animals are numerous, such as bears, beavers, deer, racoons, &c. The Esquimaux Indians occupy the coasts of Labrador: the interior is inhabited by various tribes of a diminutive and miserable race. BRITANNICUS CAESAR (Tiberius Claudius Germanicus), son of the emperor Claudius and Messalina, was born a few days after the accession of Claudius to the throne. After the return of the emperor from his expedition to Britain, the surname BRITANNICUS was bestowed on the father and son. As the eldest son of the emperor, B. was the legitimate heir to the throne; but Claudius was prevailed upon by his second wife, the ambitious Agrippina, to adopt Domitius Nero, her son by a former marriage, who was three years older than B., and declare him his successor. The venal senate gave its
consent. In the mean time, Agrippina, under the pretext of maternal tenderness, strove to keep B., as much as possible, in a state of imbecility. She removed his servants, and substituted her own creatures. Sosibius, his tutor, was murdered by her contrivance. She did not permit him to appear beyond the precincts of the palace, and even kept him out of his father's sight, under the pretence that he was insane and epileptic. In a dispute with Nero, Agrippina threatened to place B., who was then 14 years old, on the throne, upon which Nero caused him to be poisoned.

**BRITTANY**; a body of monks of the order of St. Augustine, who received their name from Britini, in Ancona, which was the place of their institution. Their manner of living was very austere. They abstained from all kinds of meat, and fasted from the festival of the Exaltation of the Cross to Easter, besides observing the fasts prescribed by the church, which they were largely enjoined to do by the rules of their order. Their dress was gray; and, to distinguish themselves from the Minitores, they wore no girdle. When Alexander IV, in 1256, effected the union of the different congregations of the order of St. Augustine, the Britiniants became members of this union.

**BRITISH AMERICA.** Under the general name of British America is comprehended all that part of the continent of North America which lies to the north of the U. States, with the exception of the Russian possessions in the north-west, and Greenland in the north-east. It consists of four provinces: 1. Lower Canada, to which is annexed New Britain; 2. Upper Canada; 3. New Brunswick; 4. Nova Scotia; together with the island of Newfoundland. The whole country is under a governor-general, whose residence is at Quebec. Each of the four provinces has also a lieutenant-governor; and Newfoundland is governed by an admiral.

**BRITISH CHANNEL.** (See English Channel.)

**BRITISH MUSEUM** was founded by Sir Hans Sloane, who, in 1753, bequeathed his collection of natural and artificial curiosities, and his library, consisting of 50,000 volumes of books and MSS., to the nation, on condition of the payment of £30,000 to his heirs. Montague-house, one of the largest mansions in the metropolis, was appropriated to its reception, and it has since been gradually increased by gifts, bequests, and purchases of every species of curiosity—animals, vegetables, minerals, sculptures, books, MSS., &c. The main building is 216 feet long and 57 high; the wings are occupied by the officers of the establishment. The library of printed books occupies 16 rooms. The upper floor is composed of 11 rooms, 2 of which contain miscellaneous collections, 4 contain collections of natural history, and 5 the library of MSS., which is extremely valuable, besides the saloon, containing the minerals. The Lansdowne library of MSS. consists of 1245 volumes, exclusive of rolls and charters, and contains the Burleigh, Caesar and Kennet papers. (Catalogue of Lansdowne MSS., folio, 1819.) The Sloane and Birch MSS., consisting of 4437 volumes, are valuable. (See Ayseough's Undescribed MSS., 2 vols., 4to., 1782.) The Harleian MSS. were collected by Harley, lord Oxford, and form 7639 volumes, containing 40,000 documents. (Catalogue of Harleian MSS., 4 vols., folio, 1800.) The Cottonian collection was injured by fire in 1751. The number of articles is upwards of 50,000, among which is the original of the Magna Charta, and original documents connected with it. (Catalogue, folio, 1802.) There are many other very valuable collections, which we cannot enumerate. The gallery, or department of antiquities, is distributed in 15 rooms; 6 of which contain Greek and Roman sculptures and antiquities, and 2 are occupied with Egyptian sculptures and antiquities, many of which were collected by the French, and fell into the hands of the English at the capture of Alexandria, September, 1801. Salt's Egyptian antiquities have also been lately added. The famous Rosetta stone belongs to the collection. Other rooms are occupied by terracottas, the Hamilton vases, coins and medals, prints and drawings, the Phigalian marbles, and the Elgin marbles. The anteroom contains the famous Barberini vase, or, as it is generally called, the Portland vase.
received its name from the Britons, who were expelled from England, and took refuge here in the fifth century. It formed one of the duchies of France, till it was united to the crown by Francis I., in 1522. The province was divided into Upper and Lower B. Agriculture, in this territory, is very backward, and it is estimated, that about one half of the surface lies waste. Corn and wine are principal drinks. Salt is made on the coast, through a pin that part of certain ornaments by which they are stuck on: the ornament itself. Among the Highlanders of Scotland, there are preserved, in several families, ancient brooches of rich workmanship, and highly ornamented. Some of them are inscribed with characters to which particular virtues were attributed, and seem to have been used as a sort of amulet or talisman.

**BROACH**; to incline suddenly: to windward of the ship's course when she sails with a large wind; or, when she sails directly before the wind, to deviate from her line of course with such rapidity as to bring her side to windward, and expose her to the danger of oversetting. The masts act like levers on the ship, sideways, so as to overturn her, unless she is relieved by the raising of the sails, or the carrying away of the masts.

**BROAD PIECE**; a denomination that has been given to some English gold pieces broader than a guinea, particularly Caroluses and Jacobuses.

**BROADSIDE**; in a naval engagement; the whole discharge of the artillery on one side of a ship of war, above and below.—A squall of wind is said to throw a ship on her beamside, when it presses her down in the water, so as nearly to overset her.

**BROAD-SWORD**; a sword with a broad blade, designed chiefly for cutting, used by some regiments of cavalry and Highland infantry in the British service. It has, in general, given place to the saber, among the cavalry. The claymore or broad-sword was formerly the national weapon of the Highlanders.

**BROCADE**; a stuff of gold, silver or silk, raised and enriched with flowers, foliage and other ornaments. Formerly, it signified only a stuff wove all of gold or silver, in which silk was mixed; at present, all stuffs, brocades, satins, taffetas and lustrous are so called, if they are worked with flowers or other figures.

**BROCKEN.** (See Hartz.)

**BRODY,** a town in Austrian Galicia, situated in the circle of Zloczow, bordering on the Russian frontier, includes 2960 houses, and 16,500 inhabitants, half of whom are Jews, who have a college and a school for the instruction of artists and mechanics. The commerce, carried on principally by Jews, is important, the town being very favorably situated for the exchange of the products of Poland for the horses, black cattle, wax, honey, tobacco, skins, furs, anise, preserved fruits, &c., of Walachia, the Crimea, &c. B. belongs to count Potocki.

**BROEKHUIZEN,** Jan van (better known as James Broekhuisen); born at Amsterdam in 1640. When young, he lost his father, a hatter, and was put under the guardianship of one of his relations, who placed him with an apothecary, though he desired to study a learned profession. While in this situation, he wrote verses, and was encouraged by the applause of the public. He subsequently entered the military service of his native country. In 1674, he embarked under the command of the famous admiral de Ruyter, as a marine, on an expedition to the West.
India islands. In the autumn of the same year, he went into winter quarters at Utrecht. Here he became acquainted with several scientific men, and published a collection of his poems Utrecht, 1684). A splendid edition of them appeared at Amsterdam in 1711, 4to. He afterwards received a military appointment at Amsterdam, which afforded him leisure for literary pursuits. He published an edition of the poems of Saunazarius, and also of Palearius’s works, an edition of Propertius (Amsterdam, 1722 and 1726, 4to.), and Tibullus (Amsterdam, 1708 and 1727, 4to.), with critical notes. In these works, he displayed extensive knowledge. After the peace of Ryswick, he received his dismissal, with the rank of a captain. He died in 1707.

BROEKLIO, a family distinguished in the annals of French wars and French diplomacy, which derives its origill from Piedmont.—1. François Marie, marshal of France, born in 1671, died in 1745; from 1689, fought with distinction in the Netherlands, in Germany and Italy. He was also employed in diplomatic affairs. He rose by degrees, till, in 1734, he became marshal of France. In the Austrian war of succession, he had the chief command of the armies of Bavaria and Bohemia; but a, leading them back to the frontiers of France, he fell into disgrace at court. —2. Victor François, the eldest son of the preceding, likewise marshal of France, born in 1718, commenced his career in the battles of Guastalla and Parma (1734); was engaged in all the wars of France, and was always distinguished for his valor, though not uniformly successful. During the seven years’ war, he fought under d’Estrees at Hastenbeck; and at Rossbach under Soubise. He was more successful as commander-in-chief at Bergen. The emperor, to reward him for the victory obtained at that place, created him a prince of the empire. Disputes with Soubise, who was in particular favor with madame de Pompadour, caused his recall and banishment. In 1789, when the revolution broke out, Louis XVI appointed him minister of war; at the same time, he received the command of the troops that were to keep Paris in check. The detestation of the national guards rendered all his efforts vain, and B. left France. In the campaign of 1792, he commanded a division of the émigrés without success. After its close, he withdrew entirely from public life, and died at Münster in 1804, in the 86th year of his age. —3. Claude Victor, the third son of Victor François, on the other hand, entered wholly into the views of the revolutionary party. He was deputy of the nobility of Colmar to the states general. After the dissolution of the constituent assembly, he was appointed field marshal in the army of the Rhine, but, upon his refusal to acknowledge the decrees of the 10th of August, was deprived of his command, and afterwards, on the same account, summoned before the revolutionary tribunal, and led to the guillotine in June, 1794.—4. Charles François, a brother of Victor François, is known in the history of French diplomacy as the head of the secret ministry of Louis XV. Although B. discharged the duties of this difficult office with much ability, yet, as his views were often in direct opposition to those of the public ministry, the greatest and the most ridiculous confusion was often produced. He was, therefore, formally banished by the king; but, at the same time, received secret instructions to continue his usual duties in his exile. Under Louis XVI, he was not employed, and died in 1781.—5. Victor, peer of France, a son of Claude Victor: see the following article.

BaoGLIO, Victor, duke of, peer of France, born in 1785, married a daughter of the celebrated madame de Stael. His grandfather was the marshal duke of B., who was distinguished in the seven years’ war. His father, Victor, notwithstanding the patriotism which he had always displayed, fell a victim to the revolutionary tribunal. The son received an excellent education, and devoted himself, at first, to literature and the fine arts. But he soon engaged in more serious studies, and in political affairs. He became counsel of state, auditor, military intendant in Ilyria and Valladolid, and was attached to the French embassies in Warsaw, Vienna and Prague. In 1814, he took his seat in the chamber of peers, where he gave splendid proofs of his intimate acquaintance with the present state of society, and with the legislation adapted to it. In the trial of Ney, he was one of the few peers who voted for his acquittal. He spoke with energy against the laws of exception and the proscription lists. At the time when the ministry was making efforts to extend the power of the police, the following observation of his met with great approbation: “The existing government (said he) wish to know all things, and to confine this knowledge to themselves. Hence arises the inconvenience, that the public remains ignorant of facts by which
the government are guided, and the government of the opinions of the public." In the debates upon the censorship of the public journals, he observed: "A new government may more readily grant freedom of speech, as it is not called upon to defend former abuses. Restrictions on the liberty of the press prevent the ministers from acquiring a knowledge of their real situation, and discredit them with the nation. The restraint of the press can only be of importance to ministers, who throw themselves into the arms of a violent party, with the intention of allowing it an unlimited license." The duke is profoundly versed in the whole department of political economy.

Broker; an agent who is employed to conclude bargains, or transact other business, for his employer, for a certain fee or premium. Brokers are of several kinds—merchandise, money, exchange, ship, insurance, real estate, pawn, stock brokers, &c. Exchange brokers negotiate notes and bills of exchange; money brokers exchange different kinds of money; these two classes are not unfrequently united. Merchandise brokers make contracts for the sale of merchandise. Pawn brokers make it their business to lend money upon pawns. Insurance brokers are those whose business it is to procure insurance of vessels at sea or bound on a voyage. They are, at once, the agents of the underwriters (who expect from them a full disclosure of all circumstances affecting the risk, and the payment of their premiums), and of the party insured (who trusts to them for the regularity of the contract, and a proper selection of underwriters). An agent or broker should not, therefore, be an insurer; for he then becomes too much interested to settle with fairness the rate of premium, the amount of partial losses, &c. Stock brokers are those who are employed to buy and sell shares in the stocks, including the public funds of their own and other countries, bank stock, &c. In the U. States, brokers are not required to be licensed, nor to give bonds. In France, the brokers who deal in money, exchange, merchandise, insurance and stock, are called agents de change, and their number at Paris is fixed at 60. The company of agents de change is directed by a chamber of syndics (chambre syndicale), chosen annually by the company. They are obliged to give bonds to the amount of 125,000 francs, for the prevention of abuses. They are also obliged to keep books, and are restricted to from 1 to 4 per cent. for each negotiation. They are allowed to deal in the public funds, foreign and domestic, and the different kinds of merchandise, &c. In London, the brokers must be licensed by the lord mayor, who takes bonds for the faithful execution of their duties. In Egypt, the Arabs are the exchange brokers, and are called consuls. In the Levant and the Indies, the Jews; Armenians and Banians are the chief brokers.

Bromel: a peculiar substance discovered in 1836, and named from the Greek 

Bromius; a surname of Bacchus.

Brookhors, Peter van; a Dutch painter, born at Delft in 1588, and died in 1661. He painted, with great success, perspective views of temples and churches, enlivened with small but well executed human figures. In the town-house of Delft is his representation of Solomon's judgment—John van B., born at Leyden in 1648, learned the art of painting without any instruction, and attained to a high degree of perfection. He principally painted animals, and was particularly successful in his birds. The lightness and brilliancy of the feathers are represented with much truth. He was a pastry-cook, and painted merely for his amusement.—Another John van B., born at Utrecht in 1603, was a painter on glass. His works in the new church at Amsterdam are much esteemed. He has also engraved some works of Cornelius Poelenburg.

Bronner, Francis Xavier, born in 1758, at Hochstadt, on the Danube, of the lowest extraction, while a boy, entered the Jesuit college at Dillingen, as a singer.
He afterwards became a Benedictine monk, and devoted himself, with the greatest zeal, to the study of philosophy and mathematics, as well as to music and poetry. He fled twice from the monastery, and took shelter in Zürich. In 1810 he was made professor in Kazan, in Russia, whence he returned in 1817. His poems, in particular his piscatory idyls, are interesting for their truth and simplicity, and the refined feeling of nature which pervades them. He wrote his own life, in 3 vols.

Bronze. For the mode in which this metal is prepared, see Copper.

Bronze. The ancients used bronze for a great variety of purposes: arms and other instruments, medals and statues, of this metal, are to be found in all cabinets of antiquities. Egyptian idols of bronze are contained in the British museum. The most celebrated antique bronze statues are, the sleeping satyr; the two youthful athletes; the colossal equestrian statue of Marcus Aurelius, at Rome; the Hercules of the capitol; the colossal head of Commodus; the statue of Septimius Severus in the Barberini palace. The horses of St. Mark, at Venice, are of pure bronze. On tables of bronze were inscribed laws, edicts, and treaties. 3000 of these were destroyed by fire in the time of Vespasian. Bass-reliefs, vaults, and doors of public edifices, were ornamented with decorations of the same metal. Urban VIII took from the Pantheon alone 450,000 pounds of bronze, which he used for the ornaments of St. Peter's, and for the cannon of the castle of St. Angelo. One of these was composed wholly of bronze nails, taken from the portico, and bore the inscription, Ex clavis trabalibus porticae Agrrippae. The ancients considered this metal as naturally pure; all their instruments of sacrifice, and sacred vessels, were therefore of bronze. They also believed it endowed with the power of driving away spectres and malignant murmurs. (On Med. vi. 228, and Fast. v. 441.)

The words moneta sacra are found only on bronze medals. It was sacred to the gods; and the Roman emperors, who struck gold and silver coins, could not strike them of bronze without the permission of the senate; hence the inscription S. C. (Senatus consulta). (For the method of casting in bronze among the ancients, see Winckelmann's History of Art, book ii.) The ancients made much use of bronze, particularly for statues exposed to accidents, or the influence of the atmosphere, and for casts of celebrated antiques. The moulds are made on the pattern, of plaster and brick dust. The parts are then covered on the inside with a coating of clay as thick as the bronze is intended to be. The mould is now closed, and filled on its inside with a nucleus or core of plaster and brick dust, mixed with water. When this is done, the mould is opened, and the clay carefully removed. The mould, with its core, are then thoroughly dried, and the core secured in its position by bars of bronze, which pass into it through the external part of the mould. The whole is then heated with iron hoops, and the melted bronze is poured in through an aperture left for the purpose: of course, the bronze fills the same cavity which was previously occupied by the clay, and forms a metallic covering to the core. It is afterwards made smooth by mechanical means.

Bronze. Bronze of a good quality acquires, by oxidation, a fine green tint, called patina antiqua, or, by the Romans, verde. Corinthian brass receives in this way a beautiful green color. This appearance is imitated by an artificial process, called bronzing. A solution of sal muriatic and salt. of vitriol is used for bronzing metals. Any number of layers may be applied, and the shade becomes deeper in proportion to the number applied. For bronzing copper, a solution of vitriol and composition of yellow ochre, Prussian blue, and lampblack, dissolved in glue-water, is employed.

Bronzino. Angelo, a painter of the Florentine school, and imitator of Michael Angelo, flourished about 1550. He painted a great number of portraits; and his historical paintings are distinguished by the striking and pleasing features of the heads which they contain. One of his last paintings is a Christ, in the church Santa Croce, at Florence. It is remarkable for its grouping and coloring; as well as for the heads, many of which are the portraits of his friends and contemporaries; yet it is not altogether free from mannerism and affectation. Some persons have found fault with the nakedness of his figures. He died at Florence, 1570.

Brooklyn. (See Ornithology.)

Brooklyn, a post-town of New York, in King's county, on the west end of Long Island, separated from the city of New York by East river. Population in 1810, 4,462; in 1830, 7,175. The village of B., within the township, is incorporat-
ed, and has a pleasant and somewhat elevated situation, opposite to the city of New York, from which it is three fourths of a mile distant. It is a flourishing village, compactly and handsomely built, having various manufactures, and an extensive trade; and contained, in 1825, 8,800 inhabitants, and 5 houses of public worship. To the east of the village is a tract of land called the Walledog, which is the site of a navy-yard, and public store-houses, belonging to the U. States. Between B. and Flatbush, on the south, a severe battle was fought during the revolutionary war, between the British and Americans, in which the latter were defeated with great loss.

Brooks, John, was born in Medford, Mass., in the year 1732. His father was a respectable farmer. After receiving a common education at the town school, young B. was indentured as an apprentice, according to the prevailing custom, to doctor Simon Tufts, for the space of seven years. He here contracted an intimacy with the celebrated count Rumford, which was continued by correspondence until the latter’s death.—After completing his studies, he commenced the practice of his profession in the neighboring town of Reading; but he had not been long so engaged, when the revolutionary war broke out, and he was appointed to command a company of minute men, whom he soon had an opportunity of exercising against the British, on their retreat from Lexington and Concord.—He was soon after raised to the rank of major in the continental service, and was distinguished by having large, yellow, butterfly-shaped flowers, leaves in threes, and sinuous numerous species. The broom (spartium scoparium) is a shrub growing abundantly on sandy pastures and heaths in England. It is distinguished by having large, yellow, butterfly-shaped flowers, leaves in threes, and single, and the branches angular. This is a handsome shrub, and one of the most useful of the common plants of Great Britain. Its twigs are tied in bundles, and formed into brooms. Some persons roast the seeds, and make them into a kind of coffee. The fibrous and elastic parts of the bark, separated by soaking in water, may be manufactured into cor-
Ilroug Iii:

dage, matting, and even into a coarse kind of cloth. The twigs and young branches have been successfully employed as a substitute for oak bark in tanning leather. They may also be rendered serviceable as thatch for houses and cornricks; and some persons mix them with hops in brewing; but it is doubted whether, in this respect, they are wholesome. The flower-buds, when pickled, have occasionally been used as a substitute for capers. The wood, when the dimensions of the green tops, in conjunction with mustard, has been found efficacious in the cure of dropsy. — Spanish broom, or spart (spartium junceum), is an ornamental flowering shrub, common in English gardens, which has opposite round branches, that flower at the top, and spear-shaped leaves. In the province of Valencia, and other parts of Spain, great attention is paid to the manufacture of various articles from the twigs and bark of this shrub. They are plaited into mats, carpets, covering for plants, baskets, ropes, and even shoes. A great portion of these twigs was formerly exported to different French ports in the Mediterranean, particularly to Marseilles; but, in 1783, on account of the employment of which it deprived the Spanish people in working them, their exportation was prohibited by the government.

Brosses, Charles de, first president of the parliament of Burgundy, was born at Dijon in 1700. He applied himself to the study of law, and, at the same time, did not neglect the arts and sciences. His intimate acquaintance with Roman history produced in him a desire of visiting Italy, which he went in 1739. On his return, he published his Letters on the present Condition of the subterraneous City Herculanum (Dijon, 1750). Ten years afterwards appeared his treatise on the religious worship called Pêlech. At the request of Buffon, who had been his friend from youth, he wrote a History of the Voyages to Australia (1756). At that time, it was generally believed that there was a southern continent, to which De B. gave the name of Maguelama. The erroneous nature of this supposition was first made known by Cook. A work of a very different kind succeeded this, and displayed the extent and variety of the author's learning. This was a treatise on the mechanical formation of languages. It contained, together with many imperfections, numerous curious and profound investigations, ingenious conjectures, and penetrating views. De B. employed himself, through his whole life, on a work which was held in no slight estimation by the learned. This was a translation of Sallust, in which he labored to supply the lost parts of this historian. For this purpose, he collected above 700 fragments of Sallust, by means of which, with some important additions, he composed a history of the 7th century of the Roman republic, displaying a great extent of learning. The work would have been received with greater approbation, if the graces of style had been joined to the depth and singularity of research which it manifests. Though these labors claimed a large portion of his time, yet they did not hinder him from attending to the duties of his office. He died in 1777. The manuscripts which he left were lost during the revolution.

Brother. (See Bawdy-House.)

Brotherhood, Holy. (See Hermanidad.)

Brotherhoods. (See Fraternities.)

Brothers; male children of the same father or mother, or both. Among the ancients, the term was employed to denote more remote relations. Thus, among the Jews, Abraham was called the brother of Lot, his nephew. By the civil law, brothers and sisters stand in the second degree of consanguinity; by the canon law, they are in the first degree. In the monastic and military orders, the members were called brothers, as being united in one family. In Europe, the kings address each other by the title of brother: the president of the U. States uses the same title in addressing the Indian chiefs who are sent to talk with him.

Brougham, Henry, was born at London, in 1779. He attracted public notice, originally, as one of the principal contributors to the Edinburgh Review. Sound learning, a terse and expressive style, logical reasoning, vigor and independence of thought, were the distinguishing traits of his compositions. But his efforts as a parliamentary orator, as an advocate, and as a public benefactor, have given him the most extensive reputation, and raised him to an enviable height in public opinion. As an advocate, he stands in the front rank of the English bar; and the variety of his talents and acquisitions have served to reflect credit upon his character as a lawyer; while the solid footing of professional eminence has communicated authority and weight to his exer-
BROUGHBAM—BROUSSONET.

Broussonet, Pierre Marie Auguste, physician and naturalist, born at Montpellier in 1761, first introduced the Linnaean system into France. Daubenton, though an opponent of Linnaeus, named him his substitute in the collège de France, and, in 1754, his assistant in the veterinary school. B. read several valuable papers before the academy, and was chosen a member. As secretary of the agricultural society at Paris, he published the useful L'Usage des Cultivateurs, and caused the first flock of Merino sheep to be introduced from Spain, and Angora goats from the Levant. In 1789, he became a member of the national assembly, and, although he did not distinguish himself in political disputes, he was imprisoned by the convention as a Girondist. He escaped to Madrid, but was obliged, by the royalist émigrés, to fly from that place. By the assistance of his friend Sir Joseph Banks, he embarked in an English vessel for India. A storm forced the vessel into the harbor of Lisbon, where he soon met with new persecutions. Under the title of physician to the American consuls at Morocco, he went to Africa, and resumed his botanical studies. His name was finally struck from the list of emigrants. He was made consul at Mogador, and at the Canaries, and, in 1805, member of the corps législatif. He died in 1807, from the consequences of a fall.
he had met with some time before, by which he lost his memory for all proper names and other substantives, but had adjectives in abundance at his command. His manuscripts are of great value.

Brown, Charles Brockden, greatly distinguished as a novelist, and the editor of various periodical works, was born in the city of Philadelphia, in 1771. He was remarkable in his childhood for his attachment to books, and, at the age of 16, after having received a liberal education, had already formed plans of extensive literary works. The profession of which he made choice was the law. He was apprenticed to an eminent member of the Philadelphia bar, but, during the term intended for preparatory legal study, was, in fact, principally occupied with literary pursuits; and, when the time approached for his admission into the courts, he renounced, altogether, the legal career from constitutional timidity, and an invincible dislike to the scenes which courts present. His friends remonstrated and reasoned in vain with the youth, who, in consequence, entered upon a literary career, and the employments of a student and an author. The delicacy of his frame, however, incapacitated him for the bustle of business and all athletic amusements. During frequent visits to New York, he became intimate with a literary club, who fostered his devotion to letters, and increased his eagerness to be conspicuous as a writer. He kept minute journals, indited essays and dissertations, and cultivated, with unremitting assiduity, the arts of composition.—The first novel which he wrote was entitled Sky Walk. It was never published, owing to the death of the printer, who had undertaken to issue it at his own risk. Parts of it were afterwards incorporated in the productions by which B. became so advantageously known to his country and Great Britain. The first of these was the novel called Weland, which appeared in 1798. It soon acquired the reputation of a powerful and original romance. The next published, in the following year, was Ormond, or the Secret Witness, which had neither the success nor the merit of the other, but still exhibits uncommon powers of invention and description. At this time, B. had begun the five novels, two of which—Arthur Mervyn and Edgar Huntley—were completed and sent forth almost immediately. In Arthur Mervyn, the ravages of the yellow fever, which the author had witnessed in New York and Philadelphia, are painted with terrific truth. All these compositions abound both with excellences and faults, and bear a character of originality. In 1801, he published another novel—Clara Howard—less open to exception, but also less deserving of praise. Its form is different from that of the others, being epistolary. The last of his novels was Jane Talbot, originally published in London, in 1804. It is deficient in interest, and, indeed, in all respects, inferior to its predecessors. In April, 1799, B. published the first number of the Monthly Magazine and American Review. This work he continued with great industry and ability until the end of the year 1806. He wrote abundantly for it. Circumstances compelled him to relinquish it; but, in 1805, he commenced another journal, with the title of the Literary Magazine and American Register; and, in this undertaking, he persisted for five years. His prolific pen gave birth to three large political pamphlets in the same interval. Their respective titles are, an Address to the Government of the U. States on the Cession of Louisiana to the French, and on the late Breach of Treaty by the Spaniards; the British Treaty; and an Address to the Congress of the U. States on the Utility and Justice of Restrictions on Foreign Commerce, with Reflections on Foreign Trade in general, and the future Prospects of America. In 1804, B. married Miss Linn, a sister of the amiable and popular poet, the reverend doctor John Blair Linn. The match proved eminently happy. In 1806, he entered upon a new work, a semi-annual American Register, five volumes of which he lived to complete and publish. It is now and must long be consulted as a valuable body of annals.—We have already mentioned the delicacy of B.'s constitution. It had a tendency to consumption of the lungs, which his sedentary and studious habits unfortunately aggravated. In 1809, it was discovered that his lungs were seriously affected, and he then consented to travel for the recovery of his health. The remedy, however, was applied too late. In November of that year, after an excursion into the states of New Jersey and New York, he betook himself to his chamber, as he thought, for a few days; but his confinement lasted until February, and ended only with his life. He expired on the 22d of that month, at the age of 39. Among his manuscripts, an unfinished system of geography was found, to which his friends attribute rare merit. He was widely and critically
BROWN. 285

conversant with geography and history, and, therefore, particularly qualified to him governor of Livonia, in which post he remained 30 years, and was not less honored by Catharine II. He died in 1792.

Brown, John, M. D., the founder of the Brunonian system in physic, was born at Bunclie in Berwickshire, in 1755. His parents apprenticed him to a weaver, but, it being discovered that he possessed abilities superior to his occupation, he was sent to a grammar-school. Having imbied a considerable portion of religious enthusiasm, he looked forward to the ministerial office, among the strict sect of seceders. Upon some disgust, however, he changed his mind, and, in 1756, entered himself as a student of divinity in the university at Edinburgh. His theological predilection gradually forsaking him, after officiating as the usher of the school in which he had been educated, he returned to Edinburgh in 1759, and commenced the study of physic. He was admitted, as an indigent scholar, to a gratuitous attendance on the lectures, and obtained the patronage of doctor Cullen, who employed him as a tutor in his own family. During this course of study, he married, and set up a boarding-house, but failed, and became bankrupt. About this time, by a long course of meditation on the animal system, and the vigor of his own mind, directed by some reading, but seconded by little or no aid from practical observation, he elaborated a new theory of medicine. The result was the publication of his *Elementa Medicina*, which he further explained in a course of private lectures. B. scrupled at no means to push his doctrines. A new medical language was introduced; ideas totally at variance with former opinions were maintained; and the most violent abuse of the regular professors of the university was perseveringly uttered. At length, ruined in reputation and involved in his circumstances, he repaired, in 1786, to London. Here he endeavored to excite attention by his *Observations on the Old Systems of Physic*, but without success, and died suddenly of apoplexy, probably produced by laudanum, which he was in the habit of taking when common spirits failed to excite him sufficiently. The opinions of B., although not admitted to the extent and in the form in which he proposed them, made a considerable change in medical language and doctrines, not only in Great Britain, but in the principal schools of Europe, his *Elementa* and *Observations* having been translated and
published at more than one place on the continent. His object was to simplify medicine, by arranging both diseases and remedial powers into large and strongly-marked classes. He divided all diseases into sthenic and asthenic, or those in which excitement is too great or too little, and all curative means into such as increase or diminish excitement. The system has been useful in overturning false and trifling analogies, and in leading to a full trial of vital philosophy; but in practice it is found impossible to act on ideas so general and abstract. The best edition of the English translation of the works of his predecessors, it is remarkable, was gradually adopted for the most part.

Brown, Robert, the founder of a religious sect, first called Brownists, and afterwards Independents, was born of an ancient family in Rutlandshire, and studied at Cambridge, where, in 1580, he began openly to attack the government and liturgy of the church of England as antichristian. He first ascended the pulpit at Norwich in 1581, where he succeeded in converting a number of Dutch, who had a congregation there, to his opinions, for which he was brought before the ecclesiastical commissioners, to whom he behaved so rudely, that he was sent to prison, but soon obtained a release. He then went to Middelburg, in Zealand, with his followers, and wrote a book called A Treatise of Reformation withoutarrying for any Man. In 1585, he returned to England, and, as he still labored to gain converts, he was excommunicated by the bishop of Peterborough. This censure, joined perhaps, with the evaporation of his zeal, induced him to submit; and, in 1590, he was presented to a living in Northamptonshire, of which he received the emoluments without discharging the duties. In other respects, too, his morals were licentious, so that he retained little of the austerity of the founder of a sect. After leading a turbulent life, this extraordinary character died in 1639, in Northampton jail, where he had been sent for assaulting a constable and insulting a magistrate. The sect of Brownists was far from expiring with its founder, but spread so as to become a great object of alarm; and a bill was brought into parliament which inflicted on them very severe pains and penalties. In process of time, however, the name of Brownists was merged in that of Congregationalists or Independents (q. v.), under the latter of which titles they formed a powerful party in the commonwealth, and were very obnoxious to the Presbyterians, whose successors, it is remarkable, have, for the most part, gradually adopted Brownist principles in relation to church government.

Brown, doctor Thomas; an ingenious writer on metaphysics and morals. He was born in Scotland, in 1778, and was educated at the high-school, and subsequently at the university of Edinburgh, where he obtained the professorship of moral philosophy. He distinguished himself, at a very early age, by an acute review of the medical and physiological theories of doctor Darwin, in a work entitled Observations on Darwin's Zoology, 8vo. This work introduced him to the academy of physics, of which MacKenzie, Jeffery and Brougham were members. It was this society which gave rise to the Edinburgh Review, to which the first contributors sent their papers gratuitously. B. wrote the review of the philosophy of Kant, in the second number, which obtained immense praise. His principal poetical work is the Paradise of Coquettes, London, 1814. But he chiefly deserves notice on account of his metaphysical speculations; and his last work on the Philosophy of the Human Mind affords ample proof of his merit as a profound and original thinker.

Brown, William, the celebrated admiral of Buenos Ayres, was born in Ireland, from whence he emigrated to Baltimore, in the U. States, in 1793, being then about 14 years of age. He was employed in the American mercantile marine until 1798, when he was impressed by a British man-of-war. He continued partly in the English navy and partly in the merchant service until 1814, when, being at Buenos Ayres, in the command of an English merchant-ship, during the war of independence, he was induced to enter into the naval service of the country. Being appointed to the command of the republican fleet of two brigs, three corvettes, and a schooner, he put to sea in April, 1814, and engaged some ships of the Spaniards, off the island of Martin Garcia. In the ensuing May, a more decisive engagement took place off Monte Video, in which four of the enemy's vessels were either taken or destroyed, and the rest...
BROWN—BROWNE.

dispersed. This victory enabled B. to blockade Monte Video, and thus contribute essentially to bring about the surrender of that city, which speedily took place.—B. was now raised to the rank of admiral; and, there being no further occasion for his services in the river La Plata, after the destruction of the Spanish fleet, he planned an expedition against the Spaniards in the Pacific ocean. For some time he cruised with great success, making many rich prizes from the Spaniards, who had no force in those seas adequate to oppose him. He was daring enough to attack Callao, but without success; and afterwards made a similar attempt to gain possession of Guayaquil. But, on the latter occasion, his flag-ship, the Trinidad, grounded on the sands under the guns of a battery, and he was obliged to surrender at discretion. He remained in confinement but a few days, being exchanged for the governor of Guayaquil, don Manuel Mendiburu, who had been made prisoner by one of his cruisers. In May, 1816, he anchored in the harbor of Buenaventura with the corvettes Hercules and Hawk, and entered into communication with the government of Popayan, for the purpose of selling some of the property taken from his prizes, and obtaining supplies. At this time, the patriot cause in New Grenada was in its most desperate condition, Morillo having overrun the whole country, and obtained possession of Santa Fe. Some of the most eminent republican leaders, who were flying for their lives, took the road for Buenaventura, hoping to escape on board B.'s vessels. But, the Spaniards having gained possession of Choco, B. found it necessary to put to sea precipitately in the Hercules, scuttling the Hawk, and abandoning a number of his seamen, who were on shore, with a large quantity of valuable merchandise.—After having greatly annoyed the Spanish commerce in the Pacific, and sent a number of his prizes to Buenos Ayres, he returned in the Hercules, with a rich booty on board, to enjoy the fruits of his intrepidity and enterprise. Finding the La Plata blockaded by the Portuguese, and his vessel needing repairs, he determined to proceed either to the West Indies or the U. States. On the way, he was captured by the British ship of war Brazen, captain Sinclair, carried into Antigua, and condemned by the admiralty court, upon allegations so frivolous and unreasonable as to afford good cause to charge the captors or the court with corrupt and arbitrary conduct.—Owing to this unjust proceeding, B. lived at Buenos Ayres in retirement, and almost in poverty, until the war with Brazil commenced. This event brought him once more into notice, and gave him an opportunity of acquiring no small share of naval reputation.—As admiral of the naval forces of the republic during this war, B. has displayed uncommon bravery, activity and skill, having been generally successful in his military enterprises. But, owing to the straitened means of the republican government, his courage has generally been wasted upon small enterprises, which have signalized his talents and prowess on many brilliant occasions, but produced no decisive effect upon the war.

BROWNE, Maximilian Ulysses, count, field-marshal in the Austrian service, born at Bale, in 1705. His father, Ulysses de Browne, left Ireland in 1690, as a follower of king James II, became colonel in the imperial army, and died in 1721. The son served from his early youth in the imperial army; distinguished himself in the Italian war, in particular, in the battles of Parma and Guastalla; and, in 1739, was made lieutenant-field-marshal. In the Silesian wars, B. served with zeal and ability; the 13th June, 1746, he gained the battle of Piacenza against the French, took the pass of Bochetta, and made himself master of Savona. In 1752, he was made governor of the city of Prague, and commander in chief of the forces in Bohemia; and, in 1756, when king Frederic II attempted to penetrate through Saxony to Bohemia, he was appointed field-marshal. Octo- the 1, 1756, he lost the battle of Lowsitz, but, seven days after, advanced towards Saxony, to rescue the Saxon troops, who were surrounded between Pims and Kungsstein. Although he did not effect this purpose, he forced the Prussians to evacuate Bohemia, and was, in consequence, rewarded with the order of the golden fleece. Frederic invaded Bohe- 

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Don. Here he published a volume of hymns, and one of sermons. In 1725, the loss of his wife and only son threw him into a settled melancholy, attended with the persuasion, that God had annihilated in him the thinking substance, and utterly divested him of consciousness; and, although he retained the human shape, and the faculty of speaking in a manner that appeared to others rational, he had all the while no more notion of what he said than a parrot. He, therefore, thought himself no longer a moral agent, or a subject of reward or punishment, and, desisting from his functions, could not be prevailed upon to join in any act of worship, public or private. This, he observed, "was nothing that required a reasonable soul." Towards the close of his life, he published several clearly-written theological pieces, and, among the rest, a defence of revelation. This persuasion, which remained, with the assistance of his friends, and the appearance of spirits, to publish, but which appeared in the 88th number of the Adventurer, he describes his deprivation of a soul with great force of expression, and even passion. He died in 1732, aged 55.

Browne, Sir Thomas, a physician and writer, was born in London, in 1605. He was educated at Winchester school, whence he was removed to Oxford, and afterwards received the degree of M. D. at Leyden. On his return to England, he settled at Norwich, where he acquired extensive practice and reputation. In 1642, he published his famous work, entitled Religio Medici, which was translated into various languages. In 1646, his literary character was still further elevated by his Pseudodoxia Epidemica, or Treatise on Vulgar Errors, a work of extraordinary learning. In 1658, his Hydrophobia, or Treatise on Un-Burial, appeared. In 1663, he was constituted an honorary member of the college of physicians, and, in 1671, Charles II conferred on him the honor of knighthood. He died in 1682.

Fancy and feeling predominated in him over judgment; he believed in the existence of guardian angels, in the reality of witchcraft, and the appearance of spirits. The Treatise on Vulgar Errors ably discusses the causes of error. A folio edition of his works was published in 1686. Doctor Johnson, who has written his life, speaks highly of his exuberance of knowledge and plenitude of ideas.

Browny, in the Hebrides, and the Highlands of Scotland; a spirit who cleaned the house, churned, threshed, and did other good-natured offices. He seems to be the same as the English puck, hobgoblin, or Robin Goodfellow, whom Reginald Scott (Discovery of Witchcraft) describes as one, who, for his pains in grinding malt and mustard, and sweeping the house, had a bowl of milk set for him. When Johnson visited the Hebrides, nothing had been heard of the brownie for many years.

Barrow, James, a celebrated modern traveller, was born at Kinnaird-house, in Scotland, in 1730. He received his early education at Harrow, whence he was removed to the university of Edinburgh, where he studied with a view to pursue the profession of the law. His object, however, changing, he entered into partnership with a wine-merchant, whose daughter he married; but, upon his wife's death within a year, he made a tour abroad, during which absence he succeeded, by the death of his father, to the estate of Kinnaird. On his return to England, he sought public employment, and at length was indebted to Lord Halifax for the appointment of consul at Algiers. He repaired to his post in 1763, and employed himself there for a year in the study of the Oriental languages. He commenced travelling by visits to Tunis, Tripoli, Rhodes, Cyprus, Syria, and several parts of Asia Minor, where, accompanied by an able Italian draughtsman, (of whose labors he is now known to have assumed the merit,) he made drawings of the ruins of Palmyra, Baalbec, and other remains of antiquity. These were deposited in the king's library at Kew, and, in the language of boast and hyperbole, which formed the great weakness of this able and adventurous character, constituted "the most magnificent present in that line ever made by a subject to his sovereign." Of his first travels he published an account. In June, 1708, he set out on his famous journey to discover the source of the Nile. Proceeding first to Cairo, he navigated the Nile to Syene, thence crossed the desert to
the Red sea, and, arriving at Jiddah, passed some months in Arabia Felix, and, after various detentions, reached Gondar, the capital of Abyssinia, in February, 1770. In that country, he ingratiated himself with the sovereign, and other influential persons of both sexes, in the several capacities of physician, courtier and soldier. On November 14, 1770, he obtained the great object of his wishes—a sight of the sources of the Nile. Claiming to be the first European who had accomplished this interesting discovery, his exultation was proportionate, and he records it with singular strength of expression. The right of the fountain which he visited to the title of the principal sources of the Nile is rationally controverted; but, whether they be so or not, they had been previously visited by the missionary Jesuits of Portugal, a fact of which he could scarcely have been ignorant. On his return to Gondar, he found the country engaged in a civil war, and was detained two years before he could obtain permission to leave the country. Thirteen months more were occupied in travelling back to Cairo, in which journey he endured excessive privations. He returned to his native seat in 1773, and retired to his paternal seat. He married again, and maintained the character of an elegant and hospitable host, and an amiable man in private life, but capricious in his friendships, and haughty and arrogant to strangers. His long-expected Travels did not appear until 1796, in four large quarto volumes, decorated with plates. These volumes are replete with curious information concerning a part of the world but little known to Europeans, and contain much interesting personal adventure, and fine description. It is to be lamented that the authority of the work, in regard to facts of natural history and human manners, is not altogether satisfactory; and, the pride of the author not allowing him to remove objections, it is, perhaps, entitled to more credit than it has received. Whatever its portion of accuracy and merit, the nature of its reception may serve to guard all future travellers against the indulgence of too much egotism and personal vanity in their narrations; for, with little direct evidence against either his facts or his veracity, those faults have greatly obscured the fame of B., who, after escaping the most momentous danger in a long pilgrimage through barbarous countries, lost his life in consequence of an accidental fall down stairs, as he was attending the departure of some guests whom he had been entertaining. His death took place in April, 1794.

Bruce, Michael, a British poet of the last century, distinguished for the plaintive elegance of his compositions. He was born at Kilmarnock, in Scotland, in 1746; and, his friends being persons in low circumstances, he had to struggle with poverty, which, together with constitutional disease, gave a melancholy turn to his mind, and influenced the character of his writings. For a short time, he was engaged in the occupation of a village-schoolmaster, the fatigue of which probably shortened his life. He became consumptive, and died in 1767. His poems, which are few in number, were published by the reverend John Logan, together with some of his own, at Edinburgh, in 1770. One, composed on the anticipation of his own death, is peculiarly affecting.

Bruce, Robert; the competitor of John Baliol for the throne of Scotland. On the death of Alexander III, without any lineal descendant, the right to the crown devolved on the descendants of David, earl of Huntington, who were John Baliol, descended from his oldest daughter, and Bruce, descended, though one generation nearer, from his second daughter. Baliol, therefore, claimed as issue of the elder branch; Bruce as one degree nearer the common stock. If the principle of representation were regarded, the former had the better claim; if propinquity were considered, the latter was entitled to the preference. The dispute was referred to the decision of Edward I of England, who decided in favor of Baliol; and the new king took the oath of fealty as vassal of England. The oppressions of the English induced Baliol and his countrymen to have recourse to arms, and Bruce served in the army of Edward. Scotland was subjected, her king imprisoned, her defenders reduced, slain, or made captive, when an obscure individual arose to revenge her wrongs. William Wallace (q. v.), having succeeded in delivering his country, was accused by Bruce of aspiring to the throne, and, in the dreadful battle of Falkirk, B. was in the English ranks. In the pursuit, Wallace had the celebrated interview with him on the banks of the Carron. Hume (ch. 13) relates that the interview was between Wallace and the younger Bruce; but the Scottish historians Drummond, Lesly, Buchanan, &c., give the account as here stated. Wallace displayed such elevation of sentiment, such disinterestedness
of patriotism, that Bruce melted into tears, and swore to embrace the cause of his oppressed country.

Bruce, Robert; son of the preceding. Seven years of alternate resistance and submission, of wars and truces, had passed, from the battle of Falkirk, when Edward I returned to London, in 1305, victories for the third time over Scotland, and delivered by treachery from the dreaded Wallace. In his train, among other Scotch nobles, were Robert Bruce and John Cumyn; who, formerly rivals, now conspired to deliver themselves from the pernicious Edward. They agreed that B. should be declared king; and that Scotland should be summoned to arms. Cumyn betrayed his accomplice, who, without being informed of the discovery of the plot, was ordered not to leave the court. He received the first intimation of his danger by the present of a pair of spurs and a purse of gold from one of his friends; and, understanding the hint, he had his horses shod with their shoes inverted, that the traces on the snow might baffle his pursuers, and escaped to Scotland. He immediately assembled his friends at Dumfries, and all the nobles, except Cumyn, encouraged his resolution, and promised their aid. Cumyn endeavored to dissuade them from so desperate an undertaking; and, after the assembly was dismissed, he was attacked by B. in the cloisters of the Gray Friars, and run through the body. B. was soon after crowned at Scone. Being twice defeated, he dismissed his troops, and retired to the Hebrides, accompanied only by two friends. His wife was carried captive to London, his three brothers were hanged, and he himself was supposed to be dead, when he reappeared in Scotland, collected an army, put to the sword the English garrisons, and rallied all Scotland under his banners. Edward set out to subdue the three-conquered Scots, and was on the point of cutting the kingdom,X owing revenge, and secure of success, when he sickened and died, enjoining it with his last breath on his successor never to desist till he had subdued all Scotland. B., though obliged to be carried in a litter, defeated the English at Bannockburn, near Stirling, and secured the independence of his crown, June 24, 1314. The distracted state of the country required vigorous measures. The Scotch nobles had encroached on the possessions of the king and the commons. The king called upon them to show the titles by which they held their lands. "By these," they exclaimed, drawing their swords, "we have acquired our lands, and with these we will preserve them." King Robert was once more obliged to defend his territories from the English, who, encouraged by these disputes, had again passed the Scottish borders. On the plains of Blyth, 1323, he gained another memorable victory over these formidable enemies. On the accession of Edward III, 1329, he obtained from that king the recognition of the independence of Scotland, and the renunciation of all claims of sovereignty on the part of the English. He died in the course of the same year.

Bruges, a city of the Netherlands, and capital of West Flanders, situated about 6 miles from the sea. It is the centre of an extensive canal commerce. The principal canals are those which lead to Sluys and Ostend, on the latter of which vessels of 300 tons can come up to B. In the 14th century, it was one of the chief commercial places in Europe, and an important member of the Hanseatic confederacy. Towards the end of the 15th century, it began to decline. It now carries on a considerable trade with the north of Europe. The population is about 34,300. The exchange is supposed to have been one of the earliest establishments of the kind in Europe, and is still a fine building. B. has also a chamber of commerce, a large insurance company, a navigation school, and a dock-yard; likewise an academy of painting, sculpture and architecture; a national literary society, &c., and many valuable specimens of architecture and sculpture. In the church of Notre Dame, with its elevated spire, are the splendid tombs of Charles the Bold, and of Mary of Burgundy, his daughter, constructed in 1530. Philip the Good here founded the order of the golden fleece, in 1430; and the celebrated John van Eyck, or John of Bruges, the supposed inventor of painting in oil, was born here. (See Collection de Gravures au Trait représentant les principaux Mon. d'Architect. et de Sculpt. de Bruges, depuis le 14me jusqu' au 17me Siècle, 1834.) The chief articles manufactured at B. are lace and linen. It also exports much grain, and, when the English ports are open, immense quantities are shipped. Lat. 51° 13' N.; lon. 3° 14' E.

Bruges, viscount of; one of the principal persons of the French court. He was a lieutenant in the marine when the French revolution broke out, and served among the English troops on the expedition to St. Domingo, where his family
had great possessions. He afterwards married the countess Golofkin, in Germany. After the restoration of the Bourbons, the viscount, who drew his origin from one of the oldest families, was appointed inspector of the eighth military division of France. He could not prevent the landing of Napoleon, on his return from Elba, in 1815. He served in the army of the duke of Angouleme, in 1815, and attempted to take Marseilles in June, 1815, when marshal Brune compelled the duke to capitulate. In 1816, he was sent by the French government on an important mission to Berlin. His elder brother, count Bruges, became, in 1815, inspector-general of the national guards.

BRUGMANS, Sebastijn; a learned Dutchman, physician-in-chief of the army, of the marine, and of the colonies; member of the institute of the Netherlands, and of many learned societies. He was born at Franeker, in 1763, and graduated, in 1781, at Groningen. His dissertations, Lichenes Groningana; On harmful and poisonous Plants in Pastures; On the Symptoms of Decay in Trees, and De Paurogenia, in 1785, procured him distinction. He became professor of philosophy and physics in Franeker, where he formed a cabinet of comparative anatomy, one of the first in Europe. In 1795, he went to Leyden as professor of chemistry. His labors for the organization of the medical department of the army commenced in 1794. He was an active contributor to the Pharmacopoeia Batava. King Louis made him his physician, and confirmed all his institutions. After the union of Holland with France, Napoleon made him inspector-general of the hospitals, and rector of the university of Leyden, for which he procured large sums of money from the state, and, in later times, the return of its collection of natural history from Paris. During the many years he was director of the military hospital, the number of deaths by wounds and diseases was never increased by hospital fevers. After the battle of Waterloo, he promptly procured medical aid for more than 20,000 wounded men. His treatise On the Nature of the Masma of Hospital Fever gained the prize of the academy in Haarlem. His original views on the organization of fishes are to be found in the transactions of the national institute of the Netherlands. He died in 1819.

BRÜHL, Frederic Aloysius, count of, born at Dresden, 1739, son of Henry count of Brühl, described in the next article, was very unlike his father. Educated by his mother, an estimable and enlightened lady, with prudence and strictness, and happily endowed by nature, he became the ideal of an accomplished man of the world. He was remarkable for him. He and strength, wrote and spoke almost all the European languages, was skilled in music, painted with taste, and was well acquainted with mathematics and gunnery. He worked a whole year incognito in a cannon foundry. His activity and temperance were both extraordinary. He excelled in writing, and still more in conversation.

BRÜHL, Henry, count of, minister of Augustus III, king of Poland and elector of Saxony, was born in 1700, in Thuringia. His family not being very rich, he entered, as a page, the service of the duchess Elisabeth, whose favor, as well as that of Augustus II, he gained by his lively and graceful manners. On the death of the king, at Warsaw, in 1733, the crown of Poland, with the other regalia, being, through the good fortune of B., intrusted to him, he carried them immediately to the new elector, Augustus III, and showed the greatest activity in promoting his election. From this time, fortune never deserted him. He had cunning and skill sufficient to govern his master and get rid of his rivals. While he felt himself not sufficiently powerful to remove his rival, count Sulkowski, he acted as his friend; but, after his marriage with the countess Kollowrath, the favorite of the queen, he effected the dismissal of Sulkowski through her influence. He now succeeded in keeping every lord at a distance from the king. No servant entered his service without the consent of B.; and, even when he went to the chapel, all approach to him was prevented. The monarch's wish that his minister should make a great parade was gratified in the widest extent. B. kept 200 domestics; his guards were better paid than those of the king himself, and his table more sumptuous. Frederic II says of him, "B. had more garments, watches, lace, boots, shoes and slippers than any man of the age. Cesar would have counted him among those curled and perfumed heads which he did not fear." But Augustus III was no Cesar. When this idle prince deliberated about smoking, and asked, without looking at his favorite, "Brühl, have I any money?" "Yes, sire," was the continual answer; and, to satisfy the king's demands, he exhausted the state, plunged the country into debts,
and greatly reduced the army. At the beginning of the seven years' war, it comprised but 17,000 men, and these were compelled to surrender, at Pirna, from want of the necessary supplies. B. fled with the king, the pictures and the china, to Poland; but the archives of the state were left to the victor. He was no less avaricious of titles and money than of power. He died a few weeks after his king, in 1763. An examination, after his death, showed that he owed his immense fortune to the prodigality of the king, rather than to unlawful means of accumulating. His own profession was often beneficial to the arts and sciences. He had four sons. An account of the eldest is contained in the preceding article.

Brühl, John Maurice, nephew of the minister, died in 1809, while ambassador in London, is known, by his ingenious improvements of several instruments, by his essays in the Philosophical Transactions, and by his Recherches sur divers Objets de l'Economie politique (Dresden, 1781).

Brulot. (See Fire-Ship.)

Brumaire, the 19th (Nov. 9), 1799. On this day, general Bonaparte overthrew the directory. The next day, he dispersed, at the point of the bayonet, the council of the five hundred, and was elected consul. (See Napoleon and France.)

Brun. (See Lebrun.)

Brune, Richard Francis Philip, one of the most ingenious critics of modern times, born at Strasburg, in 1720, made rapid progress in learning, when he studied with the Jesuits in Paris, but neglected to preserve his love of letters, and led him to the study of the classics. When B. returned to Strasburg, he devoted all his leisure time to Greek, and, at the age of 30 years, while holding a public office, attended the lectures of the Greek professor of the university. The zeal which had encouraged him to undertake this laborious study was increased by the pleasure of overcoming difficulties, and he became fixed in the conviction, that all the instances of apparently careless writing in the Greek poets were only errors of the transcribers. Entertaining this opinion, he altered whatever displeased him, overthrew the order of the verses, and permitted himself liberties which criticism must needs reject. To this rage of altering he gave himself up, particularly in the marginal comments of his books, and in the numerous copies which he made of the Greek poets, more for his own pleasure than for use. This arbitrary process is so visible, even in the editions he has published, that much caution is required in using them. B. has nevertheless been of essential service to Greek literature; and, since the revival of letters, few scholars have so effectually promoted it. It is wonderful how much he has done in the space of 20 years. He published also a valuable edition of Virgil. Of his Greek editions we may mention those of the Aeschyle, Sophocles, and Aristophanes, the Ionic poets, and his masterpiece, Sophocles, for which the king allowed him a pension of 2000 francs. At this time, the French revolution interrupted his studies. He met the new ideas with enthusiasm, and was one of the first members of the popular society in Strasburg, without deviating, however, from the principles of moderation. This is proved by the circumstance that he was arrested at Besançon, during the reign of terror, and did not obtain his liberty until after the death of Robespierre. In 1791, economical reasons obliged him to sell part of his library, and, in 1801, he was obliged to adopt the same resource a second time. As he was passionately fond of his books, and his former fortune had enabled him to collect an excellent library, this was a severe privation. If he was reminded of an author he had once possessed, tears came into his eyes. From this time, Greek became his aversion; but he prepared an edition of Terence, and had Plautus ready for publication, when he died, in 1805.

Many of the papers which he left are in the library at Paris.

Brundisium, now Brindisi; a city in Terra di Otranto, in the kingdom of Naples, on the Adriatic sea, very celebrated in the time of the ancient Romans. It had then an excellent harbor, which is now almost filled up with sand. From this place the Romans usually embarked for Greece and Asia. The Appian way led to this city. It was also on the nearest route from Constantinople to Rome, by the way of the mountains of Macedonia and Albania. Virgil died here. The population, in the 12th century, was 60,000, but is now reduced to about 5000. It is the seat of an archbishop.

Brune, William Maria Anne, marshal of France, son of a lawyer at Bayes la Gaillarde, was born there March 13, 1763, and went while young to Paris. At the breaking out of the revolution, he was a
printer, and had made himself known by some small pieces of his own composition. He now devoted himself ardenty to politics, became a member of the club des Cordeliers, was connected with Danton, and played an active part in the events of that period. Till Aug. 10, 1792, he was engaged in publishing a daily newspaper. Afterwards, he went as a commissary to Belgium. In 1793, he entered the military service in the revolutionary army, in the Gironde. Oct. 10, 1793, he aided Barras to put down the Jacobins, who had assaulted the camp of Grenelle. Afterwards, he distinguished himself as general of brigade in the Italian army, in 1797, in the attack of Verona, and in the battle of Arcoli. When the directory of Switzerland declared war, B. received the chief command of an army, entered the country, without much opposition, in January, 1798, and effected a new organization of the government. In 1799, he received the chief command in Holland, defeated the English in the north of Holland, Sept. 15, near Bergen, and compelled the duke of York to agree to the treaty of Aix-la-Chapelle, Oct. 18, by which the English and Russians were to evacuate the north of Holland. In January, 1800, he was made a councillor of state, and was placed at the head of the army of the west. The restoration of tranquility to the provinces, torn by civil war, was, in a great degree, effected by him. Aug. 13, he was appointed commander-in-chief of the Italian army. Towards the end of December, he led his troops over the Mincio, conquered the Austrians, passed the Adige, Jan. 8, 1801, took possession of Vicenza and Roveredo, and concluded an armistice, Jan. 16, at Treviso, with the Austrian general Belegarre, by which several fortified places in Italy were surrendered to the French troops. When peace recalled him to the council of state, towards the end of November, 1801, he laid before the legislative body for confirmation the treaty of peace with the court of Naples. The next year, he went as ambassadour to the court of Constantinople. He prevailed there at first over the Turkish ministry the highest marks of honor; but, when new dissensions arose between the two powers, he left Turkey. During his absence, May 19, 1804, he was appointed marshal of the empire. At the end of 1805, Napoleon appointed him governor-general of the Hanseatic towns, and, soon after, commander of the troops in Swedish Pomerania, against the king of Sweden. This monarch invited the marshal to a personal interview, in which he endeavored to convert him to the cause of Louis XVIII. B. refused every proposal. He may, however, have drawn upon himself the indignation of Napoleon by his conduct in this interview by favoring the English contraband trade in Hamburg. At any rate, he was recalled, and suffered to remain without employment. After the revolution of 1814, he recognised Louis XVIII, and received the cross of Louis, but no appointment. This was the cause of his declaring himself for Napoleon, immediately upon his return. He received the chief command of an important army in the south of France, and was made a peer. When circumstances changed again, he delayed a long time before he gave up Toulon, which was in his possession in 1813, to the troops of Louis XVIII, and sent in his resignation to the king. This circumstance, and the severities exercised by his command, might well have excited against him the rage of the people. While retiring from Toulon to Paris, he was recognised, at Avignon, by the people who favored the king; and they immediately collected together about the hotel where he had entered. The excited populace were heated still more, when a report was spread among them, that B. was the murderer of the princess Lamballe. The marshal was permitted, however, to go away quietly. But scarcely had his carriage left the city, before a mob of the rabble which had followed compelled the driver to turn back to the hotel. When the marshal had alighted, and retired, with his two attendants, to his former chamber, the doors of the house were locked. The insurgents had, in the mean time, gained a powerful accession to their numbers, and, with loud shouts, demanded the death of the marshal. In vain did the prefect and the mayor strive to defend him (as there were no troops in the city) for the space of four hours and a half, at the peril of their lives. The door was at last broken open, a crowd of murderers rushed into the chamber, and the unhappy marshal fell under a shower of balls, after a fruitless attempt to defend himself and justify his conduct. His body was exposed to the most shameful insults, and then dragged from the hotel to the bridge over the Rhone, from which it was thrown into the river.

BRUNCHILDE. (See Brunechild.)

Brunehild. Brunehild; married to Siegfried I, king of Austrasia, in 503, a
Visigothic princes, of powerful mind, enterprising spirit, heroic resolution, deep political knowledge, and unrestrained ambition. She involved her husband in a war with her brother Chilperic, in the course of which he was murdered, A. D. 573; but she continued to live and reign till 613, when she fell into the hands of Clotaire II, king of Soissons, who put her to a most miserable death, as having been the murderess of 10 kings and royal princes. (See Fredegonde.)

Brunelleschi, Philip, born 1377, at Florence, devoted himself to the study of the works of Dante, to natural philosophy and perspective, the rules of which were then scarcely known. He formed various figures, and invented ingenious machines. He devoted himself particularly, however, to architecture, and learned the art of drawing, to make his architectural plans; statuary, to adorn them; and mechanics, that he might be able to raise the materials. He was also profoundly versed in mathematics and geometry. He is said to have drawn views of the finest monuments in Florence in perspective—an art which then excited much astonishment. This various knowledge prepared him for bold and difficult undertakings, and gained him the name of the restorer of architecture. As a statuary, he was much indebted to his intimate connexion with Donatello, who was then very young, but very able. Both went to Rome. Here B. conceived the idea of restoring architecture to the principles of the Greeks and Romans. When the architects assembled, in 1407, at Florence, to consult upon the building of the dome of the cathedral, the plan which B. proposed received but slight attention, and he went back to Rome. It was found necessary, however, to have recourse to him, as the undertaking far surpassed the powers of the other architects. He engaged to erect a dome, which, by its own weight, and by the strong connexion of its parts, should hang suspended. This proposal seemed so wonderful, that the author was regarded as insane. As all other plans, however, failed to answer the expectations of the magistrates, B. was again recalled, and ordered to explain the mode in which he intended to execute his plan. This he refused to do, but built two small chapels according to his new system, upon which the charge of erecting the dome was committed to him. As he observed that the higher the building was raised the more time was lost in going up and down, he erected some small lodg-

ings on the dome itself, and by that means saved the laborers the time thus spent. Aided only by his own genius, he accomplished the work, which remains one of the boldest creations of the human mind. But the ingenious lantern, which formed the upper part of the dome, was not finished when he died, in 1444, aged 67. It was completed, however, according to his first design. No monument of one man's architecture is so noble as this wonderful building. Only the dome of St. Peter's at Rome, which was built since, excels it in height, but is inferior to it in lightness and grandeur of style. Michael Angelo said it was difficult to imitate B., and impossible to excel him. B. is the author of a great number of other masterpieces of architecture.

Brunet, James Charles, bookseller at Paris, began his bibliographical career by the preparation of several auction catalogues, of which the most interesting is that of the count d'Ourches (Paris, 1811), and of a supplementary volume to Caliehau's and Duclos's Dictionnaire Bibliographique (Paris, 1809). In 1810 was published the first edition of his Manuel du Bibliotheque et de l'Amateur de Livres, in 4 vols., which gained such universal applause, that, in 1814, a second, and, in 1820, a third edition, of four volumes each, were demanded. This work showed him the worthy successor of the meritorious Delume (from whose works those of B. are distinguished only by the alphabetical form.) An attempt to unite the plan of his work with the considerations which must guide the man of letters in his studies and labors, is contained in the Bibliographical Lexicon, by Ebert, since published.

Brunet. (See Paris, Theatre of.)

Brunings. (See Nibelungen.)

Bruni, (See Bruno, Giordano.)

Bruxinos, Christian; one of the greatest hydraulic architects of Holland; born 1736, at Neckerau, in the Palatinate. In his childhood, he devoted himself to the sciences connected with hydraulic architecture. In 1761, the states of Holland appointed him general inspector of rivers. This introduced him to a share in several important commissions; for instance, that for the improvement of the dike system, in 1736; that for draining the tracts between Niewskogs and Zevenhoven, in 1797; &c. His most important waterworks are his improvements in the diking of the lake of Haerlem, the improved diking and deepening of the Oberwasser, so called, in the Netherlands, which, at
BRUNINGS—BRUNO.

BRUNO, St. Among several individuals of this name, the most famous is the one who established the order of Carthusian monks. He was born at Cologne, about 1030, of an old and noble family, which still flourished in the middle of the 18th century; was educated in the school of the collegiate church of St. Cunibert; in which, also, he afterwards received a canonship, and then studied at Rheims, where he distinguished himself to such a degree, that Gervais, the bishop, appointed him to superintend all the schools of the district. He attracted many distinguished scholars, and, among others, Odilo, afterwards pope Urban II. The immorality of his times induced him to go into solitude. He retired, therefore, with six friends of the same disposition, to the residence of St. Hugo, bishop of Grenoble, who, in 1084, led them to a desert, four or five leagues distant from the church of Chartreuse, whence the order of monks received its name. Here, in a narrow valley, overshadowed by two steep rocks, covered with snow and thorns, B. and his companions built an oratory, and small, separate cells to dwell in, and founded, in 1088, one of the severest orders of monks. In the mean time, Urban II became pope, and, in 1092, invited his former instructor to his court. B. reluctantly obeyed, but refused every spiritual dignity, and, in 1094, received permission to found a second Carthusian establishment in the solitude of della Torre, in Calabria. Here he lived in his former mode, ruled his new colony with wisdom, and died in the arms of his scholars, A.D. 1101. Leo X, in 1514, permitted the Carthusians to celebrate a mass in honor of him; and Gregory XV, in 1623, extended it to the whole Catholic church. He was afterwards canonized. B. gave his scholars no particular laws. A complete set of regulations for the Carthusians was framed by A. D. 1581, and confirmed by Innocent XI.

BRUNO, or BRUNO (Brunus, Leonardo), of Arezzo, whence his name Areus (Areino), was one of the most famous of the literati at the period of the revival of classic literature in Italy. He was born in 1370, and, in his childhood, was excelled by the character of Petrarch, to the pursuit of whose studies to which he consecrated his life. He first studied law at Florence and Ravenna; but the arrival of Enamal Chrysoloras at Florence gave him a decided turn for classical learning. He afterwards filled many offices in the Roman Catholic church, and accompanied pope John XXIII to Constance, where the latter was deposed, and E. escaped to Florence. Here he wrote his Florentine History, received, in consequence, the rights of citizenship, and afterwards, by the favor of the Medici, became secretary to the republic. In this important post he died, A.D. 1444. Florence and Arezzo vied with each other in honoring his memory by splendid obsequies and mon-
Bruno. • His philosophical writings, which have become very rare, display a classical cultivation of mind, a deep insight into the spirit of ancient philosophy, wit and satire, as well as a profound knowledge of mathematics and natural philosophy. Most of them were published between 1584 and 1591, as appears from the enumeration of the oldest editions in the Bibliographical Lexicon of Ebert (Lpz., 1824, quarto, vol. 1, p. 238 et seq.). In 1584 appeared, at Paris, his famous Spazio della Beata Inconsape (a moral allegory, with many satirical strokes on his own times), also his work De la Causa, Principio et Uno (Venice and London, 1584), besides De l'Infini, Universo et Mondi. The former contains the foundation, the latter the application, of metaphysics to the natural world. The doctrine is a pure Pantheism, connected with truly dignified notions of God—a more complete Pantheistical system than had been previously exhibited, and which, since his time, Spinoza only, who, like Descartes, borrowed his ideas, has carried to a greater perfection. The notion that God is the soul of the universe, and the world endowed with organization and life, might have been forgiven by his contemporaries; but his inference that the world is infinite and immemorable, and his doctrine of the plurality of worlds, at the moment when the new system of Copernicus was attacked from all quarters, could not but be looked upon as a crime. His writings are mostly in the form of dialogues, without any methodical order. His language is a strange mixture of Italian and Latin. His style is violent and fiery. The originality and boldness of his ideas take a powerful hold on those who can understand him. His logical writings, in which he boldly and skilfully applies Raymond Lully's art of topical memory, are more obscure and less interesting. His belief in magic and astrology, notwithstanding his enlightened views of the nature of things, is to be attributed to the spirit of his age. He has also written poems, Heureux Amours, and, among others, a comedy, Il Candido. The most eminent philosophers since his time have borrowed much from him. Among recent writers, Schelling resembles him the most in his metaphysics and his philosophical views of nature, and has given his name to one of his philosophical writings (Bruno, oder über das göttliche und natürliche Princip der Dinge, Berl., 1802). On Bruno and his writings, see Siewer's
and Thanner's Lehrmeinungen berühmter Physiker (5 vols., Sulzb., 1834.)

Brunonian System. (See Brown, John.)

Brunswick, Family of. (See Brown, John.)

Brunswick, the duchy of Brunswick-Wolfenbüttel, in Germany, situated in the former circle of Lower Saxony, and bordering upon Luneburg on the north and Westphalia on the west. The duke holds the 12th rank among the members of the German confederation. The duchy comprises 1500 square miles, and 232,600 inhabitants. It is divided into six districts, besides the two cities of Brunswick and Wolfenbüttel, which are also considered as districts. The family of B. (q. v.) is one of the most ancient in Europe. In 1896, the duchy was annexed by Napoleon, to the kingdom of Westphalia, but its native prince, Frederic William (q. v.), was restored by the peace of Leopardic, 1810. The reigning duke, Charles, born Oct. 30th, 1804, succeeded to the government in 1824. The revenue, exclusive of Oels (q. v.), is 3,000,000 florins. The circumstances and manners of the inhabitants resemble those of the adjacent countries. Most of the people are Lutherans. The whole number of Catholics and Calvinists does not probably exceed 4800. The ducal house is Lutheran. (For the form of government, see Constitution.)

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Brunswick, capital of the duchy of the same name, is situated on the Ocker, and contains 3041 houses, with 32,500 inhabitants. It was formerly one of the free cities of Germany, but it is now subject to the duke, and has been the ducal residence since 1754. The principal buildings are the ducal palace, the mint, the town-house, the arsenal and the cathedral, the public wine-cellar. The Collegium Carolinum was founded in 1745, and intended as a medium between the common schools and the universities. It has enjoyed a high reputation even in foreign countries, particularly in England and Russia. The principal manufactures are wool, yarn, linen, porcelain, pasteboard, paper hangings and chemical preparations. The traffic in home produce and the carrying trade are of some consequence, and the great Brunswick fairs rank next to those of Leipzig and Frankfurt. Lat. 52° 10' N.; lon. 10° 29' 30" E.

Brunswick, New. (See New Brunswick)

Brunswick, Charles William Ferdinand, duke of, was born in 1735. He was the eldest son of the reigning duke Charles of Brunswick and a sister of Frederic the Great. At the age of 7, his education was committed to the abbé Jerusalem, then chaplain to the court at Wittenberg. At the age of 12, he entered, under the superintendence of Jerusalem, the Collegium Carolinum, then recently established. His tutor was the chamberlain von Wittorf—man of talent, but without principle. His ambition was early kindled by the achievements of Frederic II. The seven years' war afforded him the first opportunity of cultivating his military talents. He commanded the Brunswick troops in the allied army, and, in the fatal battle of Hastenbeck, July 28th, 1757, in which he recaptured a battery that had been taken by the French in the centre of the allied army, "he showed" (such was the expression of Frederic) "that nature had destined him for a hero." June 23rd, 1758, he decided the victory of Crefeld. He took the most active part in all the enterprises of his uncle Ferdinand; and Frederic's esteem for him continued to increase, as appears from his Geschichte des Siebenjahrigen Krieges (History of the Seven Years' War), and his Ode auf den Erbprinzen von Braunschweig (Ode on the hereditary Prince of Brunswick). In 1764, he married the princess Augusta of England. Having early become acquainted with the real situation of his native country, and drawn salutary instruction from the constant embarrassments of his father, before he entered upon the government, he practised the greatest economy, living mostly retired from public business, and devoted to the arts and sciences. In 1773, he entered the Prussian service, and became general of infantry, but had no opportunity of cultivating his military talents. After the death of his father (in 1780), he entered upon the government with zeal and activity. Anxious above all for the improvement of the finances, he diminished his household, discharged the debts of the state, encouraged agriculture, extended the liberty of commerce, undertook or assisted in the erection of considerable buildings, and, by causing Italian operas, masquerades, &c. to be exhibited gratis, provided also for the amusement of the public. Yet, with the best intentions, he was often unsuccessful. This was the case with his plans for the improvement of public education. He invited men of learning into the country at great expense, but, the projected reformation having met with innumerable obstacles, they became a burden to the state. In 1787, he was obliged to place himself at the head of a Prussian army for the support of the stadtholder of Holland. The facility with which this campaign was terminated procured him more reputation than he perhaps deserved. High expectations were entertained of him when the war of the French revolution broke out. The duke received the chief command of the Austrian and Prus-
ation army, and issued at Coldentz, July 15, 1792, the famous manifesto, drawn up in a very harsh and haughty style by a Frenchman, De Limoine. It certainly did more injury to the allied forces than a hostile army could have done. It inflamed the French nation almost to fury against the insolent conquerors, who intended "to make every city, that dared to resist, level with the ground, and to cut their way to Paris." The emperor Francis approved it, and so did the king of Prussia; but the duke considered the expressions too strong. The severest passages were expunged; but its tone was still very insolent. The duke designed to press forward from Lorraine to Paris, to cut off its supplies, and thus to force it to surrender by famine. Aug. 28, 1792, Longwy was taken, and, Sept. 2, Verdun. But, in Champagne, a country of itself unproductive, the transport of provisions for the army from the frontiers was rendered difficult by mountains and forests. Dumouyrie was encamped in the vicinity of St. Menilhou, and skirmishes took place daily; but Dumouyrie, not willing to hazard the fate of France, and foreseeing that the Germans would be forced to retreat by want and disease, avoided a decisive action, notwithstanding the efforts of the enemy to provoke him to it. The Germans were, therefore, obliged to conclude an armistice, and to evacuate Champagne. Custines took Worms and Spire during this retreat, and, Oct. 21, captured the fortress of Mentz, and soon afterwards Frankfort, which latter city, however, was retaken by the Prussians and Hessians Dec. 2. The endeavors of the Germans, therefore, were principally directed to the recapture of those places. To this end the duke, in conjunction with the Austrians, opened the campaign on the Upper Rhine in 1793, took the fortress of Königstein March 7, conquered Mentz July 22, and prepared to attack the strong fortress of Landau, then in the power of the French. The French, on the other hand, Sept. 14, made a general attack on the duke and Wurmser, from Strasbourg to Saarbrück. On that day, the duke had a sanguinary engagement with Moreau, in the vicinity of Pirmasens, a town belonging to the landgrave of Hesse-Darmstadt. The French were driven from their camp near the village of Hornbach, as far as to the Saar. A month later, the duke, having formed a union with Wurmser, succeeded, Oct. 13th, in his attack on the lines of Weissenburg, and his attempt to draw nearer to Landau. In order to gain another strong point of support, he ventured, on the night of Nov. 11, to make an assault upon the mountain-fortress of Bitsch, which is the key of the Vosges, on the roads from Landau, Pirmasens, Weissenburg and Strasburg unite at that place. This attempt miscarried. Between the 28th and the 30th of November, however, he defeated a division of the army of the Moselle, at Lantern, which was pressing through the mountains, under the command of Hoche, with the intention of relieving Landau. But the daily attacks of Hoche and Pichegru, without regard to the sacrifice of men, and the successful attempt of the latter to break the Austrian lines near Froschweiler, Dec. 22, forced the Austrians to retreat beyond the Rhine, and occasioned the retreat of the duke also. As some difficulties had already risen between Austria and Prussia, he laid down the chief command of the army in the beginning of the year 1794. Möllendorf was his successor. The duke continued to labor for the welfare of his country until the final year 1806. Although he was now of such an age that he might have retired without reproach from public life, yet he assumed burdens beyond his powers. At the beginning of the year 1806, commissioned by the king of Prussia, he made a journey to Peters­burg relative to the war that soon broke out with France. He was then placed at the head of the Prussian army. But his physical strength was not equal to his moral energy, as was proved by the battles of Jena and Auerstadt. (q. v.) He was mortally wounded, and closed his life at Ottensen, near Altona, Nov. 10, 1806. As a civil ruler, he was distinguished for good intentions; yet the want of consistency, which is evident in most actions of his life, may have been the cause of the many failures of his benevolent purposes. The duke's subjects were also offended by his foreign partialities, particularly his fatal inclination for the French nation, which had been instilled into him by Frédéric II.

Brunswick, Ferdinand, duke of, born at Brunswick, Jan. 11th, 1721, fourth son of duke Ferdinand Albert, was educated for the military profession. In 1739, he entered into the Prussian service, was engaged in the Silesian wars, and became one of the most eminent generals in the seven years' war. He commanded the allied army in Westphalia, where, always opposed to superior forces, he displayed
superior talents. He drove the French from Lower Saxony, Hesse and Westphalia, and was victorious in the two great battles of Crefeld and Minden. (See Seven Years' War.)—After the peace, he resigned his commission, on account of a misunderstanding between him and the king. From that time he lived at Brunswick, the patron of art and literature. He died in 1792.

Brunswick, Frederic William, duke of; fourth and youngest son of duke Charles William Ferdinand of Brunswick. He was born in 1771, and received the same education with his second and third brothers, who were a few years older, till the military career, to which he was destined, gave his studies a particular direction. He was loved by his father with great tenderness, but very strictly treated. In 1786, he was appointed, by the king of Prussia, successor of his uncle, Frederic Augustus, duke of Oels and Bernstadt. He then went to Lausanne, remained two years in Switzerland, and, upon his return, was made captain in a Prussian regiment of foot. During the war against France, in 1792, and the following year, he fought in the Prussian armies, and was twice wounded. After the peace of Bâle, he received a regiment, and, in 1804, married the princess Maria Elisabeth Wilhelmina of Baden. The offspring of this marriage were two princesses, born in 1804 and 1806, who are still living. In 1805, his uncle died, and he became duke of Oels and Bernstadt. In 1806, he took part in the war against France, with all the fire which the oppression of Germany and his father's unhappy fate had kindled in him. He finally joined the corps of Blücher, and was made prisoner with him at Lübeck. By the death of his eldest brother, the hereditary prince, who died in September of the same year, without leaving any children, and by an agreement adjusted by his father between him and his elder brothers, who, on account of their blindness, were unfit to govern, and were unmarried, he would have succeeded his father in the government of Brunswick, had not the peace of Tilsit and Napoleon's will prevented. After that time, he lived at Bruchsal, where, in April, 1808, his wife died. In 1809, at the breaking out of the war between Austria and France, he raised a body of volunteers in Bohemia. Schill had already perished in Straubing, when the duke made an invasion into Saxony. He was, however, compelled, by the king of Westphalia, to evacuate Dresden and Leipsic, with his black hussars. The duke, in conjunction with the Austrian general Am Ende, forced his way from Dresden to Franconia, while the Austrians, under Kienmayer, had penetrated from Bohemia. After the armistice of Znaim (July 12), the Austrians again evacuated Dresden, which they had occupied for the second time, and retreated behind the frontiers of Bohemia. But the duke, renouncing his alliance with the emperor of Austria, advanced with his corps, consisting of 1500 men, among whom were 700 horse, from Altenburg towards Leipsic. After a slight skirmish with the garrison there, he continued his march to Halle, where he arrived July 27, and immediately pushed on to Holstein, where he arrived July 30. The Westphalian colonel Wellingrode, with the fifth regiment of infantry, had entered the place the same morning. Although this regiment made a gallant resistance, it was overpowered, and its commander taken prisoner. The duke then proceeded to Brunswick, his native city, where he arrived July 31, and bivouacked on the ramparts. He did not allow himself any rest, for he was closely pursued on all sides. The Westphalian general Reubel assembled 4000 men of his division at Olof; in the vicinity of Brunswick; general Gratien, with a Dutch division, had set out from Erfurt; and the Danish general Ewald, marching from Glücksstadt into the territories of Hanover, crossed the Elbe in order to cover that river. Aug. 1, Reubel met the duke not far from Brunswick, near the village of Oelpen, and an action ensued (the 11th since he had left Saxony), in which a corps of 4000 men not only retreated before 1500, but also opened to them the only way by which they could escape. Aug. 2, the duke left Brunswick. From the road he took, it was conjectured that he would march towards Celle, whither he was pursued, therefore, by the Westphalian troops. Instead, however, of doing this, he took his way through Hanover immediately to Niemburg, crossed the Weser, and, having destroyed the bridges behind him, marched down the river. He reached Hoya Aug. 4, and hastened his march upon the left bank of the Weser, while part of his corps, to make a demonstration, turned towards Brunswick. Here the black hussars entered on the 5th, and occupied the gates, but on the next day continued their march. Meanwhile the duke advanced through the territory of Oldenburg. He passed the night
of the 5th of August at Delmeuhorst, and appeared to be directing his course to East Friesland, in order to embark there. But, contrary to expectation, he crossed, merchant ships which were lying at Els­tro, principally unloaded, embarked his troops in the night of the Gth, leaving be­fleth, principally unloaded, embarked his
l11ind the horses, and procuring, in that
which falls into the weser, seized the
and, on the 8th, lauded at Kleigolarnl,
the necessary sailors by force.
country, which is inhabited by seamen,
7th, in the morning, the duke himself,
corps, for England .. In England, the duke
having the English flag hoisted, set sail,
was received with great ·distinction. llis
service, and was afterwards employed in
Portugal and Spain .. The parliament
returned, to his hereditary dominions,
Dec. 22, 1813. He was a prince ·of an
editary states, he acted with the best
intentions; but his frequent errors disap­
pointed tlie great expectations which lmd
been formed of him, and narrow-minded
counsellors contrilmted to lead him astray.
He wished to sow and reap at the same
time. His military spirit and penetrating
from the great oppressor of Europe. His
great disorder by his maintaining so many
troops; and even the interest of the pub­
debt was not paid. Thus he became
unpopular as the sovereign of
father's sceptre. The events of 1815
called him again to arms, and he fell
June 16, 1815 .. (See

BRUNSWICK—BRUSSELS. 301

BRUNSWICK, Louis Ernest, duke of; third son of Ferdinand Albert, duke of Brunswick-Lüneburg; born in 1718; en­
tered the imperial service in 1750; be­
came field-marshal of the republic of
Holland; during seven years from 1759, was cap­tain-general of the United Prov­
inces; was regent during the minority of the stadtholder, and had previously pre­
served the neutrality of the republic dur­ing
the long war of the neighboring
powers from 1754. After the stadtholder
became of age, B. was made counsellor
by the states-general. Having, however,
incurred the hatred of the people by his
partiality for the nobility, and some other
errors, he was obliged to leave the stad­
tholder in 1772. He died in 1788.

BRUNSWICK (M. J. Leopold), prince of, major-general in the Prussian service, youngest son of duke Charles of Bruns­
wick, born at Wolfenbüttel in 1752, was
instructed by the abbe Jerusalem. He
studied in Strasburg military science and other branches of knowledge, travelled
through Italy under the care of Lessing, and entered the Prussian service, in 1778, as
commander of a regiment of foot, at
Frankfort on the Oder. In this city, where he resided after his return from the
Bavarian war of succession in 1779, he
won universal esteem by his amia­
ble character, his talents, and his zeal for
literature. In 1780, Frankfort was pre­
served, by his activity, from an inunda­
tion which threatened to overthrow the
dikes and deluge the suburbs. He dis­
played the same vigilance on the occa­
sion of several conflagrations, with which
this city was afflicted. He visited the
poor in their most miserable haunts, and
his life was devoted to works of benevo­
ence. He fell a sacrifice to his humanity
in the inundation of 1785, in which he
was drowned while hastening to the as­
sistance of the suburbs. · The monuments
that have been erected to him will bear
witness to future generations of the es­
tem of his contemporaries.

BRUSH-WHEELS. In light machinery,
wheels sometimes turn each other by
means of bristles or brushes fixed to their
circumference. They may, also, com­
municate circular motion by friction only.
The surface brought in contact is then
formed of the end grain of wood, or is
covered with an elastic substance, and
the wheels are pressed together to in­
crease the friction.

BRUSSELS, formerly the capital. of the
Austrian Netherlands, with 75,000 inhab­
habitants, principally Catholics, and, after
Amsterdam, the second city of the king­
dom of the Netherlands, is a handsome
city of South Brabant. During 20 years,
from 1794 to 1814, it was in the posses­
sion of the French, and the chief town in
the department of the Dyle. It is now,
alternately with the Hague, the royal res­
idence, and the place of meeting of the
states-general of the kingdom. It is a
favorite resort of the English, many of
whom have resided here since the peace
of 1814. The gloomy forest of Soignies,
so memorable since the battle of Water­
loo, lies on the south and south-west of
the town. It was formerly surrounded
by a wall, which has been demolished,
BRUSSELS—BRUTUS.

and the ramparts laid out in public walks.
The upper part of the city is magnificent. The park is a spacious square, laid out with shaded walks, and surrounded by the palaces, public offices and principal private houses. In the lower part, lying on a plain watered by the Senne, the streets are narrow and crowded, but the great orchards, parks, and gardens are beautiful.

This part of the city is intersected by several canals, connected with the Senne, and the great Scheldt canal. The other principal squares are Oorlogo plaats, Michiel's plaats and Sands plaats. The principal churches are St. Michael's and the church of St. Gudule. B. also contains an academy of arts and sciences, a hospital, and a central school with a library of 100,000 volumes, a valuable gallery of paintings and a cabinet of natural history. The school of medicine and that of botany have also apartments, and there is a public botanical garden. The town is ornamented with 20 public fountains, all embellished with sculpture. The manufactures of B. are celebrated throughout Europe and America, particularly its lace, camlets and carpets; the first alone employs 10,000 individuals. Its carriages surpass even those of London and Paris. The other articles made here are tallow, various kinds of cotton and woollen stuffs, silk stockings, gauzes, cartouches, &c. It carries on considerable trade with the interior of the Netherlands, and also with foreign countries, by means of its canals. The principal of these was constructed in 1580 and 1581, and leads to Antwerp: it is 110 feet above the level of the sea. The city owes its origin to St. Gery, who, in the 7th century, built a chapel on an island in the Senne, and preached to the peasants. As the numbers collected here became great, it was surrounded with a wall in 1044, and became, in process of time, the residence of the dukes of Brabant, and of the Austrian governors. It was several times captured by the French, and, in 1780-90, took the lead in the troubles which broke out in the Netherlands.

BRUTUS, or BRUTE, in the fabulous history of Britain, was the first king of the island, according to Geoffrey of Monmouth. He is said to have been the son of Sylvius, and grandson of Ascanius, the son of Aeneas, and to have been born in Italy. He landed at Touquin, in Devonshire, destroyed the giants who then inhabited Albion, and called the island from his own name. At his death, the island was divided among his three sons; Locrine had England, Cambre Wales, and Albanact Scotland.

BRUTUS, Lucius Junius, son of Marcus Junius and the daughter of the elder Tarquin, saved his life from the persecutions of Tarquin the Proud by resigning himself insane, on which account he received the surname Brutus (stupid). During a plague that broke out at the time which she had suffered from Sextus, the son of Tarquin, B., being present, threw off the mask. He drew the dagger, all bloody, from the wound, and swore vengeance against the Tarquins, explaining to the astonished spectators the reason of his pretended imbecility, and persuading all who were present to take the same oath. The people submitted to his guidance, and he caused the gates to be shut, the inhabitants to be assembled, and the body to be publicly exposed. He then urged the banishment of the Tarquins. After this had been resolved on, B. proposed to abolish the regal dignity, and introduce a free government. It was then determined that two consuls should exercise supreme power for a year, and Junius Brutus and Tarquinius Collatinus were chosen for the first term. Tarquin, who had seen the gates shut against him, and found himself deserted by his army, sent ambassadors to Rome to demand a restoration of his private property, and, at the same time, to promise that he would make no attempt against the republic. His request was granted. The ambassadors, however, set on foot a conspiracy, and drew into it many young men, among whom were the two sons of B., and the nephews of Collatinus. But a slave named Vindex discovered the plot. The criminals were imprisoned, and the consuls caused the people the next morning to be called to the comitia. All were deeply shocked to see the sons of B. among the prisoners, and their father on the judgment-seat to condemn them. Collatinus wept, and even the stern Valerius sat silent. But B. arose firmly, and, after their crime had been proved beyond a doubt, ordered the lictors to execute the law. Neither the entreaties of the people nor of his sons could alter his resolution. He witnessed the horrible spectacle without emotion, and did not leave the assembly until after the execution. He was called back, however, when Collatinus wished to save
his guilty nephews. The people con-
demned them all, and chose Valerius consul in place of Collatinus. In the
mean time, Tarquin, supported by Por-
scena, collected an army, and marched
against Rome. The consuls advanced to
meet him. B. led the cavalry; Aruns,
son of Tarquin, commanded the body
opposed to him. They pierced each
other with their spears at the same
moment, and both fell. A. C. 509. The Ro-
amas came off conquerors, and B. was
buried with great splendor. The women
lamented him a whole year, as the avenger
of the honor of their sex.

Brutus, Marcus Junius. This repub-
lican resembled in spirit, as well as in
name, the expeller of Tarquin. He was
at first an enemy of Pompey, who had
slain his father in Galatia, but forgot his
private enmity, and was reconciled to
him, when he undertook the defence of
freedom. He did not, however, assume
any public station, and, after the unfortu-
nate battle of Pharsalia, surrendered him-
self to Caesar, who received him with the
tenderest friendship, as he had always
loved him, and regarded him almost like
his own son, because the mother of Brutus,
sister of the rigid Cato, had been the
object of his affection. In the distribu-
tion of the offices of state, the dictator
appointed B. to the government of Mace-
donia. Notwithstanding these benefits,
B. was the head of the conspiracy against
Cesar, deeming the sacrifice of private
friendship necessary for the welfare of
his country. He was led into the con-
spiring by Cassius, who, impelled by
hatred against Caesar, as well as by the
love of freedom, sought, at first, by writ-
ing, and then by means of his wife, Junia,
sister of B., to gain his favor; and, when
he thought him prepared for the propos-
als, disclosed to him, verbally, the play of
a conspiracy against Caesar, who was then
aiming at the supreme power. B. agreed
to the design, and his influence led many
of the most distinguished Romans to em-
brace it also. Caesar was assassinated in
the senate-house. In public speeches, B.
explained the reasons of this deed, but
he could not appease the dissatisfaction of
the people, and retired, with his party, to
the capitol. He soon after took courage,
when the consul P. Cornelius Dolabella,
and the preator L. Cornelius Cinna, Caes-
r's brother-in-law, declared themselves
in his favor. But Antony, whom B. had
generously spared, was reconciled to him
only in appearance, and obtained his leave
to read Cesar's will to the people. By
means of this instrument, Antony suc-
cceeded in exciting the popular indignation
against the murderers of Caesar, and they
were compelled to flee from Rome. B.
grew to Athens, and endeavored to form
a party there among the Roman nobility;
he gained over, also, the troops in Mace-
donia. He then began to levy soldiers
openly, which was the easier for him, as
the remainder of Pompey’s troops, since
the defeat of their general, had been
moving about in Thessaly. Hortensius,
the governor of Macedonia, aided him;
and thus B., master of all Greece and
Macedonia, in a short time stood at the
head of a powerful army. He went
now to Asia, and joined Cassius, whose efforts
had been equally successful. In Rome,
on the contrary, the triumvirs prevailed.
All the conspirators had been condemned,
and the people had taken up arms against
them. B. and Cassius, having with diffi-
culty subdued the Lycians and Rhodians,
returned to Europe to oppose the trium-
virs. (Plutarch informs us, that a spirit
appeared to B., on his march from Sardis to Abydos, in Asia Minor.) The
army passed over the Hellespont, and 19
legions and 20,000 cavalry were assem-
bled on the plains of Phalaeo, in Mace-
donia, whence also, the triumvirs Antony
and Octavianus marched with their le-
gions. Although the Roman historians
do not agree in their accounts of the bat-
tle of Philippi, so much as this appears
certain, that Cassius was beaten by An-
tony, and caused himself to be killed by
a slave; that B. fought with greater suc-
cess against the division of the army com-
manded by Octavianus, who was hindered
by indisposition from conducting the bat-
tle in person; that B., after the engage-
ment, took possession of an advantageous
situation, where it was difficult for an
attack to be made upon him; that he was
induced, by the prowess of his soldiers, to
renew the contest, and was a second time
unsuccessful. He was totally defeated,
escaped with only a few friends, passed
the night in a cave, and, as he saw his
case irretrievably ruined, ordered Strato,
one of his confidants, to kill him. Strato
refused, a long time, to perform the com-
mand; but, seeing B. resolved, he turned
away his face, and held his sword, while
B. fell upon it. Thus died B. (A. C. 42),
in the 43d year of his age.

Brutére, John de la, the famous au-
 thor of the Characters and Manners of his
age, was born, 1630, in a village near
Dourdan, not far from Paris. He pur-
chased the place of treasurer at Caen;
but, a short time after, through the influence of Bossuet, he was employed in the education of the duke of Burgundy, with a pension of 5000 livres, and was attached to his person during the remainder of his life. In 1687, he translated the characters of Theophrastus into French, with much elegance, and accompanied them with a succession of characters, in which he represented the manners of his time with great accuracy, and in a style epigrammatical, ingenious and witty. B. often took his characters from living persons, although he denied it, and seems, by this means, to have gained many enemies. He was a man of pleasant manners and amiable disposition. In 1693, he was elected a member of the French academy, with some opposition, and died in 1696.

Bruyn, Corneille le, a painter and traveller, born at The Hague in 1632, went, in 1674, to Rome, where he studied his art for two years and a half. He then followed his inclination for travelling, visited Naples, and other cities of Italy, embarked for Smyrna, travelled through Asia Minor, Egypt, and the islands of the Archipelago, noting down and drawing all that he found worthy of his attention. He afterwards settled in Venice, and became a disciple of Carlo Lotti. In 1683, he returned to his native country, and published his travels in 1685. The favorable reception of this work excited in him the desire to travel anew. He visited, in 1701, and the following years, Russia, Persia, India, Ceylon and other Asiatic islands. In Russia, he painted Peter the Great, and different princes of his family; in 1706, in Batavia, some of the principal men. In 1705, he returned to his country, where he published an account of his travels and travels, the value of which, like that of the first, consists more in the beauty and correctness of the drawings than in the trustworthiness of the statements. During the rest of his life, Le B. was occupied exclusively with his art, passed his time alternately at The Hague and at Amsterdam, and died at Utrecht, in the house of his friend and protector van Mollen.

Brant, Jacob, a philologist and antiquary, born at Plymouth in 1713, died, in 1804, at his country-seat, near Windsor. He studied at Eton and Cambridge, became afterwards tutor of the sons of the famous duke of Marlborough, the eldest of whom he also accompanied to the continent as his secretary. After his return, he received, by the influence of his patron, a lucrative post in the ordnance, which gave him leisure for his researches into Biblical, Roman and Grecian antiquities. His most important work is the New System of Ancient Mythology, which appeared in 3 vols. 4to., 1773 to 1776. Whatever may be the ingenuity and the learning of the author, it is justly objected, that he has taken conjectures for proofs, and, in particular, that he has trusted too much to the deceptive conclusions of etymology. He was engaged in a famous dispute on the veracity of Homer and the existence of Troy, in which he endeavored to show, that there never was such a city as Troy, and that the whole expedition of the Greeks was a mere fiction of Homer's. The object of one of his earlier treatises, which appeared in 1676, is to show, that the island Malta, on which Paul was wrecked, was not Malta, but situated in the Adriatic. He endeavored to illustrate the Scriptures by explanations drawn from Josephus, from Philo the Jew, and from Justin Martyr; but in this, as in all his writings, his learning and his ingenuity are nausea by his love of controversy and paradox.
with greater severity than on his former campaign. In September, he marched back to Austria, and received, for his services, valuable estates in Bohemia, from his emperor. In the insurrection of Piedmont (q. v.), 1821, the count de B. received the chief command of the Austrian troops, because he restored the ancient government. After the accomplishment of this commission, he was appointed general commandant of Lombardy. He died at Milan, June 6, 1833, in the 50th year.

Buccaneers; a band of English and French freebooters in America, whose exploits form one of the most remarkable parts of the history of the 17th century. After the assassination of Henry IV., in France, in 1610, several Frenchmen sought a residence on the island of St. Christopher, one of the Antilles. Driven thence in 1626, some of them fled to the western coast of St. Domingo, others to the small island of Tortugas, in the vicinity. Several Englishmen, led by a similar disposition, associated themselves with the latter. The fugitives at St. Domingo employed themselves especially in the chase of wild cattle, of which there were large herds on the island. They sold the hides to the mariners who landed on the coast, and, because they did not boil the flesh, but roasted it before the fire, like the American savages, they were called buccaneers. Without a captain, without laws, without the society of women, these hunters lived in the rudest state of nature, associating two by two, and enjoying in common all that they had taken in the chase or acquired by robbery. The Spaniards, who could not conquer them, determined to exterminate all the cattle on the island, and thus obliged the buccaneers either to cultivate the land as husbandmen, or to join the other freebooters on the island of Tortugas. These bold adventurers attacked, in small numbers, and with small means, but with an intrepidity which bade defiance to danger, not only single merchant vessels, but several of them together, and sometimes armed ships. Their common mode of attack was by boarding. They directed their efforts especially against the Spanish ships which sailed for Europe laden with the treasures of America. By the repeated losses which they suffered, the Spaniards were at last so discouraged, that they seldom offered a serious resistance. It happened once that a ship of the buccaneers fell in with two Spanish galleons, each of which had 60 cannon and 1500 men on board. To escape was impossible, and the pirates could not think of surrender. Their captain, Laurent, made a short speech to them, sent one of his men to the powder-room with orders to set fire to it upon the first sign which he should give him, and then placed his men in order of battle on each side. "We must sail between the enemy's ships," cried he to his crew, "and fire upon them to the right and left." This manœuvre was executed with extraordinary rapidity. The fire of the pirate killed so many people, on board both ships, that the Spaniards were struck with a panic, and let him escape. The Spanish commander was afterwards put to death on account of the disgrace which he had brought upon his nation. Their frequent losses greatly reduced the trade of the Spaniards with America. The buccaneers now began to land on the coast, and to plunder the cities. Their manner of dividing their booty was remarkable. Every one who had a share in the expedition swore that he had reserved nothing of the plunder. A false oath was of extremely rare occurrence, and was punished by banishment to an uninhabited island. The wounded first received their share, which was greater according to the severity of their wounds. The remainder was divided into equal parts, and distributed by lot. The leader received more than the others only when he had particularly distinguished himself. Those who had perished in the expedition were not forgotten. Their part was given to their relations or friends, and, in default of them, to the poor and to the church. Religion was strangely blended with their vices, and they always began their enterprises with a prayer. The wealth which they acquired was spent in gambling and debauchery, for it was the principle of these adventurers to enjoy the present and not care for the future. The climate and their mode of life gradually diminished their number, and the vigorous measures of the English and French governments at last put an end to their outrages, which had, perhaps, been purposely tolerated. From this band of pirates arose the French settlers on the western half of St. Domingo. In the beginning of the 18th century, the piracies of the buccaneers had entirely ceased. An account of their mode of life, and of many of their deeds, is to be found in the 10th volume of Raynal's History of the two Indies, and in the 2d volume of Archenholz's Historical Writings.
BUCENTAUR, in mythology; a monster, half man and half ox or ass. The splendid galley in which the doge of Venice annually sailed over the Adriatic on Ascension-Day also bore this name. Dropping a ring into the sea, he espoused it in the name of the republic, with the words

\textit{Desponsamus te, mare, in signum vert perpetuque dominii.}

The custom originated in 1176, when the doge, having refused to deliver up the pope, who had taken refuge in Venice, to the emperor, encountered and defeated the imperial fleet which was sent to reduce the Venetians.

BUCEPHALUS; the horse of Alexander the Great, which he bought for 13 talents (about 10 or 11,000 dollars). Philocrates, a Thessalian, offered to sell him to king Philip; but Alexander, who considered the price too great, commanded the unmanageable steed to be led away, when the young Alexander offered to mount him. He leaped up, in fact, and, to the astonishment of all, the horse obeyed him, and willingly submitted to his guidance, though he had never before obeyed a rider. Alexander, from this circumstance, conceived such an affection for him, that he never rode upon any other horse; and Bucephalus, also, when caitcupioned for battle, endured no other rider. He died of a wound, and Alexander caused him to be buried near the Ilydopes, and built, over his grave, a city, which he called Bucephala.

Bucer, Martin; born, 1491, at Schlettstadt, in Alsace. He died in the office of professor of theology at Cambridge, 1551. At the time of the reformation, he left the Dominican order, and became a convert to Lutheranism. He was, at first, preacher at the court of Frederic, the elector of the Palatinate, afterwards in Strasburg, and at the same time professor in the university there for 20 years, till king Edward VI of England, at the suggestion of archbishop Cranmer, invited him to Cambridge. In 1537, queen Mary caused his bones to be burned, to show her detestation of Protestantism. The cardinal Contarini called him the most learned divine among the heretics. He wrote a commentary on the Psalms, under the name of \textit{Deiphilaus}. His first wife had been a nun in her youth. After her death, he married again.

Bucquoy, Leopold von; born in 1777, in Prussia; one of the most distinguished geologists of Germany. He has studied the structure of the earth, by personal observation, for more than 30 years, in his travels through all the provinces of Germany, through Scandinavia to the North Cape, through parts of Great Britain, France, Italy and the Canaries. In the possession of a happy independence, he sets out every spring, from Berlin, where he usually passes the winter, on his scientific travels. Simple in his habits, frugal, accustomed to hardships, he travels in the carriage, on horseback, on foot, as his purpose requires. He was the first geologist who clearly explained the different volcanic phenomena, particularly their effects on the elevation of the surface and the nature of the soil. He divides volcanoes into central volcanoes and volcanic chains. The latter appear to him to follow the direction of great faults in the earth, which, in turn, correspond with the direction of the mountain ranges. His central volcanoes are, Etna, the isles of Lipari, Iceland, the Azores, the Canaries, &c. The results of his geological labors are contained in his \textit{Geognostical Observations on Travels through Germany and Italy (1692)}, and his \textit{Physical Description of the Canaries, where he lived, in 1815, for several months}. He was afterwards accompanied by the Norwegian botanist Christian Smith, who, some years later, was among the victims of the unhappy expedition of captain Tuckey in the Congo river. Bucq.'s \textit{Travels through Norway and Lapland (2 vols., Berlin, 1810, with copperplates)} is one of the best works on the structure of the earth in the high northern regions.

Buchanan, George, an eminent poet and historian, and one of the great masters of modern Latinity, was born in Scotland, in 1506. His parents were indigent, and he owed his education to an uncle, who sent him to Paris. He afterwards repaired to St. Andrew's. He became tutor or companion of the earl of Cassilis, with whom he lived five years, and obtained the notice of James V, who appointed him tutor to his natural son, afterwards the famous regent, earl of Murray. His satires against the monks exposed him to the vengeance of the clergy, and he was imprisoned for heresy; but, contriving to escape, he withdrew to Bourdeaux, where he taught three years, and composed his tragedies of \textit{Baptistes} and \textit{Jepthes}, and his translations of the \textit{Medea} and \textit{Alcestes} of Euripides. In 1543, he quitted Bourdeaux on account of the pestilence, and became, for a while, domestic tutor to the celebrated Montaigne, who records the fact in his essays. In 1544, he went to Paris and,
for some time, taught in the college of Bourbon. In 1547, he accompanied his friend Govea to Portugal. He had not been there a year before Govea died, and, as he was in Bourbon. In 1547, he accompanied his friend Govea to Portugal. He had not been there a year before Govea died, and, as he was there some time, and had passed four years at Paris, as tutor to the son of the marshal de Brissac. In 1509, he returned to Scotland, where he openly embraced Protestantism, yet he was well received at court, and assisted the queen in her studies. He was also employed in regulating the universities, and was made principal of St. Leonard's college, St. Andrew's. He even obtained a pension from Mary, which did not prevent him from connecting himself with the party of Murray. Though a layman, he was made, in 1567, moderator of the general assembly, which appointed him preceptor to James VI, who acquired, under his tuition, the scholastic knowledge on which he so much prided himself. It is said that Buchanan, on being subsequently told that he had made the king a pedant, replied, that "it was the best of which he was capable." He next accompanied Murray to England, in order to prefer charges against Mary, and, in 1571, published his \textit{De Jure Regni,} a work which had great influence upon the character and conduct of that unhappy queen; and, although his patron Murray had been assassinated in 1570, he continued in favor with the prevalent party, who made him one of the lords of the council and lord of the privy seal. He likewise received a pension of £100 per annum from queen Elizabeth. In 1579, he published his celebrated \textit{De Jure Regni,} a work which was extensively read and admired. Buchanan died in 1582. He spent the last 12 or 13 years of his life in composing his great work, entitled \textit{Rerum Scoticarum Historia,} in 90 books, which was published at Edinburgh, in 1582. He died the same year, at the age of 76, in very poor circumstances; and the city of Edinburgh interred him at the public expense. The moral character of Buchanan has been the subject of much obloquy, but his abilities were great, and his temper was harsh and unamiable, and his conduct, as a party man, exceedingly violent. As a writer, he has obtained high applause from all parties; and as a Latin poet, in particular, he stands among the first of the moderns. His Psalms are in all kinds of measure, and some of them are extremely beautiful. As a historian, he is considered to have united the beauties of Livy and Sallust as to style; but he discovered a great lack of judgment and investigative spirit, taking up all the tales of the chronicles as he found them, and affording to their legendary absurdities the currency of his own eloquent embellishment. On the whole, however, B. may justly be deemed an honor to his country; as a man whose genius burst through all disadvantages to the attainment of wide and justly-celebrated distinction. Of his different works in verse and prose, various editions have been given; and a valuable edition of the whole was published at Edinburgh, in 2 vols. folio, 1714, and reprinted at Leyden, in 2 vols. 4to., 1725.

\textbf{Bucharest} (i.e. city of joy), the chief city of Walachia, the residence of the hospodar and of a Greek bishop, contains 10,000 meanly built houses, and 28,000 inhabitants, including Greeks, Jews and Armenians. The streets are not paved, but covered with laths. The Greeks for- merly had an academy here with 12 instructors, which, in 1810, contained 244 students. It has declined since the present hospodar Ghika, a native of Walachia, took possession of its funds in 1823. The trade in wine, skins, and other products of the country, is very brisk. May 28, 1812, a peace was concluded here between Russia and the Porte.

\textit{Bucharest, Peace of,} May 28, 1812, between Russia and the Porte. In November, 1806, the emperor Alexander took up arms for the protection of Moldavia and Walachia, and on account of the violation of the free navigation of the Bosphorus. He occupied Moldavia, upon which the Porte declared war against Russia, Jan. 7, 1807. An armistice, however, was agreed upon at Slobosia, Aug. 24, 1807, in consequence of the peace of Tilsit, by which the Russians evacuated the principality. After the expiration of the truce, in April, 1808, it was tacitly continued; but when Napoleon, in the congress at Erfurt, had agreed to the union of the two principalities with Russia, the Russian court opened a congress, to deliberate upon peace at Jassy, in Feb., 1809, and demanded the cession of both principalities by the Turks, and the re-
moval of the British ambassador from Constantinople. Upon this, the Porte broke off the negotiations, and in April, 1809, the war was renewed. The Russians advanced to Bulgaria, and, after two bloody campaigns, remained masters of the Danube. The Porte now offered terms of peace. A congress was opened at B. in Dec., 1811. Napoleon soon after turned his arms against Russia, and concluded an alliance with Austria, March 14, 1812, by which both powers guaranteed the integrity of the Porte. He also did all in his power to induce the Porte to continue the war. But the interposition of Great Britain and Sweden, as well as the concessions of Russia, and the distrust of the Porte towards Napoleon, brought to a conclusion the peace of B., which was signed, on the part of the Russians, by Andri I. talinski, Sabanejeff, and Jos. Fonton, May 28. The Porte gave to continue the war. But the interposition of Great Britain and Sweden, as well as the concessions of Russia, and the distrust of the Porte towards Napoleon, brought to a conclusion the peace of B., which was signed, on the part of the Russians, by Andri I. talinski, Sabanejeff, and Jos. Fonton, May 28. The Porte gave

The Servians, however, would not accept these conditions, and continued the contest, but were soon overpowered by the Turks.

**Bucharia, Great;** a country of Central Asia, lying between the parallels of 33° and 44° N. lat., and from 60° to 72° E. lon. It comprehends the three provinces of Bucharia Proper, Samarcand and Balkh, corresponding to the country of the nomade Scythians, Sogdiana and Bactria of ancient geography. It forms the south-eastern part of Tartary, and, being occupied chiefly by the Usbeck Tartars (q. v.), is sometimes called Usbeckistan. The original inhabitants, or Taujiks, a Persian colony, are handsome than the Tartars, and still speak the Persian language. They live in cities, and carry on a trade with Russia, China, Hindustan and Persia. There are also many Jews in the country. The rivers are the Gihon or Oxus, the Sir, or Jaxartes, and the Segd. The Bucharians or Taujiks lead a frugal life, their food consisting chiefly of rice, wheat, millet, and, above all, fruits, such as melons, grapes and apples: they are fond of horse-flesh, but it is expensive, and beef is more used. Tea and wine, the former flavored with anise, are their principal drink: they intoxicate themselves with opium, and their bread is not fermented. Besides these articles, which, except tea, are produced in the country, the principal vegetable productions are the Judas tree, the rhubarb, assafetida, &c. B. is supposed to be the native country of the camel, and a large, shaggy variety, called tak, has the peculiarity of blowing a large bladder from its mouth when it utters a cry. Other varieties of the camel, and dromedaries, fine horses, and asses, of various sorts, abound. Sheep and cows are scarce. Several rare birds are found here, particularly the tetra paradoxus. This bird resembles the partridge of the desert, except in the structure of its feet, which consist of one large toe, placed between two diminutive ones, resting on a hard sole, and enabling it to run with great speed over the dry, gritty sand. The province of Balkh, which is described by geographers as forming a part of B., lies on the south of the Oxus, and belongs at present, to the Afghans. The two provinces on the north of that river form the Transoxana, famous in Arabian and Tartar history, under the Arabian name Mowrawnahr (beyond the river), where Timur received the homage of so many conquered princes. His descendants were driven out by the Tartars in the 15th century. The government, as in other Mohammedan states, is despotic. The population, extent and revenue of the state have not been ascertained. (Eversmann's Reise nach Buchara, Berlin, 1831; Elphinstone's Cambil; Meyendorf's Journal (in French), Paris, 1826.) Bucharia, or Bochara, a large and populous city, has often disputed with Samarcand the title of capital. Its population has been stated at from 100,000 to 200,000. The streets are so narrow, that a loaded camel fills the space from side to side. The houses are low, and built of mud and brick. The number of mosques is said to be 300, and that of medrassas, or schools, 285. It has always been distinguished for the study of theology and Mohammedan law. B., is the commercial emporium of Central Asia for the Hindoos, Afghans, Persians, Russians, Chinese and Arabs. The trade is carried on by caravans, and there are
10 large caravansaries in the city. The caravans bring Russian and English manufactures from the Russian towns, and return silk, wool, Cashmere shawls, indigo, &c. About 500 camels bring silk and woollen cloths, shawls, &c. from Meschid and Herat, and Russian manufactures are carried back in return. China ware and tea from Cashgar, and shawls, calicoes, muslins, from Cashmir and Cashmere, are the other principal articles of import.—A description of the city is contained in the work of Meyendorf, above referred to, who was attached to the Russian mission to B. in 1820.

Bucharia, Little, as it is improperly called, lies east of Great B., stretching from 73° to 100° E. lon. and from 38° to 44° N. lat. It is very imperfectly known, but appears to be bounded on the north and east by the Calmuck country, on the south by Thibet, and on the west is separated from Great Bucharia by the Beloor mountains. It is a very elevated country; forming a portion of the great central plateau of Asia, which constitutes a sixth part of the old continent, yet shrouds from the curious philosopher its mineral, animal, and vegetable productions. The climate is very rigorous, owing to the great elevation of the country. It was overrun, in 1683, by the Calmucks, who were subdued by the Chinese in 1759. Little is known of the origin and manners of the native inhabitants, who still form the principal part of the population. The divisions into provinces are very differently stated by different authors. Cashgar, with a town of the same name, Yarkand, also with a town of the same name, which, by some, is thought to be the capital of Little B., if, indeed, Yarkand is not merely another name for Cashgar, and the other provinces, are little known. Both sexes wear long drawers, and a garment reaching to the calf, bound round the waist by a girdle. The women dye their nails with henna. The houses are chiefly of stone, and furnished with articles of Chinese manufacture. Tea is the general beverage, taken, in the manner of Central Asia, with milk, butter and salt.

Bucher, Anthony von, a well known and much esteemed Catholic writer against the Jesuits, born in Münich, Jan. 8, 1745, was educated in the Latin schools of the Jesuits, studied at Ingolstadt, and was consecrated priest in 1768. In his different offices as a public teacher, he has done a great deal to instruct and enlighten his country. His contributions to the history of the Jesuits in Bavaria (Beiträge zur Geschichte der Jesuiten in Bayern) are of great historical value. His works were published in 6 vols., Münich, 1819 et seq.

Buchholz, Paul Ferdinand Frederic; born, Feb. 5, 1768, at Altruppin (Old Ruppin). At the age of 32, he resigned the office of teacher at Brandenburg, and went to Berlin, where, for 21 years, he has been an author. He is best known to foreign countries as the publisher of the New Monthly Journal for Germany. In many of his writings, he tries to prove the existence of a law of gravitation in the moral as well as the natural world.

Buck; the male of the fallow deer, also of rabbits and other animals. (See Deer, Rabbit, &c.)

Buckingham, George Villiers, duke of; the male of the fallow deer, also of rabbits and other animals. (See Deer, Rabbit, &c.)

Buckbierg. (See Lippe.)

Buckets, in water-wheels, are a series of cavities into which the water is delivered, on the circumference of the wheel to be set in motion. By the revolution of the wheel, the buckets will be alternately erected so as to receive water, and inverted so as to discharge it; the loaded side will descend, and present the empty buckets in succession to the current, and thus keep up a constant revolution of the wheel.

Buckeck, Arnold, the first artist who engraved geographical maps on copper. He brought this art to a high degree of perfection. Schweynheym, who had learnt the secret of printing from the inventors, Faustus and Schoeffer, wished to publish an edition of Ptolemy. Wood cuts were too imperfect for the maps contained in the expensive manuscripts of it. Swewnheyem determined to engrave them on copper, and, for that purpose, associated himself with B. The former died during the progress of the work. B. completed it. The first edition of Ptolemy with maps (for the edition of 1468 is certainly dated wrong) at length appeared in folio, at Rome, 1478, and concluded as follows: Claudii Ptolomaii Alexandrini philosophi geographiæ, Arnoldus Buckinck e Germania Roma tabulis aeneis in pictura formatae impressæ, &c. These charts are also added to some Roman editions of Ptolemy published afterwards.

Buckingham, George Villiers, duke of; the unworthy favorite of James I and Charles I of England; born, 1592, at Brookesly, in Leicestershire, of a family which came thither, from Normandy, in the time of William the Conqueror. In his youth, he showed little taste or little
aptitude for literature. Nature had lavishly bestowed upon him beauty, ease and grace. By means of these qualities, he so effectually won the affections of James I, that, in less than two years, he was made a knight, a gentleman of the bedchamber, baron, viscount, marquis of B., lord high-admiral, lord warden of the cinque ports, &c., and, at last, dispenser of all the honors, offices, favors and revenues of the three kingdoms, according to the dictates of his ambition, his cupidity and his caprice. The nation was indignant at seeing merit undervalued, the persons he used to enslave, the nobility humbled, the crown impoverished and degraded, to elevate and enrich a weak and insolent favorite. To complete the catalogue of his misdeeds, B. became a traitor in 1623, the eighth year of his favor. He desired to remove the earl of Bristol, an able and virtuous minister, from office. Bristol was then negotiating the marriage of a Spanish princess with the prince of Wales, afterwards Charles I. The design of B. was, not only to reconcile to himself the prince, against whom he had dared to lift his hand in a fit of passion, but also to make him dependent upon himself, that he might secure the continuance of his power, in case of the death of James. He therefore inspired young Charles with the romantic idea of going to Madrid himself, and removing all the difficulties of negotiation by his presence. The king's consent to this measure was gained in an hour of weakness, and, though he was long angry, on this account, with B., he soon after made him a duke. The event was winning a connexion with Spain, which was what James had anticipated. While the young prince delighted the royal family and the whole nation by the gentleness and modesty of his manners, B. who accompanied him, offended them by his arrogance and licentiousness. He attained his purpose: the negotiation, which was far advanced by means of Bristol, was broken off; and, that no one else might afterwards complete it with success, he indulged himself in the grossest insults against the Spanish ministry, speedily left the kingdom with the prince, deceived James by false reports, and, at last, disgraced the parliament to declare, that, instead of forming a connexion with Spain, it was necessary to make war against it, which was accordingly done by James. The house of commons peremptorily refused the requisite supplies, although they had consented to the war. B. connected himself with the Puritan party, and formed the project of abolishing the episcopal dignity, selling the possessions of the church, and continuing the war with the money raised in this way. Thus the policy, the feelings and conscience of James were betrayed by his favorite, and in the midst of these disorders he died. He had succeeded, indeed, in concluding a treaty for the marriage of his son with Henrietta of France; but had the grief of seeing an English army, which was intended to recover the hereditary dominions of his son-in-law, the unhappy elector palatine Frederic V., ruined by the mismanagement of B., while a union with the house of Austria would have effected a peaceful restoration of the territories. After the death of James, B. continued to be the arbitrary minister of Charles I; but the time had now come for the fulfilment of the prophecy of his former king. After having been declared the savior of the prince and the nation, in the house of commons of the last parliament, B. was declared, by the new one, a seducer of the king, a traitor to the liberty of his country, and a public enemy. This took place during a war which required, more than ever, the fullest harmony with the house of commons. Hence the dissolution of two parliaments, the imprisonment of the members who had been most distinguished for their zeal, illegal taxes and forced loans, instead of supplies granted by parliament, the arbitrary imprisonment of those who refused to pay them; in short, every thing that could conspire to bring a virtuous king to the most fearful end. But B., who had learned, by his disgraceful attempt on Cadiz, that he was unequal to a war against Spain, did not hesitate to engage in a war against France. He had gone to Paris to solemnize, in the name of the king, his marriage with the daughter of Henry IV. Here he dared to raise his eyes to the queen of France. As this princess dismissed him with indulgence rather than indignation, he desired to return to the French court as English ambassador. His rashness, however, did not remain unobserved; and Louis XIII wrote to him to forbid his cherishing the thought of this journey. In order to avenge himself for this prohibition, B. engaged with the Protestants of Rochelle in a war against France. This enterprise, and the assault of the island Ré (1627), was more disgracefully conducted than the attempt on Cadiz. The time minister, admiral and general, seemed to make it his object to dishonor himself in all three capacities. After having
excited the people of Rochelle to a sedition, only to deliver them to the vengeance of Richelieu, and after having sacrificed a third of the British army, he returned to England, despaired and executed as much by his fellow-citizens as by his enemies. Pecuniary necessity compelled him to call a new parliament. B. opened it with the declaration, that the king might have done without it, and that, if money was refused, his majesty would find other means to supply his wants. Thus he scattered the seeds of discord between the king and people. In the course of the debates, he was obliged to hear himself called the author of the public distress, while the king's heart was acknowledged to be the sanctuary of all the virtues. Without knowing when to yield and when to resist, he contended most violently against the famous petition of rights; but he suddenly ceased his resistance, when he heard that an impeachment was preparing against him in the house of commons. The complaints against him, however, continued; but the house of commons contended itself, instead of a solemn impeachment, with a petition, that the king would remove him from his person and his council, as the author of the public calamities. The only reply of the monarch was a sudden correction of the public taste, which had been corrupted by Dryden, and other dramatists of the age.

Buckingham, George Villiers, duke of, son of the preceding, was born at Walthingford-house, in Westminster, Jan. 30, 1627. After studying at Trinity college, Cambridge, he travelled abroad, and, on his return home, after the commencement of the civil war, he was presented to the king at Oxford. He served in the royal army, under prince Rupert and lord Gerard. His estate was seized by the parliament; but, having obtained the restoration of it, he travelled, with his brother, into France and Italy. In 1648, he returned to England, and was with Charles II in Scotland, and at the battle of Worcester. He followed that prince abroad, and served, as a volunteer, in the French army in Flanders. He afterwards returned to England, and, in 1657, married the daughter of lord Fairfax, by which means he repaired the ruin of his fortune in the royal cause. He, however, preserved the favor of Charles II, and, at the restoration, was made master of the horse. He also became one of the king's confidential ministers, who were designated by the appellation of the cabal. His political conduct was, like his general behavior, characterized by unprincipled levity and imprudence. In 1666, he engaged in a conspiracy to effect a change of the government; notwithstanding which, he recovered the favor of king Charles, which he repeatedly abused. The profanity of his private life was notorious. He seduced the countess of Shrewsbury, and killed her husband in a duel; and he was more than suspected of having been the instigator of the infamous colonel Blood to his brutal outrage against the duke of Ormond, whom he attempted, with the assistance of other ruffians, to carry to Tyburn, and hang on the common gallows. In 1676, he was, together with the earls of Shaftebury and Salisbury, and lord Wharton, committed to the Tower for a contempt by order of the house of lords; but, on petitioning the king, they were released. After plotting against the government with the Dissenters, and making himself the object of contempt to all parties, he died, neglected and unregretted, at Kirkby Moorside, in Yorkshire, April 16, 1688. Pope (Moral Essays, episode 30) has strikingly described his death. His abilities were far superior to those of his father; and, among his literary compositions, the comedy of the Rehearsal may be mentioned as a work which displays no common powers, and which greatly contributed to the correction of the public taste, which had been corrupted by Dryden, and other dramatists of the age.

Buckler. (See Shield.)
Buckler, John, under the name of Schinderhan-nes, was the leader of a band of robbers, on the banks of the Rhine, towards the end of the last century. Born of indigent parents, he entered into the service of an executioner. He stole some skins from his master, and eloped, but was apprehended, and condemned to be scourged. This punishment, publicly inflicted on him, as he himself said, determined the character of his future life. Without knowing what to undertake at this juncture, he wandered about stealing sheep. He was a second time brought to justice, escaped, and connected himself, at Fink, with Rothbart, the leader of a band of robbers. Being seized again, he again escaped, and returned to his old acquaintance. He was apprehended once more, and escaped anew. He now resolved upon highway robbery, and collected a large band, which soon struck terror into all the surrounding country. He was not entirely destitute of good qualities. He often assisted the poor, and relieved the distresses of those who were severely treated by his band. Political commotions drove him to the right bank of the Rhine, where he married one Juliet Blasius. A song which he composed on her was played at all the fairs and religious festivals throughout the adjacent country. About this time, his followers began to rob houses; and carried on their lawless trade so publicly, that the Jews, who were most annoyed by them, sent to treat with B. At length Schinderhan-nes was taken prisoner, and brought to Frankfort. He confessed immediately his true name, and a great part of his crimes. He was then given up, with his comrades, to the tribunal at Mentz. Here he confessed many facts, thinking, that, as he had never committed murder, he would not be condemned to death. After his condemnation, he still continued to hope for pardon, and, till the last moment of his life, showed the greatest presence of mind. He was guillotined Nov. 21, 1803.

Buckminster, Joseph Stevens, celebrated as a pulpit orator and man of letters, was born at Portsmouth, New Hampshire, May 20, 1784. His father was a clergyman, and he himself manifested, in his boyhood, such talents and dispositions as gave assurance of his success in the same career. In 1797, he entered Harvard college, Cambridge. In the year 1800, he received the honors of the university with the distinction due to his uncommon proficiency in the studies of the institution, and to the excellence of the oration which he delivered on the literary character of different nations. After leaving college, he devoted himself for more than four years to theology and general literature. In Oct., 1804, at Boston, he preached for the first time, and, in the following year, accepted an invitation from a religious society in that place, to become their minister. The fatigue and agitation which he suffered at his ordination threw him into a severe illness of two months duration. On his recovery, he devoted himself ardently to his clerical duties, but his zeal aggravated a predisposition to epilepsy, which had been felt some years before. The increase of this dreadful disorder rendered a voyage to Europe expedient. He embarked for England in 1806, remained for some months in that country, went through Holland to Switzerland, and thence proceeded to Paris, where he passed nearly half a year. After revisiting England, he returned to his native land, not, indeed, cured of his malady, but generally more vigorous in constitution, and enriched with a large additional store of knowledge. No American of his age had made a more favorable impression abroad. His parishioners welcomed him back with enthusiasm, and he required their esteem by an admirable discharge of all his duties. His sermons placed him in the first rank of popular preachers. He also contributed valuable and beautiful papers to the periodical publications of the day, besides preparing a number of occasional addresses of distinguished merit. In 1808, he intended an American edition of Griesbach's Greek Testament, and wrote much in vindication and praise of this author's erudition, fidelity and accuracy. In 1810, he digested a plan of publishing all the books of the Old Testament, but the whole design failed for want of public patronage. In 1811, he was appointed the first lecturer on Biblical criticism at the university of Cambridge, on the foundation established by Samuel Dexter. While he was laboriously preparing for the execution of this office, a violent fit of epilepsy at once destroyed his noble and affluent intellect, and gave a shock to his frame, which he survived only a few days. He died June 9, 1812, at the completion of his 28th year. Mr. Buckminster possessed a fine face, an easy and winning address, a cheerful temper, and the power of gaining a multitude of friends and admirers. In 1814, his sermons were
collected, and published in an octavo volume, to which is prefixed a well-written memoir of the life and character. These remains have been extensively circulated. They are highly valuable in every respect, and fitted to excite universal regret at the premature fate of the accomplished and virtuous author. A second volume appeared very recently (Boston, 1829).

BUCKWHEAT, or BRANK, is a black and triangular grain, produced by a plant of the Persicaria tribe (Polygonum fagopyrum), with somewhat arrow-shaped leaves, and purple-white flowers.—Buckwheat was first brought to Europe from the northern parts of Asia, and first cultivated in England about the year 1600. The flowers appear about July, and the seeds ripen in October; and so tender are the plants, that a single night’s sharp frost will destroy a whole crop. As a grain, buckwheat has been principally cultivated for oxen, swine and poultry; and, although some farmers state, that a single bushel of it is equal in quality to two bushels of oats, others assert, that it is a very unprofitable food. Mixed with bran, chaff or grain, it is sometimes given to horses. The flower of buckwheat is occasionally used for bread, but more frequently for the thin cakes called crauspets. In Germany, it serves as an ingredient in potage, puddings, and other food. In Pennsylvania, it is very extensively used, throughout the winter, in cakes for bees, which are cooked upon a griddle. Beer may be brewed from it; and by distillation it yields an excellent spirit.—The best mode of harvesting this grain is said to be by pulling it out of the ground like flax, stripping off the seeds with the hand, and collecting these into aprons or cloths, tied round the waist. Buckwheat is much cultivated in the domains of noblemen, possessed of landed property, as a food for plebeians. With some farmers, it is the practice to sow buckwheat for the purpose only of ploughing it into the ground, as a manure for the land. While it grows, it serves as food for sheep and oxen; and, mixed with other provender, it may also be given with advantage to horses. The blossoms may be used for dyeing a peacock blue color. It is frequently cultivated in the Middle U. States as a food for bees, who are very fond of it, and to whose honey it imparts a flavor by no means unpleasant. The principal advantage of buckwheat is, that it is capable of being cultivated upon land which will produce scarcely any thing else, and that its culture, compared with that of other grain, is attended with little expense.

BUDDHISM. (See Pastoral Poetry.)

 Буда (in German, Ofen) is the Hungarian name of the capital of Hungary, situated on the west bank of the Danube, opposite Pest. It consists of the Upper Town, which is fortified, and lies, with the castle, on a hill; of the Lower Town, or Wasserstadt, which lies at the foot of the hill, and is connected with Pest by a bridge of boats; of the Neustadt, which is the remarkable Trinity pillar, 52 feet high; and of the Taban, called, in German, Raitzenstadt, from being almost entirely occupied by the Russians, a Schavonian race. There are three other parts inhabited by Germans and Hungarians. The population is 25,500, exclusive of the court of the palatine, the officers of government, the military and the clergy. Among the public buildings are the royal fortress, in which the crown is kept, the arsenal, the cannon foundery, the new observatory on the Blocksberg. The trade in wine, which the environs produce of an excellent quality, is the chief occupation of the inhabitants. There are also manufactures of silk, leather, tobacco, copper and iron. The baths are efficacious in pulse, weakness of limbs, and similar complaints. The castle was chosen as a place of residence by the emperor Louis I; and king Matthias I founded the library, which was destroyed by the Turks, in whose hands it remained from 1530 till 1686, when it was taken by storm by the duke of Lorraine. The castle was then destroyed, but was rebuilt by the empress Maria Theresa for the university, which was removed from Tyrnan to Buda in 1777, and which has subsequently been removed to Pest. Lon. 19° 2' E.; lat. 47° 30' N.; distant 120 miles S. E. from Vienna.

Benma, the founder of a very ancient religion, called after him. His worship, after the Brahmans had put a stop to it in India, spread to Japan, Tibet and China, where, as well as in Ceylon, it exists at the present day. Ritter, in his Vor­ halten Europäischer Völkergeschichten (Introduction to the Histories of the European Nations), advances the opinion, that the Buddhists also migrated to the N. W. to the shores of the Black sea, to Colchis, to the modern Mingrelia, and thence to Thrace, where they laid the foundation of the civilization of the Pelasgi and Hellenes. Even in the doctrine of Asa, in the extreme north, traces of Buddhism have been thought to appear. According
Jan. 1821, Buddha, whose historical name was Tshakia-muni, was born under the reign of Tshao-wang, 950 B.C. Before his death, he intrusted his disciple Makakaya, a Brahmin in the kingdom of Makata, which lay in the centre of India, with his mysteries. This Makakaya, who lived under Hio-wang, 950 B.C., was the first saint or patriarch of Buddhism, which was left by him to his successor, Ananta. The Japanese Encyclopedia enumerates 36 patriarchs, including Makakaya, in chronological succession, each of whom chose his successor, and transmitted to him the secret doctrine of Tshakia-muni, who was afterwards worshipped as a god, under the name of Buddhas. Several of them died (or, to use the language of the Buddhists, emigrated) voluntarily in the flames. Among them, Maming, the successor of Buddha (by the Chinese called Phu-sa; in Sanscrit, Deva-buddhasa), who gave names to the gods of the second class, was worshipped as a god, under the name of Buddhas. Several of them died (or, to use the language of the Buddhists, emigrated) voluntarily in the flames. Among them, Maming, the successor of Buddha, was the last who lived in Hindostan. He afterwards fixed his residence in China, near the famous mountain Sung. He died A.D. 455. The secret of his doctrine was left by him to a Chinese, who was the 28th patriarch. After him, the above-mentioned book gives the names of four Chinese, who succeeded to the same dignity. The last of them died A.D. 713. Their history, like that of many other saints, is mixed with fables; their manner of living was the same as what the ancients report to us of the Gymnosophists and Samaneans. They devoted themselves to religious exercises and constant contemplation, and condemned themselves to the most severe abstinence; many, several of them, as we have mentioned, sealed their belief in the transmigration of souls with a voluntary death. From that Indian patriarchate originated, A.D. 706, the sacerdotal dignity, which is common in China, and among the Monguls, with the title spiritual prince of the law. These priests are, at the same time, a sort of confessors to the emperors. From this priesthood afterwards sprung the hereditary dignity of Grand Lamas, in Thibet; and, in process of time, the whole hierarchal system, when the monastic life of the Buddhists required regular superiors, or inferior lamas. Besides many other monuments of the ancient worship of Buddha, there are two particularly remarkable—the ruins of the gigantic temple Boro-Budor, in Java, with works of sculpture; and the five large subterranean halls, called Patal-Pandyu, probably an old temple of the Buddhists, near the city of Ban, on the way from Guzurat to Malwa. Tradition ascribes these astonishing works of ancient Indian architecture and sculpture, which far surpass the skill of the modern Hindoos, to the Pandus, the heroes of Indian mythology. An accurate description of these monuments is contained in the second volume of the Transactions of the learned society at Bombay (London, 1819).

Budé, Guillaume; more generally known under the Latin form Budaen; one of the greatest French scholars of his time; born at Paris in 1467, died in 1540; was royal librarian, and master of requêtes; studied at Paris and Orleans at first without success, on account of his dissipated life in his early youth. From his 24th year, he devoted himself to study with the greatest zeal, in particular to belles-lettres, to mathematics, and to Greek. Among his philosophical, philosophical and juridical works, his treatise De Jusse et Partibus ejus, and his commentaries on the Greek language, are of the greatest importance. By his influence, the collège royal de France was founded. He enjoyed, not only as a scholar, but also as a man and citizen, the greatest esteem. His works appeared at Bâle, 1557, 4 vols. folio.

Budessin. (See Bauden.)

Budgell, Eustace, an ingenious writer, was born at St. Thomas, near Exeter, about 1685, and educated at Christ church, Oxford; after which he went to London, and was entered of the Inner Temple, where his inclinations led him to neglect his profession, and study polite literature. During his stay here, he contracted a friendship with Addison, who, in 1717, when principal secretary of state in England, procured for B. the place of accountant and comptroller-general of the revenue in Ireland. He lost these places when the duke of Bolton was appointed lord-lieutenant, in 1718, by a lampoon on his grace. He then returned to England,
where, in 1720, he lost £20,000 by the South sea bubble. He afterwards tried to get into parliament, and spent £5,000 more in unsuccessful attempts, which completed his ruin. In 1727, the duchess-dowager of Marlborough gave him £10,000 for the purpose of getting him into parliament; but his attempts were ineffectual. In 1733, he commenced a weekly paper, called the Bee, which was very popular. On the death of doctor Tindal, the author of Christianity as old as the Creation, £2,000 was left to him by his will. This sum was so disproportionate to the testator's circumstances, and the legacy so contrary to his known intentions, that suspicions arose respecting the authenticity of the testament; and, upon its being contested by his nephew, it was set aside. The disgrace of this affair had such an effect upon the unhappy man, that, on May 4th, 1737, taking a boat at Somerset stairs, he threw himself overboard, with stones in his pocket, and immediately sank.—Besides the above-mentioned works, he also possessed a share in the Craftsman, wrote several papers in the Guardian, with the history of Cleomenes, (8vo.) and memoirs of the Boyle family.

**Budget.** In the parliamentary language in England, means the minister's proposed plan of taxation for the ensuing year; and comprehends a general view of the national debt, income, and expenditure, with the actual product of the preceding year; with means of raising supplies, &c.; with the actual product of the preceding year; and the minister of finances presents the budget to the king and chambers.

**Budweis;** a circle and city of Bohemia. The circle is separated from Austria by high mountains, in which the Moldau has its source; it contains extensive forests and sheep-walks, and abounds in game and fish. The city of B. is a mining town on the Moldau, with manufactories of salt-petre and cloth. Population of the circle, 170,000; of the city, 4,600. The latter lies in lon. 14° 20' E.; lat. 49° 2' N.

**Buenaventura;** a settlement, and Spanish mission, on the coast of New California. Lon. 118° 58' W.; lat. 34° 16' N. It was founded in 1782, and contains 500 inhabitants. It has a tolerably good roadstead, and the soil and climate are very favorable to the production of a great variety of fruits.

**Buenos Ayres;** a seaport in Coloma, on the bay of Choco, at the mouth of a river of the same name; 90 miles W. N. W. Cali, 200 W. by S. Santa Fé de Bogota. It is supported by the vessels that touch at it; the entrance is difficult, and the climate unhealthy. It is the part of Santa Fé de Bogota, Popayan and Cali. Lat. 3° 50' N.; lon. 77° 42' E. There are many small settlements and villages of this name in Spanish America.

Buenos Ayres; an extensive country of South America, formerly belonging to Spain, and styled the vicereality of La Plata, or of Rio de la Plata; but since the declaration of independence, in 1816, it has assumed the name of the United Provinces of South America. It is bounded N. by Bolivia, E. by Brazil, S. E. by the Atlantic ocean, S. by Patagonia, and W. by Chili and the Pacific ocean. It comprehends most of the valley or basin of the great river La Plata, and is watered by the river La Plata, and its tributaries, the Parana, Paraguay, Uruguay, Pilcomayo and Rio Grande, and also by the Colorado and Negro.—The great chain of the Andes extends along the western side, and the western and southern parts of the country are mountainous. Most of the other portions, which comprise the greater part of the whole country, consist of vast and uniform plains; and extensive tracts which border on the river are liable to inundation. In the southern division are found immense pampas, or plains, which extend into Patagonia, and are upwards of 1200 miles in length, and 500 in breadth. They are covered with tall, waving grass, which affords pasture to vast numbers of cattle and wild horses, and have few interruptions from forests or eminences.—The climate is different in different parts, but generally healthy. On the plains, the atmosphere is moist, and, in summer, the heat is excessive, with frequent rains, accompanied by tremendous thunder and lightning.—A large part of the country has a very fertile soil, adapted to the growth of wheat, maize, barley, tobacco, sugar, wine and fruits; but agriculture is much neglected.
great portion of the wealth of this country consists in the immense herds of cattle and horses which graze upon its plains. The principal exports are hides, tallow, beef, gold and silver. It has valuable mines of gold, silver, copper, lead and tin.—Some of the principal towns are Buenos Ayres, Monte Video, Cordova and Asuncion. (Respecting the relations of Buenos Ayres and Brazil, see Brazil.)

Buenos Ayres, or Nuestra Señora de Buenos Ayres; a city of South America, and capital of the country to which it gives name, on the S. W. side of the La Plata, 65 leagues from its mouth; first built in the year 1533. Lat. 35° 31' W.; lat. 34° 37' S. The population is uncertain, and, within a few years, has been variously stated at 50,000, 70,000, and 100,000. About one fourth of the inhabitants are whites; the rest are Indian negroes and mixed breeds. The situation is agreeable and healthy, and the city derives its name from the salubrity of its climate. The temperature is nearly the same throughout the year. The city is built with great regularity, and the principal streets are straight and regular, and some of them are paved. They are broad, with side-walks, but, from the great scarcity of stone, are generally unpaved in the middle. The houses are mostly built of brick or chalk, with flat roofs, many of them of two stories, though the greater part of only one. They are generally plastered on the outside, but nacked somewhat shabbily. The public buildings are a palace, a royal chapel, a cathedral, a college, 2 hospitals, 4 monasteries, 2 numerose, 10 or 15 churches, a public library of nearly 20,000 volumes, an academy, and 8 public schools. Some of these public buildings are large and splendid.—There is no harbor at Buenos Ayres, nor so much as a mole to facilitate the landing of boats. Ships can only come within three leagues of the town; there they unload their goods into boats, which enter a little river named Rio Chuelo, from whence the merchandise is brought in carts to the town, which is about a quarter of a league from the landing places. The ships which want careening, or take loading at Buenos Ayres, go to the bay of Baragon, a kind of port about 12 miles S. E. of the town.—The environs of this city are well cultivated, furnishing all the necessaries of life in abundance, except wine, which is brought from Spain, or from Mendoza.

The inhabitants have country-houses, called quintas. Wood is very dear at Buenos Ayres and at Monte Video. In the neighborhood of these places are only some little shrubs, hardly fit for fuel. All timber for building houses, and constructing and refitting the vessels that navigate in the river, comes from Paraguay in rafts.—After the province of Buenos Ayres withdrew from the government of Spain, the city of B. was the temporary seat of the central government, and the congress of the United States of South America. In 1826, it was made, by the congress of the United Provinces of La Plata, the permanent seat of government, and the capital of the confederation. It is also the seat of a bishop. The city has an extensive trade in hides and tallow, which are disposed of, principally, to the British and people of the U. States. The Germans and Dutch likewise trade with B. Much of the commerce of Brazil, Chili, Peru and Paraguay is also carried on through this city. From 300 to 400 foreign ships annually enter this port.—The climate of B. is mild. There are very few days in winter in which water is frozen.—In 1526, it was conquered by an English squadron, under the command of admiral Popham and general Beresford. Soon after, the inhabitants, having recovered from their terror, attacked the English by surprise, and made a great slaughter among them. In the following year, Whitelock and Crawford came over with reinforcements. They were quietly permitted to enter the city, and were then attacked with such fury, that a third part of their number was destroyed, and the remainder were glad to conclude a truce.

Buen Retiro; a royal summer-residence, on an elevated ground, near Madrid, built, with much splendor, by the duke of Olivarez, at the beginning of the 17th century. It has a theatre, park, and some valuable pictures. In 1658, when the French attacked Madrid, Dec. 5, it was the centre of the conflict, and was plundered. The French afterwards fortified it, and used it as a citadel.

Buffalo; a post-town of New York, the capital of Erie county, situated at the eastern end of lake Erie, at the eflux of Niagara river, and at the west end of the Erie canal; 226 miles W. of Albany, 340 E. of Sandusky. Population in 1810, 1548; in 1820, 2095; in 1825, 5140. The village of B. is very advantageously and finely situated on a handsome plain, near the entrance of Buffalo creek or river into lake Erie, on the channel of
BUFFALO—BUFFON.

communication between the Atlantic ocean and the lakes. It has been, for several years past, a very flourishing place, and has an extensive trade. In 1813, this village, which then contained about 100 houses, was burnt by the British, in retaliation for the burning of Newark, in Upper Canada, by the Americans.

—Black Rock is a considerable post-village, within the township of B., two miles from the village of B. It is situated at the ferry across the Niagara river, which is here about three quarters of a mile wide.

BUFFALO: in America, a name misapplied to the bison, (q. v.) It properly belongs to a species of ox (bos bubalus), found in various parts of India. This species, in the wild state, lives in herds of considerable numbers, frequenting moist and muddy situations. It is naturally fierce and stubborn, and is with difficulty subdued. The following of the buffalo is heavier than that of the common bull. The female begins to breed at 4 years of age, and ceases at 12. The term of life in this species is from 18 to 25 years. One variety of this species has horns of vast size and length. This is the auro or auro. The horns are turned laterally, and flattened in front. They are wrinkled on the concave surface, 4 or 5 feet long, and 8 or 10 from tip to tip. The buffalo is 7 or 8 feet long, by 4 in height, and is generally of a black color. The skin is covered with scattered hair. which he was deficient; and, after an unusual labor of 10 years, the two friends published the three first volumes of the Natural History, and, between 1749 and 1767, 12 others, which comprehend the whole scheme of the work was thus altered. Descriptions, less detailed, and almost entirely without anatomy, were inserted among the historical articles, which, at first, were composed by Gueneau de Montbeillard, and afterwards by the abbe Bexon. B. published alone the five volumes on minerals, from 1783 to 1788. Of the seven supplement,
ary volumes, of which the last did not appear until after his death, in 1788, the 5th formed an independent whole, the most celebrated of all his works. It contains his "Peaces of Nature," in which the author, in a style truly sublime, and with the triumphant power of genius, gives a second theory of the earth, very different from that which he had traced in the first volumes, which he assumed, at the commencement, the air of merely defending and developing the former. This great labor, with which B. was occupied during 50 years, is, however, but a part of a scheme, which he had sketched, and which has been continued by Lacépède, in his history of the different species of cephalopods, reptiles and fishes, but has remained unexecuted as far as regards the invertebrated animals and the plants. There is but one opinion of B. as an author. For the elevation of his views, for powerful and profound ideas, for the majesty of his images, for noble and dignified expression, for the lofty simplicity but little in accordance with the style of his writings. The best edition of his Natural History is that published from 1749 to 1788, in 36 volumes.

BUFFONE (Italian); buffoon; a comic singer in the opera buffa, or the Italian intermezzo. The Italians, however, distinguish the buffo cantante, which requires good singing, from the buffo comico, in which there is more acting. Buffonery is the name given to the jokes which the buffoon introduces. The word is, no doubt, borrowed from the Low Latin, in which the name buffo (checked), was given to those who appeared on the theatre, with their cheeks puffed up, to receive blows on them, and to excite the laughter of the spectators. Hence buffo, checks; buffone, to puff up the cheeks. Afterwards, the name came to signify a mimic, a jester in general.

BUGENHAGEN, John, also Pomernan, doctor Pommer, was of great service to Luther in the reformation. He was born in 1483, at Stralsund, and, in 1503, was made rector of the school in Treptow. He fled from his Catholic superiors to Wittenberg, in 1521, where he was made, in 1522, professor of theology. Luther derived assistance from his profound exegetical learning, in preparing his translation of the Bible. In 1525, he gave occasion for the controversies about the sacrament, by a work against Zwingli, on the communion. He acquired more reputation by his excellent Interpretatio in Librum Psalmorum (Nuremberg, 1523).
He effected the union of the Protestant free cities with the Saxons, and introduced into Brunswick, Hamburg, Lübeck, Pomerania and Denmark, and many other places, the Lutheran service and church discipline. For the Lower Saxons, he translated the Bible into Low German (Lübeck, 1533). He was a faithful friend to Luther, and delivered his eulogy. Together with Melanchthon, he composed the Interim of Leipzig. He died in 1558. He wrote also a History of Pomerania.

**BEGGE, Thomas,** born in 1740, at Copenhagen, professor of mathematics and astronomy at the university in that city, and in the royal marine, has rendered much service to astronomy and geography by his own observations, and by the edicts of the government, from many of whom we have valuable observations in Norway, Iceland, Greenland, and several parts of the East and West Indies. He caused more correct surveys to be made in Denmark, for the equalization of the land- taxes, and had the principal part in the preparation of the excellent map of Denmark. His works are, Elementary Principles of Spherical and Theoretical Astronomy (Altona, 1797), Description of the Method of Measurement in the Construction of the Danish Maps and Charts. He died in 1815.

**BUGLE-HAGEN.** (See Horn.)

**BUGNEHAGEN.**

**BUGNEHAGEN—BULGARIANS.**

**BUGNEHAGEN.**

**BULBRAH.** (See Bucharia.)

**BULHARIA.** (See Bucharia.)

**BULKHARIA.** (See Bucharia.)

**BULSIA.** (See Galicia.)

**BULSWORTH.** (See Quartz.)

**BULTH; a small town of Wales, on the Wye, 171 miles W. N. W. of London.** It was probably the Roman station Bulba; and Roman relics are yet occasionally discovered there. The Britons built a castle there, when driven from their country by the Saxons, which was occupied by the English after the conquest. Llewellyn, the last Welsh prince, was slain in the neighborhood, in an engagement between the Welsh and English. *Lon. 3° 16' W.; lat. 52° 8' N.*

**BULMA; an island on the west coast of Africa, one of the Bisgoes.** It is 24 miles long and 12 broad, and is situated about two miles from the mouth of the Rio Grande. It is very fertile, but not easy of access. The Bulama association attempted to colonize it, in 1792, but it was soon abandoned. *Lon. 14° 38' W.; lat. 11° N.*

**BULMA, European or Little, a Turkish province, which owes its name to the Asiatic race of Bulgarians (q. v.), who overran it, was the Asia Inferior of the Romans.** Its capital is Sophia, and it is divided, by the Turks, who conquered it in 1293, into four sangiacats, forming a part of the pachalie of Romania. It is nearly in the form of a triangle, enclosed by the Danube on the north, the Black sea on the east, the Balkan (q. v.) or mount Haems on the south and west. It is 33,579 square miles in extent, with a population of 1,800,000 inhabitants, engaged in agricultural labors, peaceful and industrious, and mostly members of the Greek church. The whole province, except in the neighborhood of the Danube and the Black sea, is rugged and mountainous. From the eastern extremity of the Balkan, a branch runs north- easterly, nearly parallel with the Enume, and the streams flow northerly and westerly to the Danube, or south- easterly to the sea. The soil is very productive; all sorts of grain, cattle, wool, iron and wine are raised in abundance, and the province is considered the granary of Constantinople. About Philippiopolis are large rice farms. A very fine wool is brought from the pasture near Nicepoli, and silk, hemp, wax and tobacco are important articles of produce. Dobrunisha, the solitude on the Black sea, is famous for its horses, which are small, but strong and well-formed. Some of the principal towns, besides those already mentioned, are Silistra, taken by the Russians, June 28, 1829, 216 miles N. of Constantinople, Brailow (q. v.), Varna (q. v.), Schumla or Schumla (q. v.), which have been the objects of violent contest between the Russians and Turks in the war now existing between them.

**Bulgar, or Voivgar.**; an ancient Turkish or Tartar nation, which, in the fourth century, was settled on the Volga. The ruins of their former capital may still be seen in the neighborhood of Kazan. Their kingdom, which occupied a part of the Asiatic Sarmatia of the Greeks,
BULGARIANS—BULL-DOG.

called Great Bulgaria, and is now comprehended in the Russian government of Orenburg. They afterwards removed to the countries between the Danube and the Danube, and called their territories Second Bulgaria. They passed the Danube in 535, made themselves masters of the coasts of the Black sea, as far as mount Hamus, subdued the Scythian tribes of that region, and founded the kingdom of Black Bulgaria. They penetrated Thrace, Macedonia and Thessaly, and their wars with the Greek empire were very singular. Whole provinces were reduced to deserts, called Bulgarian forests, and the Greeks, not less barbarous, put out the eyes of 15,000 Bulgarian prisoners in one day. Their kingdom, which extended, in 1010, over Macedonia, Albania and Servia, was destroyed by the emperor Basil II, and the dispersed tribes took refuge in Turkey, in 1185. Those who remained in B. revolted, and formed, with the Walachians, a new kingdom, which was sometimes the ally and sometimes the vassal of the Byzantine empire, until it was finally conquered by the Ottomans, in the 14th century.

BULMA. The persons attacked by this disorder are tormented with an insatiable hunger. When their stomach is surfeited, they are seen to faint, and throw off the food which they have taken, half digested, and with violent pain. It usually appears as a concomitant of other diseases. It occurs during certain intermittent fevers, in certain diseases of the stomach and bowels, particularly in such as are produced by the tape-worm; and is also common after fevers, by which the strength of the patient is exhausted. In this last case, it arises from the effort of all parts of the body to supply the lost flesh and strength. In certain cases, however, the extraordinary desire for food seems to be caused by a particular condition of the stomach, which digests with too great rapidity. This is observed sometimes in women during their pregnancy, in young people who exercise too violently, and in persons who take much high-seasoned and heating food. In this case, the desire is not to be considered as a disease, but only as an excessive appetite. As a disease, its consequences are dreadful—leanness, pulmonary fevers, consumption, constipation, dropsy.

BULMAH, or BALKH. (See Afghanistan.)

BULK-HEADS; certain partitions or walls built up in several places of a ship between two decks, either lengthwise or across, to form and separate the various apartments.

BULL; the name applied to the males of all the species of ox (bos L.) (See Ox.) BULLERY; an instrument, ordinance or decree of the pope, treating of matters of faith or the affairs of the church, written on parchment, and provided with a lead seal. The word was originally the name of the seal itself. The papal bulls are commonly designated by the words with which they begin; e. g., the bulls In cæsa Domini, Cum iuxta, Unigenitus, Ascendente, & c. A collection of bulls is called bullary. Certain ordinances of the German emperors are also called bulls. The golden bull, emphatically so called, from the seal attached to it being in a gold box, is that fundamental law of the German empire enacted by the emperor Charles IV, in two diets, held in succession, in 1356, at Nuremberg and at Metz, with the assistance of the electors and, in part, with the consent of the empire. The chief design of the golden bull was to fix, with certainty, the manner of electing the emperor, and whatever was connected with it. Another object was to check the lawless violence of the times, which was not, however, then effected. (For an account of the particular bulls of importance, see the separate articles.)

BULL-BATTING; the barbarous and unmanly sport of setting dogs on a bull, who is tied to a stake, with the points of his horns muffled, and torn to death for the amusement of the spectators. Bears and bulgers are baited, even at the present day, in the cock-pits in London, and dog-fights also are exhibited in the same places.

BULL-DOG; a variety of the common dog, called, by naturalists, canis molossus, remarkable for its short, broad muzzle, and the projection of its lower jaw, which causes the lower front teeth to protrude beyond the upper. The conchyla of the jaw are placed above the line of the upper grinding teeth. The head is massive and broad, and the frontal sinus is large. The lips are thick and pendulous; the ears pendant at the extremity; the neck robust and short; the body long and stout, and the legs short and thick. The bull-dog is a slow-motioned, ferocious animal, better suited for savage combat, than for any purpose requiring activity and intelligence. For this reason, he is generally employed to guard houses, especially by the butchers, tanners, &c., and this office he performs with great fidelity. The butchers use bull-dogs in catching and throwing...
BULL-DOG—BULL-FIGHTS.

321

BULL-DOG—BULL-FIGHTS.

down cattle; and it is surprising to see
the apparent ease with which the dog
will seize an ox by the nose, and hold
him perfectly still, or throw him on his
side, at his master's command. In fight-
ing with other dogs, or in attacking ani-
imals capable of exciting their fiery, bull-
dog energy, display the most ferocious and
indomitable spirit. It is stated, in the
Sporting Calendar, that they have suffered
their limbs to be cut off, while thus enga-
ged, without relinquishing their hold on
the enemy. They become very vicious,
and sometimes extremely dangerous, as
they advance in years, inflicting dreadful
bites for the slightest provocation. Indeed,
at every turn of their lives, will bull-dogs
allow even their masters to take liberties
with them.

BULLFIGHTS. (See Boleyn.)

BULLFIGHTS. (See Boleyn.)

BULLFIGHTS of Buchan, or BULLS of B.
A large oval cavity in the rocks on the
cost of Aberdeenshire, 150 feet deep.
Boats enter under a natural arch, near
which is a large rock, separated by a deep
channel from the land. Through an op-
erture, in the middle of this rock, the
waves rush with a tremendous noise.

BULLETIN (French; diminutive of bul-
la) ; an official report, giving an ac-
count of the actual condition of some important
affair; thus the Bulletin of the army, of his
majesty's health, &c.

It has acquired great celebrity by the brilliant despatches
issued from the French head-quarters,
under this name, during the imperial
domination. All Europe, and America,
echoed with their accents of blood and
victory, until the 20th bulletin of the grand
army announced that the tide was rolled
back, and that Paris was to share the fate
of the other capitals of Europe.

BULLETIN UNIVERSEL DES SCIENCES ET
DE L'INDUSTRIE, is, divided into eight
sections, of each of which a number is
issued monthly. It is published at Paris,
by the French society for the promotion
of useful knowledge, under the general
direction of the baron Ferussac, assisted
by eight editors, one for each section.

These divisions are—1. mathematical,
physical and chemical sciences; 2. nat-
ural history and geology; 3. the medi-
cal sciences; 4. agriculture, horticulture,
fishing and hunting; 5. technology; 6.
geography, statistics, political economy,
voyages and travels; 7. phylology, anti-
quities and history; 8. military. (See
Periodicals.)

BULL-FIGHTS are among the favorite di-
versions of the Spaniards, who, like all the
nations of the south of Europe, are pas-
sionately fond of public combats, and ex-
hibitions of strength and agility. The ex-
communications of the popes have not
been sufficient to induce them to abandon
this amusement. Charles IV abolished it;
but it was revived again by Joseph. The
assailants are seldom killed in these specta-
tcles. The splendid bull-fights formerly exhibited
by the king on festival days were very cost-
ly. The Spaniards distinguish the toro,
in which the bull is killed, from the corrida
de novillos, where he has his horns tipped
with leaden balls (novillo embolado), and is
only irritated. Bull-fights, in the capital,
and in all the larger cities of Spain, are
usually held by private persons, or for the ben-
efit of some public institution. They are
exhibited at Madrid twice a week through
the summer regularly, for the benefit of
the general hospital. The income from
such a spectacle is commonly about 2000
dollars, and the outlay, which goes prin-
cipally to the combatants, who have their
fixed wages, about 1000.

Bull-fights are held, at Madrid, in the Céspedes
del Toro, an amphitheatre having circular
seats, rising one above another, and a row
of boxes over them. All the spectators
are dressed in their best. The comba-
tants, who make bull-fighting their profes-
sion, march into the arena in procession,
with some magistrate at their head. They
are of various kinds—the picadores, com-
batants on horseback, in the old Spanish
knightly garb; the banderilleros, comba-
tants on foot, in short, variegated frocks,
and in all the larger cities of Spain, are
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knightly garb; the banderilleros, comba-
tants on foot, in short, variegated frocks,
and, in case of danger, they save them-
Selves by leaping over the wooden fence,
which surrounds the arena. The bande-
rolleros then come into play. They try
to wound the bull with their banderillas—
hollow tubes filled with powder, having
strips of paper wound round them, and
small hooks at the ends. If they succeed,
the spurs which are attached to them are
discharged, and the bull races madly about
the arena. The matador now comes in
gravelly, with a naked sword, and aims a
fatal blow at the animal. If it is effec-
tual, the slaughtered bull is dragged away, and
another is let out from the stall. If a bull
is too inactive, the dogs are set upon him;

BULL-DOG—BULL-FIGHTS.

321
if he is too violent, several horses are often killed. The bull is more furious in proportion as the heat of the weather is greater. Burlesque scenes accompany the spectacle: apes are trained to spring upon the neck of the bull, without his being able to reach them. Men of straw are set up before him, upon which he exhausts his strength. Some of the foot combatants, likewise, dress themselves grotesquely, to irritate the bull, and amuse the spectators. (See Doblado's *Letters from Spain*, and *A Year in Spain*, by a young American.)

Bullfinch (Loxia pyrrhula; L.); a well-known European bird, which has a short, rounded, robust bill, a black cap, and plumage on the back of an ash or dark blue-gray color: the inferior parts of the body are reddish. The female is of a grayish red beneath. The bullfinch builds its nest in hedges, and various trees, and feeds chiefly on different seeds and buds of fruit-trees, for which its strong, thick bill is well adapted. The bullfinch is remarkable for the facility with which it is tamed and taught to sing, or even to articulate words. Its natural tones are soft, and, when taught to repeat tones, by a bird organ, nothing can be imagined more delightfully sweet and clear than its piping. In captivity, it appears to be rather a dull and quiet bird, though it displays much attachment to its feeder, showing evident marks of pleasure at his approach, and singing at his bidding. Bullfinches thus taught are sold at high prices, as much as $30 or $30 being demanded for a single bird. There are species of finch found in America, which, might, without much difficulty, be taught to perform as well.

Bullfrog. (See Frog.)

Bull, John. (See John Bull.)

Bullion is uncoined gold or silver, in bars, plate, or other masses. The word *bullion* was of frequent use in the proceedings respecting the bank of England (see Bank), from 1797, when the order of council was issued, that the bank should discontinue the redemption of its notes by the payment of specie, to 1823, when specie payments were resumed; for, by a previous law, the bank was authorized to pay its notes in uncoined silver or gold, according to its weight and fineness. The investigations of the bullion committees, and the various speculations on the subject of bullion, related to the supply of gold and silver, whether coined or not, as the basis of the circulating medium. (See Currency.)

Bullock. (See Ox.)

Bullock's Museum, Piccadilly, London; a private establishment for the deposit of collections of all sorts, particularly of natural history and ethnography. The following not very scientific classification of the curiosities there is given in the Picture of London: curiosities from the south seas, from America, from Africa; works of art, natural history, specimens of quadrupeds stuffed, birds, reptiles, insects, fish, productions of the sea, minerals, *miscellanea*, halls of arms. This museum is open for the inspection of the curious every week-day (admittance, one shilling), and continual additions are made to it. Here Belzoni deposited his Egyptian collections.

Bull's Bay, or Barbel Bay; a well-known bay in Newfoundland, a little to the north of St. John's harbor, on the east side of the island. Lon. 52° 29' W.; lat. 47° 23' N.

Bulmer, William; next to Bensley, the most distinguished printer in England. One of the first productions of his press was an edition of Persius, 1790, 4to. Among his masterpieces are the splendid editions of Shakespeare (1792-1801, 9 vols., folio), from which his establishment was called the *Shakespeare press*; and of Milton (1794-97, 3 vols., folio). He is a particular favorite of the fancy bookbinders in England (hence he has most of the printing for the Roxburghe club), and is supported almost solely by them. The unprejudiced will, however, not put him above Bensley. The productions of his press, particularly the works of Dibdin, are disfigured by errors more than is allowable in an artist who aspires to tread in the steps of Didot and Bodoni.

Bulow, Frederick William, count von Demernitz, royal Prussian general of infantry, knight of several military orders, &c., famous for his victories in the last French and German war, was born in 1755, on his father's estate, Falkenburg, in Altmark. In his 14th year, he entered the Prussian army, and, in 1773, was appointed governor of prince Louis Ferdinand of Prussia. In this capacity, he served with distinction in the campaign on the Rhine. In 1793, his charge of the prince ended, and he received a battalion. In the war of 1806, he was a lieutenant-colonel at the siege of Thorn, and distinguished himself in various battles. In 1808, he was made major-general and general of brigade. When the war against France broke out in 1813, he fought the
first successful battle, at Möckern, April 5; May 2, took Halie, and protected Berlin from the danger which threatened it, by his victory at Luckau, June 4. After the armistice, he commanded the third division of the army, under the crown-prince of Sweden, and saved Berlin a second time by the memorable victory of Grosbeeren, Aug. 23. He relieved the same city a third time by the great victory at Dennewitz. (q. v.) For this service, the king made him one of the few grand knights of the iron cross, and, after the end of the campaign, bestowed on him the title count Bülow of Denevitz, and made the same hereditary in his family. At the storming of Leipsic, Oct. 19, he took an important part. He distinguished himself equally in Westphalia, Hesse, Bavaria, on the Rhine, at Louvain, and took Soissons and Lefère. After the peace, he was commander-in-chief in East Prussia, and Lithuania. At the opening of the campaign of 1815, he received the chief command of the fourth division of the army, with which he contributed so essentially to the victory of Waterloo, that the king gave him the command of the 15th regiment of the line, which was to bear, in future, the name of the regiment of Bülow von Denevitz. Jan. 11, 1816, he resumed the chief command in Königsberg, in Prussia, and died there, Feb. 25, 1816. B. was highly esteemed, both as a citizen and as a man. He had learned the art of war, in early youth, scientifically, and continued the same study with unremitting diligence, throughout his military course. He was also devoted to literature and the fine arts. Music especially attracted him, and he composed many motets, a mass, and the 51st and 100th psalms.

Bülow, Henry von, born at Falkenberg, in Brandenburg, 1770; studied in the military academy at Berlin, and afterwards entered the Prussian service. But he soon retired, and occupied himself with the study of Polybius, Tacitus, and J.J. Rousseau, and then served for a short period in the Netherlands. He afterwards undertook to establish a theatre, but immediately abandoned his project, and visited the U. States; from whence he returned poor in purse, but rich in experience, and became an author. His first work was on the Art of War, in which he displayed uncommon talents. He wrote a book on Money, translated Travels of Mungo Park, and published, in 1801, his History of the Campaign of 1800. In 1804, he wrote Lehrbüüte des neuen Krieges (Theory of modern Warfare), and several other military works, among which is Tactics of the Moderns as they should be. In the former, he points out the distinction between strategy and tactics, and makes the triangle the basis of all military operations. This principle of his was opposed by Jomini, and other French writers. His history of the war of 1805 occasioned his imprisonment in Prussia, at the request of the Russian and Austrian courts. He died in 1807, of a nervous fever, in the prison of Riga. He was a follower of Swedenborg.

Bulwark. (See Bastion.)

Bun-Box; a small boat used to sell vegetables, &c., to ships lying at a distance from shore.

Bundelcund; a district of Allahabad, lying between 27° and 26° N. The country is mountainous and stony, and produces all kinds of fruit. It was ceded by the Mahrattas to the British in 1804, by whom it was annexed to the province of Benares. It is famous for the diamonds of Panmah. Square miles, 11,000. Chief towns, Banda, which is the residence of the officers of government; Calinger, &c.

Bungo; an East Indian term for a house with a thatched roof.

Bungo; a kingdom in Japan, and one of the most considerable in the island of Bungo, or Ximo. The capital is Fumay. The king of Bungo was baptized by the name of Francis Givan, and sent a solemn embassy to pope Gregory XIII, in the year 1582. Lon. 132° E.; lat. 32° 40'.

Bunk is a word used, in the U. States, to signify a case or cabin of boards for a bed. Thus, in the army, the soldier's birth is called his bunk.

Bunker Hill. (See Charlestown.)

Bunty; the middle part or cavity of the principal square-sails, as the main-sail, fore-sail, &c. If one of them be supposed to be divided into four equal parts, from one side to the other, the two middle divisions, which comprehend half of the sail, form the limits of the bunty.

Bunting; a thin woollen stuff, of which the colors and signals of a ship are usually formed.

Bunyan, John, was the son of a tinker, and was born at the village of Elston, near Bedford, in 1588. He followed his father's employment, and, for some time, led a wandering, dissipated life. During the civil war, he served as a soldier in the army of the parliament; and the danger to which he was then exposed probably brought him to reflection, in consequence
of which his conduct became reformed, and his mind impressed with a deep sense of the truth and importance of religion. He joined a society of Anabaptists at Bedford, and at length undertook the office of a public teacher among them. Acting in defiance of the severe laws enacted against dissenters from the established church, soon after the restoration, B. incurred the sentence of transportation; which was not executed, as he was detained in prison more than twelve years, and last liberated through the charitable interposition of doctor Barlow, bishop of Lincoln. To this confinement he owes his literary fame; for, in the solitude of his cell, his ardent imagination, brooding over the mysteries of Christianity, the miraculous narratives of the sacred Scripture, and the visions of Jewish prophets, gave birth to that admired religious allegory, the Pilgrim's Progress—a work which, like Robinson Crusoe, has remained unrivalled amidst a host of imitators.

He joined a society of Anabaptists at Bed ford, and became extreme ly popular. He died during a visit to London, in 1688.

Buonaparte. (See Bonaparte.)

Buonaparte, Michelangelo. (See Angelo.)

Buoy: any floating body employed to point out the particular situation of any thing under water, as of a ship's anchor, a shoal, &c. —The cask buoy is of a conical form, and painted with some conspicuous color; it is used for pointing out shoals, sand-banks, &c. —The mooring buoy; the smaller for cables, and are known as cable buoys. The buoy-ropes fastens the buoy to the anchor, and should be as long as the depth of the water where the anchor lies; it should also be strong enough to draw up the anchor in case the cable should break.

—The life or safety buoy is intended to keep a person afloat till he can be taken from the water. It should be suspended from the stern of the ship, and let go as soon as any person falls overboard. A light may be attached to it, both to indicate its position to the individual in danger, and to direct the course of the boat to relieve him, if the accident happens by night.

Burats. (See Burialts.)

Burcchiello, Domenico; one of the most eccentric of poets. Of the circumstances of his life we know but little. He lived, at the beginning of the 15th century, at Florence, where he was born. He was the son of a barber named Giovanni, and was called, originally, only Domenico. He assumed the name of B. afterwards, for reasons that cannot be assigned. His first book appeared in 1433. He was first registered as a barber in 1432. Some writers have reproached him for shameful vices, and represented him as a low buffoon, who did every thing for money. Others have defended him. His fame began about 1435.

Burckhard, John Louis, born in 1784, celebrated for his travels to Nubia, was descended from a respectable family in Halle. As he was unwilling to enter into the service of his country, at that time oppressed by France, after having completed his studies at Leipsic and Géttingen, he went to London, in 1806, where the African association wished to make a new attempt to explore Africa, from the north to the interior, in the way already trodden by Hornemann. They received B.'s proposal to undertake this journey in 1808. B. now studied the manners of the East, and the Arabian language, in their purest school, at Aleppo. He remained two years and a half in Syria,
visited Palmyra, Damascus, Lebanon and other regions; after which he went to Cairo, in order to proceed with a caravan, through the northern part of Africa, to Fezzan. In 1812, he performed a journey up the Nile, almost to Dongola; and afterwards, in the character of a poor trader, and Turk of Syria, proceeded through the deserts of Nubia (where Bruce had travelled before him), under great hardships, to Berber and Shendi, as far as Sacken on the Red sea, whence he passed through Jidda to Mecca. He was now so well initiated into the language and manners of the Arabians, than, when a doubt arose concerning his Islamism, after having passed an examination in the theoretical and practical parts of the Mohammedan faith, he was acknowledged by two learned jurists, not only a very faithful, but a very learned Mussulman. In 1815, he returned to Cairo, and afterwards visited Sinai. Just before the arrival of the long-expected caravan, he died at Cairo, April 15, 1817. The Mohammedans performed his obsequies with the greatest splendor. He had previously sent home all his journals. His last thoughts were devoted to his mother. B. was the first modern traveller who succeeded in penetrating to Shendi, in the interior of Soudan, the depot of trade for Eastern Africa, and in furnishing exact information of the slave-trade in that quarter. He found articles of European fabric, such as the Zellingen sword-blades, at the great fair of Shendi. His Travels in Nubia, in 1815, were published in London, and by the African Association, with his researches into the interior of Africa.

Burckhardt, John Charles; member of the royal French academy of sciences, one of the first astronomical calculators in Europe, born at Leipsic, April 20, 1778, applied himself to mathematics, and acquired a fondness for astronomy from the study of the works of Lalande. He applied himself particularly to the calculation of solar eclipses, and the occultation of certain stars, for the determination of geographical longitudes. He made himself master, at the same time, of nearly all the European languages. Professor Hindenburg induced him to write a Latin treatise on the combinatorial analytic method (Leipsic, 1794), and recommended him to Baron von Zach, with whom he studied practical astronomy at his observatory on the Seeberg near Gotin, and whom he assisted, from 1795 to 1797, in observing the right ascension of the stars. Von Zach recommended him to Lalande, at Paris, who received him at his house, Dec. 15, 1797. Here he distinguished himself by the calculation of the orbits of comets, participated in all the labors of Lalande, and those of his nephew, Francois Lalande, took an active part in the observatory of the ecole militaire, and translated the two first volumes of Laplace's Mechanique Celeste into German (Berlin, 1800). Being appointed adjunct astronomer by the board of longitude, he received letters of naturalization as a French citizen, Dec. 20, 1798. His important treatise on the comet of 1770, which had not been visible for nearly 30 years, although, according to the calculations of its orbit, it should have returned every five or six, was rewarded with a gold medal, by the institute, in 1800. This treatise, which proposed some improvements in doctor Olbers' mode of calculation, is contained in the Mem. de l'Institut, 1806. During this year, he was made a member of the department of physical and mathematical sciences in the academy; in 1818, was made a member of the board of longitude, and, after Lalande's death, astronomer in the observatory of the military school. In 1814 and 1816, he published in French, at Paris, Tables to assist in Astronomical Calculations. He also wrote some treatises in von Zach's Geographical Ephemerides. His labors in the board of longitude were particularly valuable. He died in 1825.

Burdett, or Burdett; 1. the contents of a ship; the quantity or number of tons which a vessel will carry; 2. the part of a song which is repeated at every verse or stanza, is called the burden of the song, from the French bord de dance, drone or base, because they are both characterized by an unchangeable tone, and bear upon the ear with a similar monotony.

Burdett, sir Francis, baronet, member of the British parliament, in which he has long held a conspicuous place in the opposition, is descended from an ancient and opulent family, and was educated at Westminster. He entered on his parliamentary career in 1796, when he was chosen member from Boroughbridge. He soon distinguished himself as an ardent and enlightened friend of reform, and the steady opposer of the arbitrary measures of the ministry, the suspension of the habeas corpus act, the sedition bills, and the policy towards Ireland. In 1802, he was returned member for Middlesex.
1804, he was wounded in a duel with Mr. Paull, which arose from political causes. After the death of Pitt, he voted with the Fox ministry, and, in 1807, was elected to parliament from Westminster. In 1810, having addressed a letter to his constituents, in which he accused the house of commons of a usurpation of power in committing to prison the author of a publication derogatory to the dignity and privileges of the house, a writ was issued against him, ordering that he should be committed to the Tower. The execution of the writ was resisted, during three days, by crowds which surrounded his house. Several riots took place; but he was finally arrested, and conducted to the Tower, where he remained till the prorogation of parliament. He has since continued a vigilant and bold opponent of corruption and oppression on the part of the ministry. In 1815, he presented a petition of the city of Westminster, in favor of peace and parliamentary reform, with a speech, in which he advocated a peace with Napoleon, accused the ministers of a violation of treaties, by which, he said, they had effected the downfall of the emperor, and placed the Bourbons, a name synonymous with falsehood, on the throne of France.

Bureau; a writing-table; afterwards used to signify the chamber of an officer of government, and the body of subordinate officers who labor under the direction of a chief. Bureau system, or bureaucracy, is a term often applied to those governments in which the business of administration is carried on in departments, each under the control of a chief; and is opposed to those in which the officers of government have a coordinate authority. Sometimes a mixture of the two systems is found. Thus the business of the executive branch of government may be carried on by bureaus, while the administration of justice is in the hands of coordinate judges. The bureau des longitudes, in France, corresponding to the English board of longitude, is charged with the publication of astronomical and meteorological observations, the correction of the astronomical tables, and the publication of the Connaissance des Temps, an astronomical and nautical almanac. (See Almanac.) According to the parliamentary usage of France, at the opening of each session, the chamber of deputies is divided into nine bureaux, composed of an equal number of deputies, designated by lot. Each bureau appoints its own president, and discusses all matters referred to it by the chamber separately. A reporter is appointed by each bureau, and, after the discussion by bureaus, the nine reporters meet, discuss the subject, and appoint one of their number to report to the whole chamber, where the final discussion and decision of the subject takes place. (See Règlement pour la Chambre des Députés, Paris, 1827, chap. v.)

Béa, John Tobias; an astronomer, born, 1705, in Treves; resolved, when young, to become a mechanic, for the purpose of supporting his father, but was prevented by his teacher, who perceived his great talents; studied mathematics and astronomy under Triesnecker; was, in 1791, professor of natural philosophy in Clagenfurt, and, in 1792, adjunct astronomer at the imperial observatory. He has distinguished himself by his theory of the motion of the moon. The national institute proposed, as a prize question, in 1798, the determination, by at least 500 accurate observations, the epoch of the mean distance of the apogee of the moon and of her ascending node. The committee who examined the calculations of the competitors found those of B. and of Alexander Bouvard both so excellent, that they determined to divide the prize between them; but the consul Bonaparte doubled the prize, assigning one to each. B.'s tables of the moon, according to the theory of Laplace, were published in 1806, by the national institute.

Burgas, or Bourgas; a trading town of European Turkey on the Black sea, in the government of Roumelia. The bay on which it stands is of sufficient depth for large vessels, and the exports are grain, iron, butter, wine, and also woollen goods for Constantinople. Lon. 27° 29' E.; lat. 42° 31' N.

Bürger, Godfrey Augustus, born Jan. 1, 1743, at Wolmersweide, near Halberstadt, where his father was a preacher, died June 18, 1794, at Göttingen. Before his 10th year, he learned nothing but reading and writing, but showed a great predilection for solitary and gloomy places, and began early to make verses, with no other model than that afforded by hymn books. He learned Latin with difficulty. In 1764, he studied theology at the university in Halle, and, in 1768, he went to Göttingen, in order to exchange theology for law, but soon formed connections here equally disadvantageous to his studies and his morals. His grandfather, who had hitherto maintained him, withdrew his support from him.
The friendship of several distinguished young men at the university was now of great service to him. In union with his friends, he studied the ancient classics and the best works in French, Italian, Spanish and English, particularly Shakespeare, and the old English and Scotch ballads. Percy's Relics was his constant companion. His poems soon attracted attention. In 1773, he obtained, by the influence of Boie, the small office of bailiff in Alten-Gleichen, and, by a reconciliation with his grandfather, a sum for the payment of his debts, which he unfortunately lost, and, during the rest of his life, was involved in pecuniary difficulties. In 1774, he married the daughter of a neighboring bailiff, named Leonardt, but his marriage was unfortunate. He conceived a violent passion for the sister of his wife, and married her, in 1784, soon after his first wife's death. She also, his celebrated Molly, died in the first year of their marriage. At the same time, he lost his little property by imprudent management, and was obliged, by intrigues, to resign his place. He was made professor extraordinary in Göttingen, but received no salary, and this favorite poet of the nation was obliged to gain a living for himself and his children by poorly-rewarded translations for booksellers. A third marriage, in 1790, with a young lady of Suabia, who had publicly offered him her hand in a poem, completed his misfortunes; he was divorced from her two years afterwards. The government of Hanover afforded him some assistance shortly before his death, which took place in June, 1794, and was occasioned by a complaint of the lungs. In the midst of these misfortunes and obstacles, it is astonishing how much he did. He has left us songs, odes, elegies, ballads, narrative poems and epigrams. In none of these departments does he hold a low rank; in some, the public voice has placed him in the first. Schiller criticised him very severely; he denied him the power of idealizing, and reproached his muse as being of too sensual a character. The judgment of A. W. Schlegel seems more just: he says, "B. is a poet of a more peculiar than comprehensive imagination; of more honest and plain than delicate feelings; his execution is more remarkable than his conception; he is more at home in ballads and simple songs than in the higher lyrical poetry; yet, in some of his productions, he appears as a true poet of the people, and his style, with some faults, is clear, vigorous, fresh, and sometimes tender." The first collection of his poems appeared in Göttingen, 1778. His poetical works have been published several times by K. Reinhard; last in Berlin, 1823—25, 8 vols.; so also his Lehrbuch der Ästhetik (Compendium of Aesthetics), Berlin, 1823, and his Lehrbuch des Deutschen Stils (Manual of German Style), Berlin, 1826.

BURGESS, in England; the holder of a tenement in a borough: in a parliamentary sense, the representative of a borough. The latter must have a clear estate to the value of £300 per annum. The burgesses in parliament bear a quadruple proportion to the members for counties; the former being (from England alone) 339, the latter, 80. The whole number of the former, from the three kingdoms, is 396; of the latter, 186. Before the North American revolution, the popular branch of the legislature in Virginia was called the house of burgesses; it is now called the house of delegates.

BURGERS. (See Seceders.)

BURGLARY (supposed to be derived from the German burg, a house, and larron, a thief, from the Latin lato) is defined to be a breaking and entering the mansion-house of another, in the night, with intent to commit some felony within the same, whether such felonious intent be executed or not. This is the modern signification of the term, which formerly applied, also, to the breaking into a church, fort or town; and the breaking into a church is said, by Sir William Blackstone (4 Com. 224), to be, undoubtedly, burglary. Both breaking and entering are considered necessary to constitute the offence. The opening a door or window, picking a lock, or unlocking it with a key, raising a latch, or loosening any fastenings, constitutes a breaking. Likewise, knocking at the door, and, on its being opened, rushing in, has been so considered. So, if a lodger in the same house open and enter another's room; or if a servant conspire with a robber and let him into the house, it will be such a breaking of a house, as, if done with intent to commit a felony, will be burglary. The breaking and entering must, however, be in the night, to make it burglary; and, according to Lord Hale's opinion (1 P. C. 550), if there be enough of daylight in the evening twilight or dawn for discerning a man's face, it will not be burglary. But this does not extend to moonlight, since such a construction would secure impunity to many burglaries. The breaking open of a barn, shop,
shed, or other building, is not burglary, unless it be appurtenant to a dwelling-house. A chamber in a college, or in the London inns of court, is, for this purpose, considered to be a mansion-house. The more usual punishment of burglary has heretofore been death. In the United States, there is some diversity of punishment for this offence, the penalty being death in some states, and imprisonment for life or years in others. In Maine, for the principal and accessory before the fact, where the criminal enters a dwelling-house by night, with a deadly weapon, it is death. In New Hampshire, the offence, according to the common definition, is punished by imprisonment and hard labor for life. In Vermont, the punishment is imprisonment in the state prison for a term not exceeding 15 years, or a fine not exceeding 1000 dollars; in Massachusetts, imprisonment for life of the principal and accessory before the fact, in case of being armed with a deadly weapon; in Rhode Island, death; in Connecticut, imprisonment in the state prison not exceeding 3 years; in New York, a fine, and imprisonment for life with hard labor not exceeding 10 years; in Pennsylvania, for the first offence, imprisonment not exceeding 10 years; for the second, not exceeding 15; in Maryland, restoration of property, and imprisonment not less than 2 nor exceeding 10 years; in Virginia, restoration of property, and imprisonment not less than 5 nor more than 10 years; and in Louisiana, imprisonment not less than 10 nor more than 15 years; and the code of this state makes the crime the same considered to be committed in a house during the day, until night, as where he breaks into it during the night. The British statute 7 & 8 Geo. IV, c. 28, defines the committing a felony in a mansion-house. [The American statutes generally adopt this description.] It also defines what shall be considered as part of the house, saying, that no building within the same curtilage, and occupied with the dwelling-house, shall be deemed a part of it for this purpose, "unless there shall be a communication" with the house "by means of a covered and enclosed passage." This provision clears up a doubt that had hung over the former law. This act also provides (s. 19) that, "if any person shall break and enter a house and steal," &c., or shall steal any property in any dwelling-house, any person therein being put in fear, or "shall steal to the value of £5," he shall suffer death; and it does not appear, by Mr. Collier's edition of the criminal statutes, 1825, that any distinction is made, in this section, as to the offence being by day or night. This crime is punishable, under the French code (Penal. lib. 3, tit. 2, c. 2, s. 1, No. 351, 383), either by death or by hard labor for life, according to the circumstances of aggravation.

Burgoaster; the name of the chief magistrates of large towns in the Netherlands and Germany. Their number and term of office are different in different places. They are sometimes chosen for life, sometimes for a fixed period. They reside in the municipal councils, &c. The same officer, in France, is called maire; in England and the cities of North America, mayor.

Burgoes; a city of Spain, the capital of Old Castile, and once the residence of its kings. It stands on the declivity of a hill, on the right bank of the Arlanzon. The streets are narrow and dark. It contains a college, numerous churches and convents, and a population of about 10,000. The cathedral, one of the most beautiful Gothic structures in Spain, was built in the 13th century, and, as well as some of the other churches, contains splendid manuscript. It is so large, that service can be performed in eight chapels at once, without confusion. The wool of Old Castile passes principally through B., and it has some woollen manufactures. It was captured by the English in 1813. Lat. 43° 21' N.; lon. 2° 40' W.

Burgoyn; an English general officer and dramatist. He was the natural son of Lord Burley, and entered early into the army. In 1762, he commanded a force sent into Portugal for the defence of that kingdom against the Spaniards. He also distinguished himself, in the American war, by the taking of Ticonderoga, but was, at last, obliged to surrender, with his army, to General Gates, at Saratoga. He was elected into parliament for Preston, in Lancashire, but refusing to return to America, pursuant to his convention, was dismissed the service. He published some pamphlets in defence of his conduct, and is the author of three dramas,—the Maid of the Oaks, Bon Ton, and the Heiress,—all in the line of what is usually called genteel comedy, of which they form light and pleasing specimens.
BURGUETTA—BURGUNDIANS.

BURGUETTA, or ELBURGUETTA; a town of Spain, in the valley of Ronceval, where the rear-guard of Charlemagne's army was defeated by the Saracens, and the famous Roland slain, A. D. 778; 24 miles N. E. of Pamplona.

BURGUNDIANS. The Burgundians called by the ancients, Burgundii, Burgundiones, Burguni, Burgiones, Buntiones, and sometimes Ursundii, one of the principal branches of the Vandals, can be traced back to the country between the Oder and the Vistula, in what is now the New Mark, and the southern part of West Prussia. They were distinguished from the other Germans by living together in villages, burgen (whence, perhaps, they received the name of Burgundians). The others lived separately, and led a more wandering life. This is probably the reason why they retained possession of their country much longer than the neighboring Goths and Vandals, till, at length, they were no longer able to withstand the Gepide, who pressed in upon them from the mouths of the Vistula. In consequence of the loss of a great battle with the Gepide, they emigrated to Germany, where they advanced to the region of the Upper Rhine, and settled near the Alamanni. From them they took a considerable tract of country, and lived in almost continual war with them. In the beginning of the 5th century, with other German nations, they passed over into Gaul. After a long struggle, and many losses, they succeeded in obtaining possession of the south-eastern part of this country by a contract with the Romans. A part of Switzerland, Savoy, Dauphiny, Liéonnais and Franche-Comté belonged to their new kingdom, which, even in the year 470, was known by the name of Burgundy. The seat of government seems to have been sometimes Lyons, and sometimes Geneva. By their old constitution, they had kings, called regnans, whom they chose and deposed at their pleasure. If any great calamity befell them, as a failure of the crops, a pestilence, or a defeat, the king was made responsible for it, and his throne was given to another, under whom they hoped for better times. Before their conversion to Christianity, which happened after their settlement in Gaul, they had a high-priest, called sinetius, whose person was sacred, and whose office was for life. The trial by combat even then existed among them, and was an appeal to the judgment of God. Continually endeavoring to extend their limits, they became engaged in a war with the Franks, by whom they were finally wholly subdued, under the son of Clovis, after Clovis himself had taken Lyons. They still preserved their constitution, laws and customs for a time. But the dignity of king was soon abolished, and, under the Carolingians, the kingdom was divided into provinces, which, from time to time, shook off their dependence. In 870, Boson, count of Autun, brother-in-law of king Charles the Bald, and duke of Milan, with the assent of the Burgundian nobles, succeeded in establishing again the royal dignity in this kingdom. He styled himself king of Franche-Comté. His residence was at Arles, and hence is derived the name kingdom of Arles. He was deprived of several provinces by Louis and Carloman; but his son Louis added to his hereditary possessions the country lying beyond the Jura, and thus established the kingdom of Burgundy, Cis-Jurana, or Lower Burgundy, which included a part of Provence, with Arles, Dauphiny, Liéonnais, Savoy, and a part of Franche-Comté. A second kingdom of Burgundy arose when the Guelph Rodolph von Streitlingen (duke of Swiss Lorraine) gained possession of the rest of Lorraine, namely, Switzerland beyond the river Reus, the Valais, and a part of Savoy, and, in short, all the provinces between the Jura and the Pennine Alps, and caused himself, in 883, to be crowned king of Upper Burgundy (regnum Burgundicum Transjurana). Both Burgundian kingdoms were united about the year 956, and, after the race of Rodolph became extinct (1052) were incorporated with Germany, under the emperor Conrad II. But a third state, which had its origin about the same time with Upper Burgundy, consisting, principally, of the French province Bourgogne (Burgundy, properly so called), and the founder of which is said to have been Richard, brother of Boson (first king of Lower Burgundy), maintained its independence. From Ludovig, granddaughter of Richard, and her husband, Otho, a brother of Hugh Capet, sprang the ancient dukes of Burgundy (Bourgogne). They became extinct, in 1361, with the death of duke Philip, and Burgundy was immediately united, by king John of France, with the French crown, partly as a fief of the kingdom, and partly because his mother was sister of the grandfathers of the last duke. The dignity of duke of Burgundy was restored in 1363, by his grant of those domains, under the title of
a dukedom, as an appanage to his youngest and favorite son, Philip the Bold. Philip was the founder of the new line of the dukes of Burgundy. In 1388, he married Margaret, the widow of the last duke of the old line, only daughter and heiress of Louis III, count of Flanders, whereby he greatly augmented his possessions. At that time, Flanders, Mechlin, Antwerp and Franche-Comté fell to him. In 1404, he was made regent of France, on account of the sickness of Charles VI. Louis, duke of Orleans, in the previous year, having been obliged to yield to him this dignity, conceived a bitter hatred against him. This was the occasion of the famous division of the French between the Orleans and Burgundian parties. In 1404, Philip died, and was succeeded by his son, John the Fearless. Orleans now became regent of France. But both cousins remained bitter enemies, till, under the walls of Montfaucon, at the commencement of a civil war (1405), they embraced each other in the sight of the whole army, and, as a pledge of entire reconciliation, slept in the same bed the following night. Nevertheless, Orleans was assassinated in the street in 1407, and justice overtook him as he was about to repeat the farce of a public reconciliation with the dauphin, on the bridge of Montceau. While the first words of salutation were passing between them, he was stabbed by the companions of the dauphin (1419). His son and successor, Philip, surnamed the Good (previously count of Charolais), in the peace which was concluded between England and France and Burgundy (1420), succeeded in effecting the exclusion of the dauphin, as a punishment for the murder of duke John. In the reign of Philip happened his memorable dispute with Jacqueline of Brabant, and her second husband, the duke of Gloucester, which was settled by a treaty, by virtue of which Philip was to become the heir of Jacqueline (who died childless), and she was not to marry without his consent. But Jacqueline violated this last stipulation (1430), and Philip took possession of her territories, Hainault, Holland and Zealand. In 1434, he purchased Namur, and, in 1435, it was stipulated that king Charles VII should sue for pardon on account of the murder of John, and that Philip should receive from France the valuable districts of Maçon, St. Gengou, Auxerre and Bar sur le Seine for himself and his lawful male and female heirs; and, further, St. Quentin, Corbie, Amiens, Abbeville, Ponthieu, Douai, St. Riquier, Creveceeur, Arleux and Mortagne, and the county of Boulogne, for himself and his heirs. To these important possessions he added also, in 1441, the duchy of Luxemburg. In 1450, Philip had contracted a third marriage, as his two former wives had borne him no children. On his marriage with Isabella (Elisabeth), daughter of king John of Portugal, at Bruges (v. r.), in Flanders, he founded the order of the golden fleece. Three sons sprung from this marriage, of whom the two first soon died. The third, Charles count Charolais, after the death of Philip (at Bruges, July 10th, 1467), became duke of Burgundy. (See Charles the Bold.) He acquired Gueldres in 1475, and left behind him, in 1477, a daughter, Maria, the sole heiress of his states. Seven princes were her suitors, among whom were the dauphin of France and Maximilian of Austria. The last obtained her hand and the dukedom (the Netherlands and Upper Burgundy). The king of France received, of the Burgundian territory, nothing except the cities in Flanders and the dukedom of Bourgogne, which he assumed as being a male fee. Maria died in her 25th year, in consequence of a fall, leaving three children, Philip, Margaret, and Francis (who died soon after). The Burgundian provincies would not all recognise Maximilian as the guardian of his children. He betrothed his daughter to the dauphin, Charles, with the county of Artois and Burgundy, together with the Maconnais, Auxerrois, Salins and Bar sur le Seine, as her dowry. But his object, which was wholly to pacify the provinces, was not attained. The people of Flanders were particularly obstinate, and they went so far that Maximilian, two years after his election as king of the Romans (1488), was retained a prisoner at Bruges for more than three months. Finally, the people of Flanders acknowledged him as guardian of his son Philip, and regent of the government. Burgundy was, as we have seen above, separated into two parts.
BURGUNDIANS—BURGUNDY WINES.

—Burgundy Proper, and Upper Burgundy or Franche-Comté. The former was transferred from Spain to France in the ladies' peace, so called, of Cambrai, 1529. (See Francis I.) The latter Louis XIV conquered, and retained at the peace of Nimeguen. Since that time, the Burgundians have never been separated from France. (See Netherlands, Kingdom of.)


BURGUNDY (called, also, Burgundy Proper, or Lower Burgundy); formerly a province in the east of France, lying on the west of Franche-Comté, and on the south of Champagne. It was divided into the duchy of B. and four counties. It now forms the four departments of Yonne, Côte-d'Or, Saône-et-Loire and Ain, containing, according to official tables for 1827, 1,570,613 inhabitants. It is watered by a number of navigable rivers. The central canal joins the Loire with the Seine; that of B. will connect the Seine and the Rhône, and that of Monsieur will unite the Saône and the Rhône. B. is one of the most productive provinces in France. The plains are rich in arable land, the sides of the hills are covered with vine-trees and fruit-trees, while the summits abound in pastures, wood and game. The principal product is wine. (See Burgundy Wines.)

Burgundy, circle of; one of the 10 circles of the German empire, as divided by Maximilian in 1512. At first it comprised the Franche-Comté and the 17 provinces of the Netherlands. The 7 Dutch provinces having declared themselves independent, and the Franche-Comté being conquered by France, the Spanish or Austrian Netherlands alone composed the circle.

Burgundy, Louis, duke of, was born at Versailles, in 1682. His parents were the dauphin, son of Louis XIV, and the princess Anne of Bavaria. In his early childhood, he was stubborn, irascible, obdurate, passionately fond of every kind of pleasure, and inclined to cruelty, severe in his satire, attacking with great penetration the follies of those about him. The education of the prince was intrusted, in the seventh year of his age, to Fenelon, Fleury, and Beuvilliers. They succeeded in gaining his affection, and in giving him a right turn of mind. From this alteration in his character, he became amiable, humane and modest, and faithful in the discharge of his duties. In 1697, he married the intelligent and amiable princess Adelaide of Savoy, who was the ornament of her court, and was beloved by her husband with the tenderest affection. In 1698, Louis XIV ordered an encampment at Compiègne for the instruction of his grandson, to whom, in 1702, he gave the command of the army in Flanders, under the direction of marshal Boufflers. In a battle between the cavaliers, near Nimeguen, he showed determination and courage. Afterwards, under the most difficult circumstances, he was appointed commander-in-chief of all the forces in Flanders, but with instructions which made him dependent on the duke of Vendôme; Marlborough and prince Eugene having command of the opposing army. The differences which arose between the prince and Vendôme drew after them the most disastrous consequences. All France accused the prince as the author of these misfortunes, censuring his timid character and his religious scruples. He, however, appears to have succeeded in justifying his conduct in the eyes of the king. Vendôme, on the contrary, who had behaved very insolently towards the heir to the throne, fell into disgrace, but was favored by the opposition party. In 1711, the duke of Burgundy became dauphin, by the death of his father, and now began to attract the attention of the court, and the confidence of his sovereign, who appointed him a counsellor of state. France expected from the virtues and excellent intentions of this prince, to enjoy a long and general rest from her troubles; but he was suddenly taken away, Feb. 18, 1712, by a disease to which his wife and eldest son had already fallen victims, the one, the other 20 days before. In less than one year, France had seen three dauphins; and the fourth, the youngest son of the duke of Burgundy, and the only heir to the throne, afterwards Louis XV, was also in a dangerous situation. The public voice loudly accused the duke of Orleans, afterwards regent, as the cause of these misfortunes, of which, however, Louis XIV himself declared him innocent.

BURGUNDY WINES are produced in the former provinces of Upper and Lower Burgundy (q. v.), in a soil of a light-black or red loam, mixed with the débris of the calcareous rock on which it repose. In richness of flavor and perfume, and all the more delicate qualities of the juice of the grape, they are inferior to none in the world. It is to the great skill with which
The cultivation of the vine and the fermentation of the liquor are managed, that they owe those generous qualities, which gave to the dukes of Burgundy the title of princes des bon vins, and which, as Petrarch more than hints, contributed not a little to prolong the stay of their holiness at Avignon. They are remarkable for their spirituosity and powerful aroma, and are, therefore, more heating than some other wines which contain more alcohol. The exhilaration they produce is, however, more innocent than that resulting from heavier wines. The finer wines of Burgundy do not bear removal except in bottles; and, as they are not produced in great abundance, they are rarely, if ever, met with in foreign countries. It is the inferior growths which are sold under that name. The Burgundy wines are generally exported between January and May, chiefly in double casks. They keep only four or five years, and are very apt to acquire a bitter taste, which Chapuia attributes to the development of the acerb principle, and Henderson to that of citric ether. It may sometimes be partially removed by new sulphuring and fining. The most numerous are the red wines of Burgundy. The finest growths of these are the Romanée-Contoy, the Chambertin (the favorite of Louis XIV and Napoleon), the Closbougot, the Richebourg, the Romanée de St. Vivant, &c. They are distinguished for their beautiful color, and exquisite flavor and aroma, combining more than any other wines lightness and delicacy with richness and fulness of body. Of the second class are the vins de primeur, of which the Volnay and Pommard are the best; those of Beaune, distinguished above all by their pure flavor, and formerly considered the most choice of the Burgundy wines; the Macon wines, remarkable for their strength and durability; those of Tonnelle and Auxerre, &c. The white wines of Burgundy are less numerous, but not inferior in aroma and flavor. The famous Montrachet is equal to the finer red wines, and is distinguished for its agreeable nutty flavor. Of the second class are the Geuille d’or, so called from the splendid of its tint; La Perrière, &c. (See Julian’s Classification des Vins, and Henderson’s Ancient and Modern Wines.)

Buryial. Great care should be taken not to bury the body too soon after death. The ancient nations endeavored to satisfy themselves, by many precautions, that death had really taken place. The ancient Egyptians embalmed their dead; the Romans cut off one of their fingers, before they burnt them; other nations repeatedly washed and anointed them. Intemperance should never be allowed before the most undoubted symptoms of putrefaction have taken place. We should wait at least three days in winter, and two whole days in summer, unless the hot weather requires a quicker interment. It would be well to introduce the custom of exposing the corpse to the inspection of a person regularly instructed for this purpose, who should carefully and repeatedly examine it, and none should be interred without the certificate of this inspector. In many cases, it is troublesome, and even dangerous, to keep the body long, as in case of contagious diseases, or of want of room. In many places, to obviate this inconvenience, houses are erected, where the corpse is brought a few hours after the decease. (See France; also Burying-Places and Sepulture.)

Buriats, Burats, or Buratti. This nomadic Tartar nation consists of 77 tribes. They submitted to the Russian sceptre in 1644, and form the second principal branch of the Cumaes. They rove about in the southern part of the government of Irkutsk. Their number is upwards of 100,000. They can furnish 32,000 archers, and choose their own princes and elders. Their choice is confirmed, however, by the government of Irkutsk. They support themselves by their flocks, by hunting, and the mechanical arts, particularly the forging of iron. Their dress is leather bordered with fur. The B. protect their huts, which are hexagons, or octagonal, from heat and cold by covering them with leather. These huts they call jutres. The religion of this people is partly Lamasism and partly Shamanism. They call their supreme God Octorgon Burchan, or Tingiri Burchan (God of heaven). The planets are inferior gods; and the chief of the evil spirits is called Ochod. The idols of Lamasism, like those of Shamanism, are sometimes painted on cloth, and sometimes made of wood, metal, felt and sheep-skin. The smoke of the jutres makes the idols, disgusting in themselves, still more disgusting. The worshippers of the Grand Lama have this peculiarity, that male forms are the basis of their idols. As the female sex in this nation is considered unclean, they may not approach the place where the household gods are arranged. The male B. always burn incense, to purify any place where a woman has been sitting, before they sit.
BURIATS—BURKE.

there themselves. The poor B. sometimes go over to the Greek church, but continue to use their old ceremonies in reference to their new objects of worship. Their number, in 1783, was estimated at 49,764 males, and 47,932 females.

Burin, or Graver; an instrument of tempered steel, used for engraving on copper. It is of a prismatical form, having one end attached to a short wooden handle, and the other ground off obliquely, so as to produce a sharp point. In working, the burin is held in the palm of the hand, and pushed forward so as to cut a portion of the copper. The expressions brilliant burin, soft burin, are used to characterize the manner of a master. (See Engraving.)

Burke, Walsis, a fabulist of the 16th century, was born at Altenorfr, on the Werra. In his earlier years, he was a monk. After having travelled over Europe, he became a zealous Protestant, and died, in 1555, in the office of preacher at Abterode. His Aesop, in rhyme, contains 400 fables and amusing stories, partly from Aesop and other fabulists and novelists, partly original. They are written in a strain of happy humor and well-directed satire, and in an easy and often peculiar style. Esclernburg published a collection of them in 1776.

Burke, Edmund, a writer, orator and statesman of great eminence, was born in Dublin, Jan. 1, 1730. His father was an attorney of reputation, and he received his education under Abraham Shackleton, a Quaker, at Ballitore. In 1744, he was entered at Trinity college, Dublin, as pensioner, where he chiefly occupied himself with a plan of study of his own, the principal objects of which were the classics, logic, metaphysics, morals, history, rhetoric, and composition. He left Trinity college, after taking a bachelor's degree, in 1749; and not much is recorded of this period of his life, except that he made an unsuccessful application for the professorship of logic at Glasgow. At this period, he had planned a refutation of the metaphysical theories of Berkeley and Hume. In 1750, he first entered the great theatre of London, as a law student at the Temple, where he soon became the admiration of his intimates, for the brilliancy of his parts, and the variety of his acquisitions. Applying more to literature than to law, he supported himself by his pen, and, by intense occupation, brought himself into a state of ill health. This illness, by making him a guest to doctor Nugent, an eminent physician, led to his marriage with that gentleman's daughter. In 1756, he published, without a name, his first avowed work, entitled A Vindication of Natural Society, in a Letter to Lord ****, by a noble Lord. This work exhibited so complete an imitation, although ironical, of the style of Bolingbroke, that many persons were deceived by it, not perceiving B.'s intention to prove that the same arguments with which that nobleman had attacked religion, might be applied against all civil and political institutions whatever. In the same year, he published his Essay on the Sublime and Beautiful. The elegance of its language, and the spirit of philosophical investigation displayed in it, introduced the author to the best literary acquaintances. In 1758, he suggested to Dodsley the plan of the Annual Register, and took upon himself the composition of the historical part, which he continued for a number of years. He was thus gradually forming himself for a statesman. His political career may be said to have commenced in 1761, when he went to Ireland as confidential friend to William Gerard Hamilton, then secretary to the lord lieutenant, lord Halifax. For his services in this unofficial capacity, he was rewarded with a pension of £300 per annum, on the Irish establishment. On his return, in 1765, he was introduced to the marquis of Rockingham, then first lord of the treasury, who made him his private secretary; and, through the same interest, he became M.P. for the borough of Wendover. The marquis also made him a nominal loan, but real gift, of a large sum, which placed him in easy circumstances, and enabled him to purchase his elegant seat near Beaconsfield. His first speech in parliament was on the Grenville stamp act; and it was at his advice, that the Rockingham administration took the middle and undecided course of repealing the act, and passing a law declaratory of the right of Great Britain to tax America. This ministry was soon dissolved, to make room for a new cabinet, under Mr. Pitt. B. concluded his official labors by his pamphlet, entitled Short Account of a late Short Administration. In the proceedings against Wilkes, he joined the remonstrants against the violation of the rights of election, and, in 1770, published his Thoughts on the Causes of the present Discontents, the sentiments of which are consistent with his future doctrines and conduct. He opposed the ministerial measures antecedent and consequent to the American
war; and the whole powers of his eloquence were exerted, first to prevent, and then to heal, the fatal breach between the mother country and her colonies. In 1774, he was chosen member for Bristol; and it is to his credit that he subsequently ventured to give offence to his Bristol friends, by his support of the Irish petitions for free trade, and for moderating the penal statutes against the Roman Catholics. He soon, however, recovered all the ground thus lost by his famous reform bill, which he unsuccessfully advanced with an extraordinary union of wit, humor, and financial detail. In 1783, lord North's ministry was dissolved; and, on the return of the marquis of Rockingham and his party to power, B. obtained the lucrative post of paymaster-general of the forces, and a seat at the council board. He also embraced the suspicious opportunity to re-introduce his reform bill, which passed, but not without considerable modifications. On the death of the marquis of Rockingham, and the succession of lord Shelburn, B. resigned, and joined the coalition: the India bill formed the ostensible cause for dismissing this ill-judged combination; and Mr. Pitt succeeded to the helm, and dissolved the parliament. The next great political event of his life was his share in the prosecution of Mr. Hastings, which trial, indeed, originated with him. The Report of the Committee on the Trial of W. Hastings, 1794, was by B. His conduct in this affair gained him little in the public estimation, except increased fame as an orator. On the settling of the regency, in 1788, he argued against the principle of the ministers, that the regency was elective, and not hereditary. The last great set of his political life was, the part he took in the French revolution. He early manifested his dislike to it, and, in 1790, loudly condemned the principles and conduct of the revolutionists. His famous Reflections on the Revolution in France appeared in the following October; and no work ever attracted more attention, or produced more effect. It exhibits both the merits and defects of the writer, and contains much justness of argument, profundity of observation, and beauty of style; but it is equally obvious that he commits the very fault which he intended to reprobate, in his Vindication of Natural Society, by making his arguments applicable to the defence of all establishments, however tyrannical, and censure of every popular struggle for liberty, whatever the oppression. It had an unprecedented sale, and obtained unbounded praise from all who trembled for establishments, or were alarmed at the odious character which the French revolution was beginning to assume. On the other hand, it met with severe and formidable critics and opponents, and, among other things, produced the celebrated Rights of Man, of Thomas Paine. B. followed up this attack with a Letter to a Member of the National Assembly (1791); an Appeal from the New to the Old Whigs; Letter to a noble Lord on the Subject in Discussion with the Duke of Bedford (1796); Letters on a Regicide Peace, &c. In all these productions, he displayed unabated powers of mind. In 1792, he published a Letter to Sir Hercules Langrishe, on the Propriety of admitting Roman Catholics to the Elective Franchise, and, in 1794, withdrew from parliament, and was succeeded in the representation of Malton by his only son, whose death soon after hastened the decline of nature which he was beginning to experience. Decay, by gradual approaches, terminated his life on July 8, 1797, in the 68th year of his age. He preserved his senses to the last; and, a few hours before he died, he had read to him Addison's paper in the Spectator, on the immortality of the soul. Amiable in private life, and exemplary in his domestic and social relations, he was greatly beloved by his friends. His conversation was delightful and instructive. He was exceedingly charitable and beneficent, and founded a school for the children of French emigrants, the permanent support of which formed one of his latest cares. His public character will be best collected from a study of his political career, and his powers of mind from his publications. His oratory was preeminently that of a full mind, which makes excursions to a vast variety of subjects, connected by the slightest and most evanescent associations, and that in a diction as rich and varied as the matter. In delivery, however, the effect of his speeches was by no means proportioned to their absolute merit; their length, their copiousness, abundance of ornament, and wide field of speculation, producing impatience in men of business absorbed in the particular subject of debate; added to which, his manner was indifferent, his voice harsh, and his action, though forcible, inelegant. On the whole, though the greatest genius, he was by no means the most effective orator, in the house of commons. The entire works of this great man have been
the Champlain canal, and the river Hud-

son. The village is very finely situated,

side of the village, a mile distant from

side of the entrance of Onion river

W. 42° 41' 25" N.; lon. 73° 15' W. Population

high and low. High thoughts, for in-

ressences, or to provoke derision and ridicule.

BURLEIGH, Lord. (See Cecil.)

BURLEIGH, Lord. (See Cecil.)

BURLEIGH, Lord. (See Cecil.)

BUrLETTA; a light, comic species of

The burlesque

the name of a family of

LUDMILLA}ir

The burlesque

to jest. It origi-

learned men, originally from Cologne-

Francis B., born in 1633, was professor at

Leyden and Utrecht, where he died in

1769, and author of several theological

writings.—His son Peter, born at Utrecht,

in 1658, was made professor of history and rhetoric at

the university of Utrecht. At a later pe-

riod, he became professor of the Greek

language and policies. From this time,

he published, annually, either some classic

author, with notes, or masterly Latin

verses, or some pamphlet against his ad-

versaries, of whom he had made many

by his intolerant vehemence. His ed-

tions of the classics are not so much dis-

tinguished for taste, as for learning and

accuracy. He became professor of elo-

quency, history, and the Greek language,

in Leyden, 1715, and died in 1741. His

younger brother, Francis, died in 1719,

while professor of theology at Utrecht,

and was the author of several theological

writings. He left four sons, distinguish-

ed likewise as scholars.—John, born in

1706, died 1780, at Amsterdam, was a

physician, and professor of botany. Lin-

næus makes honorable mention of his

writings.—Peter, born in 1713, devoted

himself, like his uncle, to philological

pursuits. In 1734, he was made doctor

of law at Utrecht. In the following year,

he became professor of eloquence and

history at the university of Franeker.

In 1742, he went to Amsterdam, as pro-

fessor of history and ancient languages,

where he became, in succession, professor

of poetry, librarian, and inspector of the

gymnasium. Like his uncle, he has pub-

lished many good editions, particularly

of the Latin classics; like him, he was
distinguished by learning, by his talent

for Latin poetry, and by his hasty dispo-
sition. He died in 1778.—Nicolaus Lau-

rentius B. succeeded, in 1781, his fa-

ther, John B., as professor of botany,

for which science he did much by his own

writings, and by aiding the un-

takings of others. In particular, he

encouraged Thunberg to visit the cape,
of Good Hope and Japan. He died in 1763.

Burmann, Gottlob William, originally Burman, born in 1707, at Lautern, in Upper Lusatia, resided in Berlin in great poverty. He was small of figure, meagre, lame and deformed, but was endowed with sensibility for every thing sublime and beautiful.—He was highly eccentric. His poems were irregular, and deficient in taste and finish. His merits were obscured by his singularities, and his vigorous mind was forgotten before he died. He had a rare talent of improvisation. Struck with palsy, he passed the last ten years of his life in great misery. His most celebrated works are his fables, songs, and his poems without the letter r.

He died in 1763.

Burman Empire. (See Burman Empire.)

Burnet, Gilbert, was born at Edinburgh, in 1643, and, having studied at Aberdeen, he travelled into Holland in 1664. On his return, he was made fellow of the royal society, in London, and ordained at Edinburgh in 1665. In 1669, he was made professor of divinity at Glasgow, where he published his Conference between a Conformist and a Nonconformist; also, Memoirs of the Duke of Hamilton; and was offered a Scottish bishopric, which he refused. His Vindication of the Church and State of Scotland, so inconsistent with the general tenor of his conduct and opinions, was much approved at court, and a bishopric was again offered him, and refused. In 1673, he was made chaplain in ordinary to the king; and was in high credit, both with Charles and the duke of York. In consequence of the machinations in favor of popery, he inclined to the opposition party in the Scotch parliament, and afterwards removed to London, where he was coldly received by the king, and struck out of his list of court chaplains. The nation being alarmed on account of the progress of popery, B. undertook a History of the Reformation in England. He gave a first volume to the public in 1673, when the affair of the popish plot was in agitation. It procured for the author the unprecedented honor of thanks from both houses of parliament. The second volume appeared in 1681; the third, which was supplementary, in 1714. This is esteemed the most valuable of his writings. The high character of B. as a divine caused him to be sent for by the witty and profligate earl of Rochester, when, exhausted by a course of libertinism, he was sinking into the grave, at the early age of 33. The result of his conferences with the dying nobleman he gave to the world in his celebrated Account of the Life and Death of the Earl of Rochester. About this time, he wrote a letter to the king, announcing his public misgovernment and private vices. His connexion with the opposition party was now very intimate, and he attended lord Russell to the scaffold, whose speech there it is thought that he penned. He published, during this period, several works in favor of liberty and Protestantism, and wrote the lives of bishop Bedell and sir Matthew Hale. On the accession of James II, he made a tour in France and Italy, of which he published an account in letters addressed to Mr. Boyle. At the close of his travels, he was invited to the Hague by the prince and princess of Orange, and had a great share in the councils relative to England. James caused a prosecution for high treason to be commenced against him in England, and demanded his person from the states, who refused to deliver him up. In the revolution, he took an active part, accompanying the prince of Orange to England as chaplain, and was rewarded for his services with the bishopric of Sarum. On taking his seat in the house of lords, he displayed his usual moderation in regard to the non-juring clergy and dissenters. As a prelate, bishop B. distinguished himself by favor, ascendency and charity. In 1690, he published his Exposition of the Thirty-nine Articles. The scheme for the augmentation of poor livings out of the first fruits and tenths due to the crown originated with B. He died in March, 1715, in the seventy-second year of his age, leaving behind him his well-known History of his own Times, with an Account of his Life (2 vols. fol., 1723-1724). He merits the praise of depth, vigor, and variety of knowledge, but was lusty and rough in his composition. He was ardent, active and open, benevolent, liberal and disinterested; but vain, self-important and garrulous. He was the author of numerous works besides those mentioned. William, his eldest son, originally bred to the law, became governor, first of New York and New Jersey, and subsequently of Massachusetts and New Hampshire.

Burnet, Thomas, a learned divine and philosopher, was born at Croft, in Yorkshire, about 1635, educated under doctor Ralph Cudworth, at Cambridge, and afterwards travelled as tutor to several young noblemen. In 1661, he made himself known by his Telluris sacra Th-
BURNET—BURREY.

B. was appointed chaplain in or-
dinary and clerk of the closet to king
William. In 1682, he published his Ar-
chaeologia Philosophica, sive Doctrina an-
tiqua de Rerum Originibus. The free-
dom of opinion displayed in this work
led to the removal of the author from the
court and the royal closet. He died in
September, 1715, and was interred in the
charter-house chapel. Two posthumous
works of this author appeared in 1716—
a treatise De Fide et Officia Christiano-
rum; and another, De Statu, Fortunis
et Resurgentiis. All the works of
B. exhibit him as an ingenious specula-
tor, rather than as a patient and sober
inquirer concerning the moral and natu-
rual phenomena of which he treats. His
great work, the Theory of the Earth, is
one of the many systems of cosmogony,
in which Christian philosophers have at-
ttempted to reconcile the Mosaic account
of the creation, paradise, and the deluge,
with the traditions of the ancients, and
the principles of modern science. His
speculations are recommended by sub-
limity of description and eloquence of
style. In his Archeologia Philosophica,
the doctor has combated the literal inter-
pretation of the history of the fall of man;
and, to expose its improbability, he has
introduced an imaginary dialogue be-
tween Eve and the serpent, which, as
coming from the pen of a divine, is sin-
gular enough. It is only to be found in
the first edition of the work.

Burney, Charles; second son of the
historian of music; a classical scholar and
critic of high reputation. He was born
in 1726, at the family seat of
Monboddo, in Kincardineshire. After
studying at Aberdeen, he went to the
university of Groningen, whence he re-
turned to London, at the request of the
duke of York, where his compositions,
and the musical skill of his eldest daugh-
ter, Francisca d’Arblay, is the authoress
of many interesting observations, but
also exhibit some strange and paradoxical
opinions. Thus he seriously advocates
the existence of satyrs and mermaids; and
has advanced some whimsical specu-
lations relative to a supposed affinity be-
tween the human race and the monkey
tribe, which exposed him to a good deal
of ridicule on the first publication of his
theories. Both his official and his pri-
ivate character were extremely respecta-
bly; and he was, notwithstanding his ec-
centricities, a man of considerable learning and ability. He died, in consequence of
a paralytic stroke, at Edinburgh, May
26, 1799.

Burney, Charles, a celebrated com-
poser and writer on music, born at
Shrewsbury, in 1725, became his
brother, Burney, and completed them
at Chester, under the organist of the cathe-
dral there, continued them at Shrewsb-
bury, under the direction of his half-
brother, Burney, and completed them in
London, between 1744 and 1747, under
doctor Arne. In the latter year appeared
his first compositions. His musical pieces
Alfred, and Queen Mab, composed in
1743, made him known. In 1751, he
obtained the place of organist at Lynn
Regis, in Norfolk. Here he commenced
his General History of Music, and deter-
mined to visit all the institutions in Eu-
rope, at which he could obtain important
information for his work. In 1760, he
returned to London, at the request of the
duke of York, where his compositions,
and the musical skill of his eldest daugh-
ter, then eight years of age, excited a
mixture. In 1762, the university of Ox-
ford bestowed on him the honorary de-
gree of doctor of music. In 1770, he
visited France and Italy, and, two years
afterwards, the Netherlands and Ger-
many, for the sake of his great work. He
published an account of both tours. After
his second return, he became a fellow of
the royal society. In 1776 appeared the
1st volume of his General History of
Music from the earliest Ages to the pres-
cent Period (4to.); the 2d in 1779, and
the 3d and 4th in 1789. He is the author
too, or several other valuable works,
among which are the Memoir of Handel,
and several musical compositions. He
died in April, 1814, in the office of organ-
ist at Chelsea college. He wrote most
of the musical articles in Rees’ Cyclo-
pedia; B. had a numerous family, sev-
eral members of which have highly distin-
guished themselves. His second daugh-
ter, Francisca d’Arblay, is the authoress
of the well-known novels Evelina, Ce-
cilia, and Camilla.
at Lynn, in Norfolk, in 1737, and receiv-
ed his education at the charter-house school, and the universities of Cambridge and Aberdeen; distinguished himself as a writer in the Monthly Review, to which he contributed many articles on classical literature; subsequently entered into holy orders, and obtained some preferment in the church. He died in December, 1817; and his valuable collection of books, many of them enriched with manuscript notes, was purchased by par-

liament for the British museum. B. published an appendix to Scapula's Greek Lexicon from the MSS. of doctor Askew; a valuable edition of the choral odes of Aeschylus, the Greek tragedian; the Greek Lexicon of Philomcn; remarks on the Greek verses of Milton; an abridgment of Pearson's exposition of the creed; and a sermon preached at St. Paul's: besides which he printed, for private dis-

tribution, a small impression of the Latin epistles of doctor Bentley and other learned scholars.

Burning-Glass; a lens which unites the rays of light that fall upon it in so narrow a space as to cause them to kindle any combustible matter coming in their way, like fire. The same name has been sometimes given, though improperly, to the burning-mirror. (See the next article.) The lenses commonly used as burning-glasses are convex on both sides; these bring the rays upon a point with the greatest force, because of the shortness of their focal distance. The effects of a burning-glass are more powerful in proportion as its surface is greater, and its focus smaller. That such a glass may produce its greatest effect, it is necessary that the rays of the sun should fall upon it in a perpendicular direction, which is the case when the image of the sun, that appears at the moment of burning, is cir-
cular. It's second lens, of a smaller focal distance, is placed between the first and its focus, so as to intercept the rays which pass through the first, they are still more condensed, and united in a still narrower compass, so that the effect is greatly aug-

mented. The Greeks and Romans seem to have been acquainted with burning-glasses, or, at least, with a kind of trans-
parent stones similar to them. They became more known in the 13th century. At the close of the 17th, von Tschirnhaus-

sen caused the largest burning-glasses, consisting of one piece, that are known, to be polished with incredible pains. Two of them, still in Paris, are 33 inches in diameter, and the weight of one amounts to 160 pounds. Both glasses produce an effect equal to that of the most intense fire. They kindle wood which is both hard and wet in a mo-

ment, and make cold water, in small ves-
sels, boil in an instant; metals, placed upon a plate of china, are melted and vitrified by them; tiles, slates, and similar objects, become instantly red-hot, and vitrified. As Tschirnhausen's glasses, however, are not perfectly clear, and the effect is thus considerably lessened, Bris-

son and Lavoisier undertook, in 1774, to put together two lenses, resembling those used for watch glasses, filling up the space between them with a transparent fluid. In this manner, veins and impuri-
ties may be avoided, at less expense. They succeeded in making a burning-glass of 4 feet in diameter, the greatest thickness of which, in the centre, amounted to 8 inches, and which, of itself, had a much greater power than the glasses of Tschirnhausen, in connexion with a smaller lens, or collective glass, but pro-
duced an extraordinary effect if joined to a collective glass.—The experiments made by means of large burning-glasses are important in chemistry and physics. The power of a burning-glass, however, is almost four times less than that of a burning mirror, or reflector (q. v.), of equal extent and equal curvature. This reflects more light than the glass allows to pass through it; has a smaller focal distance, and is free from the dissipation of the rays, which takes place in the burning-glass, since it reflects them all nearly to one point, while the burning-glass refracts them to different points. On the other hand, the burning-glass is much more convenient, on account of the place of its focus, which is behind the glass. The burning point (focus) is an image of the sun; its diameter is equal to the 180th part of the focal distance, and its cen-
tre is the focus, properly so called. In the higher branches of geometry and conic sections, the foci are points in the parab,

ola, ellipsis, and hyperbola, where the rays, reflected from all parts of these curves, meet. Several accidents in mod-
ern times have shown, that conflagrations may be caused by convex window-glasses or water-bottles, &c., which have the form of burning-glasses, if the rays of the sun are concentrated by them upon com-

bustible substances lying within their reach. Since the casting and polishing of large lenses are attended with great dif-
ficulties, Buffon's plan of casting them in pieces, or zones, and afterwards putting
BURNING-GLASS—BURNS.

them together, has lately been practised. Lenses of this last kind have been ingeniously applied, by Becquey, for augmenting the light on light-houses, according to the suggestion of Fresnel. (See Pharo.) For the history of burning instruments, see the article Burning Mirrors, or Reflectors; mirrors, the smoothly polished surface of which reflects the rays of the sun that fall upon it in such a direction, that they unite at some distance from the mirror, in a more limited space, and act upon substances within this space like the most powerful fire. Concave mirrors cause the rays that fall upon them in a direction parallel to the axis to converge. Spherical mirrors of this kind are the most common; but parabolic ones are also used; and even plane mirrors may be employed like concave ones, if several of them are melted combined in a proper manner. In order that a burning mirror should produce its whole effect, its axis must be directed exactly towards the centre of the sun's disk. This is the case if the light, intercepted by a plane, perpendicular to the axis of the mirror, at its focal distance, forms a circle. The focus then lies in a straight line between the sun and the mirror. The ancients were acquainted with such mirrors, as is manifest from several of their writings still extant. It is impossible, from the nature of things, that Archimedes, during the siege of Syracuse by Marcellus, should have set fire to the fleet of the latter by means of concave mirrors: it would be more credible, that it had been effected by a combination of plane mirrors. Various experiments have shown, that great effects may be produced by a plane mirror of considerable distance, by the latter instrument. Kircher placed five plane mirrors, of an equal size, in such a position as to reflect the rays upon a spot one hundred feet distant, and thereby produced a great heat. Buffon, in 1747, effected a combination of 168 plane mirrors, each of which was 6 inches broad, and 8 long. With 40 of these mirrors, he set fire, almost instantaneously, a board of beech wood, covered with tar, at a distance of 66 feet; and, with 128 mirrors, a board of pine wood, likewise covered with tar, at a distance of 150 feet. With 45 mirrors, he melted a tin bottle, at a distance of 20 feet, and, with 117 mirrors, small pieces of money. He afterwards burned wood with this machine, at the distance of 200 feet, melted tin at the distance of 150, lead at the distance of 130, and silver at the distance of 60 feet. During the last century, several large mirrors were made in Italy, two of which are still in Paris and Cassel. Von Tschirnhausen also manufactured one in 1687, 3 Leipsic ells (about 34 English feet) in diameter, and the focal distance of which was 2 ells (3 ſ English feet). It consists of a thin plate of copper, highly polished, and is now in the mathematical hall in Dresden. This mirror sets wood on fire, makes water boil, melts tin three inches thick, as well as lead, vitrifies bricks, bones, &c. Besides metals, wood, pasteboard, glass, and other materials, serve for burning mirrors, if their surface be polished. Burning mirrors have of late been used as reflectors (q. v.), to throw light at a great distance, and may be very usefully employed in light-houses. If, for instance, a lamp is placed in the focus of a parabolic mirror, the rays of light which fall on it are all reflected in a direction parallel to the axis; thus the reflectors of Lenoir appear like stars of the first magnitude at the distance of 80,000 feet. (For further information on burning-glasses and burning mirrors, see Priestley's History and present State of Optics; and the 5th vol. of the new edition of Gehler's Physikalisches Lexicon, Leips., 1835.)

BURNING is a blunt, smooth tool, used for smoothing and polishing a rough surface by pressure, and not by removing any part of the body. Other processes of polishing detach the little asperities. Agates, tempered steel, and dogs'-teeth, are used for burnishing. It is one of the most expeditious methods of polishing, and one which gives the highest lustre. The burnishers used by engravers are formed to burnish with one end, and to erase blemishes with the other.

Burns, Robert; a celebrated Scottish poet, whose history affords a memorable example of the miseries arising from the possession of extraordinary talents, unaccompanied by habits of prudence and self-control. He was the son of William Burns or Burns, a gardener and small farmer, near the town of Ayr, and was born January 25, 1759. He was brought up to rustic labor; but his education was not neglected, as he was, at an early age, instructed in English grammar, by Mr. Murdoch, who died not long since in London, to which he added an acquaintance with the French language and practical mathematics. Smitten with a passion for...
reading, he devoted every moment he could spare to the perusal of such books as fell in his way, and, among them, meeting with the works of some of the best English poets, he was enabled to cultivate and improve a taste for poetry and romantic fiction; which was, perhaps, first inspired by the chimney-corner tales of an old woman in his father's family, whose memory was plentifully stored with adventures of fairies, witches, warlocks, ghosts and goblins, which she religiously believed, and therefore detailed with the most impressive effect to her admiring auditors. Burns's first poetical effusions were prompted by love, a passion of which he was peculiarly susceptible. Having begun, he continued to make verses, which attracted the notice of his neighbors, and gained him considerable reputation. His company was consequently much sought—a circumstance which led him to an indulgence in habits of dissipation, and a disgust at the plebeian occupation to which he seemed destined by fortune. He then engaged in business as a flax-dresser, in the town of Irvine; but his premises were destroyed by fire, and he was obliged to relinquish the undertaking. His father dying, he took a small farm in conjunction with a younger brother; and this scheme also proved unsuccessful. In the mean time, he had formed a connexion with a young woman, whom, on her becoming pregnant, he would have married; but his ruined circumstances induced her friends to object to it. Thus unsuccessful at home, he engaged himself as assistant overseer to a plantation in Jamaica. To obtain the funds necessary for the voyage, he was induced to publish, by subscription, a volume of his poetical effusions. It was accordingly printed at Kilmaurs in 1785, and Burns, having derived from the publication the assistance he expected, was about to set sail from his native land, when his purpose was prevented by the second publication of his poems. A part of this sum he advanced to his brother, and, with the remainder, took a considerable farm near Dumfries, and at the same time procured the office of exciseman. He also now completed his matrimonial engagement with the female to whom he had been contracted. His convivial habits were long prevented him from paying a proper attention to his farm; and, after a trial of three years and a half, he found himself obliged to resign his lease, and remove to the town of Dumfries, to follow his employment as an exciseman. He continued to exercise his pen, particularly in the composition of a number of beautiful songs, adapted to old Scottish tunes, for a periodical work, published at Edinburgh. His disposition to intemperate indulgence was too deeply rooted to be overcome; and, in spite of the remonstrances of his friends, and his own acknowledged conviction of the folly of his conduct, he persisted in the use of intoxicating liquors till he had ruined his constitution, and brought on a disease, which occasioned his death, July 21, 1796. The poems of B. are none of them of any great length, nor do they appertain to the higher kinds of poetical composition. It appears, indeed, from his correspondence, that he at one time meditated an epic or dramatic effort, but the mode of spending his time, to which he had become habituated, utterly prevented the necessary application. Whatever he has done, however, he has done well. His songs, his tales, and his poetical epistles, display pathos, humor, a vigor of sentiment, and a purity and elegance of style, which, in spite of their being clothed in what may be termed a provincial dialect, will not only ensure a permanent fame to their author, but advance him high in the records of native genius. His prose compositions, which consist entirely of private letters, never intended for the press, are altogether as extraordinary productions as his poems; and those literary men who were acquainted with him have asserted, that his conversation was not less calculated to leave a powerful impression of the extent and accuracy of his knowledge and observation, and the strength and vivacity of his genius. He left a wife and four children unprovided for; but his friends raised a subscription for their support, and an edition of the works of Burns, in 4 vols. 8vo., was published for their benefit, in 1800, with a life of the author, by doctor Currie, of Liverpool.
BURRAMFOOTE—BURTON-UPON-TRENT.

BURRAMFOOTER, or BRAMAPUOTRA, is the largest river in India. Its sources, not yet explored, seem to be situated near lake Mansarorovara, in Thibet, near those of the Indus. In Thibet it is called the Sampoos, flows by Lassa, the residence of the Grand Lama, and, after being lost to European knowledge, re-appears in Asia. Its river is rendered difficult by shifting sand-banks, and trunks of trees sticking in its bed. After entering Bengal, it joins the Ganges, at Lucknpooor, where the united rivers form a wide gulf, communicating with the sea of Bengal. The course of the B. is estimated at about 1800 miles. Rising from opposite sides of the same mountains, and separating to a distance of 1200 miles, the B. and the Ganges are destined to mingle their waters again in the same channel.

BURRILL, James, a distinguished senator of the U. States, was born in Providence, Rhode Island, April 25, 1772. He received his education at the college in Providence, now Brown University, and was graduated in 1797, he was elected, by the general assembly, attorney-general of the state, and held the office of the supreme court of the state before he reached his majority. In a few years, he stood at the head of his profession in Rhode Island. In October, 1797, he was elected, by the general assembly, attorney-general of the state, and annually after, by the people, for seventeen successive elections. The decay of his health, and other causes, induced him to resign that office in May, 1813. In 1816, he was appointed, by the general assembly, chief justice of the supreme court, having been, for several years previous, speaker of the house of representatives of Rhode Island. In the next year, he was placed in the senate of the U. States, of which he remained a highly esteemed member until the period of his decease, December 25, 1820.

BURSA, a city of Natalia, in Asiatic Turkey, with a population of about 60,000 Turks, Greeks, Armenians and Jews, engaged in commerce, and the manufacture of satins, silk stuff, carpets, gauze, &c. The bazaars are filled with merchandise, and the caravans, passing from Aleppo and Smyrna to Constantinople, promote its commerce. It contains 140 mosques, two of which are magnificent, and is adorned with an immense number of fountains. It is one of the most beautiful cities in the empire, situated in a fertile and finely-wooded plain, which is enclosed by the ridges of Olympus, and abounds in hot springs. The castle, which is about a mile in circumference, is supposed to be the Pruss of the ancients, built, according to Pliny (v. 22), by Hannibal. In the 14th century, it was taken by the Turks, and became the capital of the Ottoman empire previous to the capture of Constantinople. Its port is Montagnu, or Mondania, on the sea of Marmora, 75 miles S. W. of Constantinople. (Lon. 28° 12' E.; lat. 40° 14' N.)

Burschens; the name given to one another by the students at the German universities. It is derived from burzales or burserri, the name which the students bore in the middle ages, from the buildings (burzae) in which they lived in common. (See Universitates.)

Burton, Robert; a writer of the 17th century. He was born at Lindley, in Leicestershire, 1575, educated at Oxford, embraced the ecclesiastical profession, and became rector of Segrave, in Leicestershire. His learning, which was various and extensive, is copiously displayed in the Anatomy of Melancholy, by Democritus Junior, first published in 1621, and repeatedly reprinted. B. died in 1640 and was buried at Christ church, with the following epitaph, said to have been his own composition:

Pancis notus, paucioribus ignotus,
Hic jacet Democritus Junior;
Car vita parior et motum
Doli Melancholia.

He was a man of integrity and benevolence, but subject to strange fits of hypochondriac melancholy, which rendered his conduct flighty and inconsistent. Sometimes he was an agreeable and lively companion, delighting those around him with perpetual salies of wit and humor; while, at other times, devoured with spleen and envy, he sought relief by listening to the jests of the bargemen on the river near Oxford. He is reported also to have undertaken the composition of his Anatomy of Melancholy with a view to the dissipation of his morbid feelings. Among those who have been most deeply indebted to B., is the facetious author of Tristram Shandy; who has, however, been perhaps too harshly censured for a fault which every man of general and extensive reading knows to be common to almost all great writers.

BURTON-UPON-TRENT; a town of England, on the north bank of the Trent, which is here crossed by a fine old bridge.
of 36 arches. B. is a borough, and the inhabitants have the privilege of exemption from county juries. It is mentioned early in Saxon history, and suffered much in the civil wars. It is chiefly celebrated for its excellent ale, of which vast quantities are made, both for home consumption and exportation. Contrary to common usage, the brewers, in preparing it, employ hard instead of soft water. (See Brewing.) Population, in 1821, 6700. Lon. 1° 36' W.; lat. 52° 50' N.

BURSTED-ST. Edmund's; a town in Suffolk, England, formerly surrounded with walls. It contains two fine churches, with numerous monuments, and, before the reformation, had five hospitals. Of many benevolent institutions, the principal is a free school founded by Edward VI. It is one of the greatest corn markets in the kingdom, and its great fair, in October, which lasts three weeks, is attended by the nobility and gentry of the neighborhood. The town is a borough, returning two representatives. It is an ancient place, and is supposed to have derived its name from St. Edmund, a king of the East Angles, who was buried here. The barons, in John's reign, met here, and formed a league against him. The town is a borough, and was the seat of two parliaments, and contains the remains of an abbey, the most wealthy and magnificent in Britain, "with gates of brass, towers and high walls, so that one might think the monastery alone a city." Barren women, desirous of offspring, offered a white bull at the shrine of St. Edmund's. 73 miles N. N. E. of London. Lat. 52° 50' N.

Burying-Places. The custom of burying the dead in public places prevailed among the most ancient nations. The Romans had this custom in the earliest times. Afterwards, in the flourishing periods of the republic, they burnt their dead, and only buried the ashes, collected in urns (urnae). The ancient Germans buried their dead in the graves consecrated by their priests. With the introduction of the Christian religion, consecrated places were appropriated for the purpose of general burial; and it was regarded as ignominious not to be buried in consecrated earth. The deprivation of the rites of burial was, therefore, part of the punishment of excommunication. The Romans were accustomed to provide their sepulchres at least with a stone, upon which was inscribed the name of the deceased, and the wish, May he rest in peace (Si tu terra levia, that is, May the earth rest lightly upon him). This custom was preserved by the Christians. The sepulchres in churches originate from an inclination, common to men of all times and nations, to honor their relations, even in the grave. The Egyptians, Greeks and Romans erected over the graves of men of rank, or persons otherwise remarkable, pyramids, mausolea or temples. After the introduction of Christianity, little churches, called chapelæ, were erected over the dead. The early Christian martyrs were buried in caverns, which, by degrees, were enlarged to spacious subterranean vaults, and called chambers of repose. In the sequel, others considered themselves happy if their bones were allowed to repose near the ashes of a martyr. The sepulchres of the martyrs were, on this account, distinguished by a white altar over them. When the Christians were allowed the public exercise of their religion, they erected churches, and the heathen temples became places of Christian worship. As early as the 4th century, they built churches over the sepulchres of the holy martyrs; and, in the belief that a place was sanctified by their ashes, they anxiously sought out, on the erection of new churches in cities, or the transformation of heathen temples into Christian churches, the remains (relics) of the martyrs, and buried them under the altar of the new church, to communicate to it a character of greater sanctity. It gradually came to be universally considered, among the Christians, a privilege to be buried in the neighborhood of a saint. The emperor Constantine, who died in 337, was the first person that we know of, who ordered his sepulchre to be erected in a church. This was done in the church of the apostles at Constantinople, of which he was the founder, and therefore, probably, considered himself as peculiarly entitled to this privilege. He was soon imitated by the bishops, and, in the sequel, all those who had enriched the church were distinguished by this honor. The emperors Theodosius and Justinian, indeed, forbade the erection of sepulchres in churches, but in vain. Leo the Philosopher again permitted them to every body. It is only in later times that men have become convinced how injurious it is to the health of the living to remain, for a long time, in the vicinity of the dead; particularly if the corpses remain standing in simple coffins, and are not placed deep in the earth, as is commonly the case in the sepulchral vaults of churches. From these the effluvia of putrefaction escape easily, and diffuse...
themselves in the air. On the occasion of opening such sepulchral vaults, those who stood near them have sometimes fallen dead on the spot, and no one could venture into the church, for a long time after, without exposing himself to dangerous consequences. At present, the burying in churches is almost everywhere suppressed, or, at least, permitted only under certain restrictions. Even in Naples and Rome, the general practice of erecting sepulchres in churches was forbidden in 1809, and the foundation of burial-places without the city was provided for. The custom of the communities was imitated. Several Catholic church-yards in Germany are also distinguished by their pleasing aspect; for instance, one in Münich, where every grave is covered with a bed of flowers, which the relations of the deceased water from a fountain for the purpose. The Quakers, it is well known, erect no tomb-stones. The beautiful name of the German Moravian Brothers, Friedhof, or field of peace, is becoming more and more common in Germany. The celebrated burying-place of Père la Chaise, near Paris, is one of the most beautiful and interesting spots in the world.

Busaco; a convent in Portugal, in the province of Beira. The monks are Carmelites, and the prospect from the summit of the Sierra de Busaco is one of the finest in Portugal. It is memorable for the battle, Sept. 27, 1810, between Massena and Lord Wellington, who, on a retreat before the superior forces of the former, availed himself of the favorable position of the Sierra for checking the pursuit. Two attacks, one on the right wing consisting of British, and the other on the left, composed chiefly of Portuguese, were repulsed; but, Massena having detached a force to march round the mountain, and cut off the British troops from Coimbra, Wellington retreated towards that city, and afterwards to the lines of Torres Vedras. (q. v.)

Busbecq, or Busbecius, Augier Ghislen; the natural son of a nobleman; born in 1522, at Comines, in Flanders; legitimated by Charles V. After having studied in the most celebrated universities of Flanders, France and Italy, he accompanied Peter Lassen, ambassador of Ferdinand II., who was remarkable as a member of the Göttingen learned society. Notwithstanding some difficulties about his hete-
rodox opinions, he received an invitation to become pastor in a Lutheran church at Petersburg. In 1766, he was made director of the united gymnasia of Berlin and of the suburb Köln, and discharged his duties with great diligence. He died in 1793. He is chiefly distinguished as a geographer. Before his great work, Allgemeine Erdbeschreibung, which he began to publish in 1754, in separate volumes, and which, though not entirely completed by the author, passed through eight legal editions during his life, neither the Germans nor any other nation had a thoroughly scientific geographical work.

Bussemach, Hermann, a Jesuit, famous for his Medulla Theologiae Moralis, ex variis probatisque Auctoris concinato, born at Nottolen, in Westphalia, 1600, rector of the Jesuits' colleges at Hildesheim and Münster, died in 1658. His work was much used in the seminaries of the Jesuits, and had passed through 50 editions, when father Lacroix published it, increased from a single diodecimo to two folios by his own commentaries and the additions of father Collendall. It was published at Lyons, in 1729, with further additions by father Montausan. The latter edition was reprinted, in 1738, at Cologne. It was now found to contain principles concerning homicide and regicide, which appeared the more reprehensible on account of the recent attempt on the life of Louis XV, by Damiens. The parliament of Toulouse caused the book to be publicly burnt, and summoned the superiors of the Jesuits to appear at their bar for trial. They disavowed these sentences, father Zacharias, an Italian Jesuit, with the permission of his superiors, stepped forward as the defender of B. and Lacroix; but his defence was condemned by the parliament of Paris. B. was also the author of Lumen Inter Sinus, de Virginiis Dei dextris eqve in Saceulo intercrentibus.

Bushel; an English dry measure, containing 8 gallons or 4 pecks. It is also used in the North American U. States. The standard English bushel (12 Henry VII) contains 8 gallons of wheat, each of 8 pounds troy, each of 12 ounces, each of 20 pennyweights, each of 32 corns of wheat that grew in the middle of the ear. In 1698, a duty being laid upon malt, it became necessary to ascertain the exact contents of the Winchester bushel, as that of Henry VII was called. It was found that the capacity was 2151.7 cubic inches of pure water, equivalent to 1131 oz. 13 dws. troy. (See J. Q. Adams's Report upon Weights and Measures, Washington, 1821.) The capacity of the Imperial bushel, prescribed by the act of uniformity (5 Geo. IV, c. 74), which took effect Jan. 1, 1825, is, for coal, potatoes, fruits, and other goods sold by heaped measure, 2815 cubic inches, the goods to be heaped up in the form of a cone, to a height above the rim of the measure of at least three fourths of its depth. The imperial bushel for all liquids, and for corn and other dry goods not heaped, contains 2218.20 cubic inches, and holds 80 lbs. avoidupios of pure water.

Bushirs, or Abushirs; the principal settlement of Persia, situated on the Persian gulf, with 5000 inhabitants. The principal exports are carpets, wine of Shiraz, rose-water, drugs, pearls and cotton. The English East India company have a factory here. Lon. 50° 43' E.; lat. 28° 59'.

Bushmen, or Bosmen; the common name of that wild race of people, who dwell in the western part of South Africa, in the immense plains bordering on the north side of the colony of the cape of Good Hope, and are lost in the unknown regions of the interior. Janssens, formerly Dutch governor at the cape, gives the following account of them:—The Bushmen are a wild, rude, cruel and miserable people. So far from forming a nation, they do not even form societies. They live together in single families, and unite for defence or for pillage. They do not cultivate the land, and have no domestic animals except the dog. Their usual food is locusts. They endure hunger for a long time, but indemnify themselves by their voracity if they are so fortunate as to kill any wild game, or steal an ox or a sheep. They are entirely destitute of huts and household furniture. The scorching heaven is their tent, and the hot sand their bed. Their weapons consist of a small bow and poisoned arrows, which they shoot, with astonishing accuracy, to a great distance. Their language is exceedingly poor. It consists of a certain rattling with the tongue, and harsh, gurgling tones, for which we have no letters. They are, for the most part, of low stature; their skin is of a dark-yellow; and their hair, which resembles wool, is twist-
ed together in small tufts. (See Hottentots.)

**Bushmen, or Bushuanas, or Betjemanas;** an African people, occupying the country lying between 20° and 25° S. latitude, divided into several tribes. Though under the government of separate chiefs, who are often at war with each other, these tribes are united by language, manners, and customs. Less tall than the Caffres, and as well proportioned, their form is even more elegant. Their skin is of a brown tint, between the coloring black of the Negro and the yellow color of the Hottentots. They surpass the Caffres in civilization and the arts of life. Some of their towns are considerable. Kurechanee was visited by Campbell in 1821, who estimated the population at 16,000. Inoculation for the small-pox is practised there. Old and New Leetakoo contain each 4000 inhabitants. The Bushuanas are inquisitive and intelligent; without any settled occupation, yet always active. Their principal food is the curds of milk and the produce of the skins of animals: the women cover the breast, and leave the belly exposed. Their clothes are made of the skins of animals: the women wear them over the breast, and leave the belly exposed. Their ornaments are rings and bracelets of ivory and brass. Their houses are circular form. They are very skilful in tempering iron, and making their arms, which consist of a hassagay (javelin), a shield and a club. Polygamy is established among them; a young man buys a wife for 10 or 12 oxen: her first business is to build a house, for which she sells the necessary quantity of wood. The erection of the stable, the cultivation of the fields, and all the household work, falls to her. As soon as he can afford it, the Bushwana buys a second wife, who, in like manner, must build a house and stable, and cultivate a piece of ground. Honesty, loyalty and courage are the highest virtues, in their estimation. They have an idea of a soul, and believe in an invisible Lord of nature, the sovereign Dispenser of good and evil, whom they call Moriruro. Their principal ceremonies are circumcision and the blessing of cattle. They divide the year into 13 lunar months, and distinguish the planets from the fixed stars. Christianity has been introduced among them by missionaries, and with it some degree of civilization.

**Bushkin** (in Greek and Latin, colubrus); a kind of high shoe worn upon the stage, by the ancient actors of tragedy, in order to give them a more heroic appearance. It was introduced by Sophocles, and, from this use, the word is figuratively employed, by the classic authors, for tragedy itself (Juvenal, xv. 20), or for a lofty and elevated style (grande manu). Oecropia colubrus, Hoep. Busk in, or buskin, or busk. Hunters and soldiers used a different kind, resembling the half-boot.

**Bust** (Italian, il busto, from the Latin bustum), in sculpture; the representation of that portion of the human figure, which comprises the head and the upper part of the body. Busts are of different extents: 1. such as consist of the head, the upper part of the neck, and the upper part of the shoulders; 2. heads with the upper part of the chest, to the end of the breast-bone (busts properly so called); and, 3. heads with the whole chest to the middle of the body, often to the hips. Between the bust and its pedestal is sometimes a column, or a square prop; such a bust is called Herme. The figure is sometimes in relief. The origin of the bust may be derived from the Herme, and from the custom of the Greeks and Romans to decorate their shields with portraits, and their vestibules with the images of their ancestors. Busts were afterwards used for the images of their gods, as being less expensive. The greater part have been found in Rome and Italy. Some remarkable ones have been obtained from Herculaneum, in bronze. The chief difficulty in the execution of busts arises from this circumstance, that we are accustomed to estimate the size of the head by comparing it with the whole body. In a bust, therefore, the head appears disproportionately large, and the artist is obliged to yield, in some measure, to this ocular deception, by lessening its natural proportion.

**Bustard**; the trivial name of a species of wader belonging to the genus Otus, L., and to the family Grezzae, C. The great bustard (otus tarda, L.) is the largest of European land-birds, the male weighing, on an average, 25 pounds. It is four feet in length, and measures nine feet from tip to tip of the wings. The head and neck are ash-colored, and there is a tuft of feathers about five inches long on each side of the lower mandible. The
BUSTARD—BUTE.

back is transversely barred with black and bright ferruginous colors, and the primaries are black. The tail consists of 20 feathers, broadly barred with red and black. The belly is white, the legs dusky, naked, and without a hind toe. The female is but half the size of the male, and has the crown of the head of a deep orange color, traversed by red lines; the remainder of the head is brown. She otherwise resembles the male, except that the color of her plumage is less bright. This species is found in most of the open and level countries of the south and east of Scotland, where they are occasionally seen, in autumn, in flocks of 50 and upwards. They are very shy and vigilant, and by no means easy to shoot. They run with great speed, and aid their course with their wings, like the ostrich. Although they rise on the wing with difficulty, they are said to fly many miles without resting. They feed on grain, seeds, worms, &c., and lay two eggs, as large as those of a goose; these are of a pale olive tint, with dark spots. The nest is merely a hole scraped in the earth. They do not wander far from their accustomed haunts, seldom going to a greater distance than 20 or 30 miles. Their flesh is considered fine eating.

Butchers have been much the same in all ages and countries, and we know not of any great improvements that modern art or science has introduced into the practice of slaughtering animals. The ancient Scythians, and their Tartar descendants, seem to be peculiar in their taste for horse-flesh. The Romans appear to have loved beef, and veal, and mutton, as well as the modern Europeans and their American descendants: cara omnia, is the complaint of the old comic writer, agnuram caram, caram bubulam, vilulium, porcinam, omnia cara. In Paris, the abattoirs, formerly receptacles of filth, and injurious to health, were removed by Napoleon, in 1809, to the outskirts of the city. They are called abattoirs (abattere, to kill), and consist of spacious buildings for the reception of the cattle, preparing the tripe, tallow, &c, and reservoirs of water for the service of the establishments. Of these there are five, in which are slaughtered annually 75,000 black cattle, with a proportionate number of sheep, &c. The larger animals are killed by a blow on the head, and the jugular vein is immediately separated with a knife. The flesh is then blown (gnefè), by injecting air into the vessels through a bellows, which gives it a plump appearance. Every part of the animal—bones, horns, hoofs, blood, intestines, hide, tallow—is used for the fabrication of glue, jelly, Prussian blue, sal-ammoniac, &c. In London, the carcass butchers kill the meat, and sell it out in great quantities; the retail butchers sell it out to the consumers. The average number of oxen sold at Smithfield annually is 156,000; sheep and lambs, 1,500,000; calves, 22,000; hogs, 20,000. The Jews in London have their own butchers, who are licensed by the rabbis. They cut the throats of the animals, never knocking them down, according to the usual practice. In some countries, the method of slaughtering cattle by penetrating the spinal marrow is practised.

Bute; a small island of Scotland, lying at the mouth of the Clyde, with an area of 29,000 acres, belonging principally to the marquis of Bute. The climate is moist and mild. The herring fishery is a profitable employment. The only town is Rothesay, the ruins of the castle of which, formerly inhabited by the Scottish monarchs, still remain. It gave the title of duke of Rothesay to the heir apparent of Scotland. The title is now transferred to the prince of Wales.

Bute (John Stuart) earl of; a British statesman, born in the beginning of the 18th century, in Scotland. His ancestors had been elevated to the peerage in 1704, and were connected with the old kings of Scotland. In his youth, B. seemed devoted to pleasure, and little inclined to engage in politics; nevertheless, in 1737, after the death of a Scottish peer, he was chosen to fill his seat in parliament. In consequence of his opposition to the measures of the ministry, he was left out when a new parliament was convened, in 1741. Offended by this neglect, B. retired to his estates, and lived there, wholly secluded, till the landing of the Pretender in Scotland, 1745, induced him to go to London, and offer his services to the government. Notwithstanding this manifestation of zeal, he would not have been brought forward again, if he had not attracted the notice of the prince of Wales, at an exhibition of private theatricals, in consequence of which he was invited to the court. Here he soon gained influence, and succeeded in making himself indispensable to the prince. At his death, in 1731, he was appointed, by the widowed princess, chamberlain to her son, and was intrusted by her with his education. B. never lost sight of his pupil, and possessed so much more influence with the princess
BUTLER, James, duke of Ormond; an eminent statesman in the reigns of Charles I and II. He was born at London; sus-
ceeded his grandfather, in 1632, and, although all his connexions were Catholics, his wardship being claimed by James I, he was brought up a member of the church of England, to which he ever after constantly adhered. When Strafford became lord-lieutenant of Ireland, B. was made commander of the army, which consisting of only 3000 men, he could do little more than keep the enemy in check, and was obliged to agree to a cessation of hostilities; after which, having been created a marquis, he was appointed lord-lieutenant. On the ruin of the royal cause, his seat in Dorsetshire, in 1688, leaving behind him the character of a man who united the courtier and the man of honor and integrity better than any nobleman of the time.

Butler, Joseph; an English prelate of distinguished eminence as a writer on ethics and theology. He was born in 1612, at Wantage, in Berkshire, where his father was a shopkeeper, and a Presbyterian dissenter. After some previous education at a grammar-school, he was sent to an academy at Tewkesbury, with a view to ordination as a minister among the dissenters. While occupied by his studies, he gave a proof of his talents by some acute and ingenious remarks on doctor Samuel Clarke's Demonstration of the Being andAttributes of God, in private letters addressed to the author. He likewise paid particular attention to the points of controversy between the members of the established church and the dissenters, the result of which was a determination to be no longer a nonconformist; and he therefore removed to Oxford, in 1714. Having taken orders, he was, in 1718, appointed preacher at the Rolls chapel, and, in 1730, he was appointed clerk of the closet to the queen. The same year, he published his celebrated work, the Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature. In 1728, doctor B. was promoted to the bishopric of Bristol, on the recommendation of queen Caroline; and, in 1750, obtained his highest preferment—the bishopric of Durham. He died in 1752, and was interred in Bristol cathedral. A charge, delivered to the clergy of the diocese of Durham, on the subject of external religion, together with the circumstances of his settling up a marble cross in his chapel at Bristol, gave rise to suspicions that he was inclined to the principles of popery; and, after his death, a report was spread that he had died in the Catholic faith; but this story was satisfactorily contradicted by archbishop Secker.

Butler, Samuel, a celebrated English poet, was the son of a farmer in Strens-ham, in Worcestershire, where he was born in 1632, and educated at Cambridge. He resided some time with sir Samuel Luke, a commander under Cromwell. In this situation, B. acquired the materials for his Hudibras, by a study of those around him, and particularly of sir Samuel himself; a caricature of whom constituted the celebrated knight Hudibras.
The first part of Hudibras was published in 1663, and was brought into the notice of the court by the well-known earl of Dorset. It immediately became highly popular with the prevailing party in church and state, and served as a general source of quotation; the king himself persisting of the whey and the caseous matter of these products, in 100 parts of cream, are,

- Butter, .......... 4.5
- Cheese, .......... 3.5
- Whey, .......... 92.0
- Total, ........... 100.0

Chemical analysis gives stearine, chaine, and a small quantity of acid and coloring matter, as the component parts of butter. Beckmann (History of Inventions, 372) concludes that butter is not of Grecian nor of Roman invention; but that the Franks received it from the Scythians, Thracians and Phrygians, and that the Romans derived it from the people of Germany, and used it as a medicine, rather than as a culinary luxury. In warm countries, the place of butter is still, for the most part, supplied by oil. In Italy, Spain, Portugal, and the south of France, it is to be purchased in the apothecaries' shops. The difficulty of keeping it any length of time is, indeed, an effectual barrier to its general use. The ancients appear to have been wholly deficient in the art of giving it consistency. The European countries, in which oil or butter is used, says Maltese-Brun (Geog. liv. xxv), may be separated by a line extending along the Pyrenees, the Cevennes, the Alps and the Alps and Mount Hermon. To the north, the pasturage is better; cattle abound, and the food is chiefly derived from them. The olive-groves to the south supersede the use of butter by that of oil. The butter, bear, and animal food, of the north of Europe, give way to oil, wine and bread, in the warmer regions. The word *chameab*, translated butter, in the English version of the Bible, means some liquid preparation of milk or cream. It was in general use among the Celts; *spuma id est lecita, consecutorque quam quod serum vocatur, barbara rum gentium lautissimus cibus.* (Pliny, ix, 41, and xviii, 9.) The Hindoes make use of *ghee*, which means butter clarified by boiling. They boil the milk two or three hours, which, when cool, is fermented with curdled milk, left to sour, churned, and, when it is sufficiently ran-cid, is boiled, and mixed with salt, or betel-leaf, and muddle, to improve its taste and color.

**Butterfly.** (See Papilio.)

**Butermann, Philip Charies;** born at Frankfort, in 1704; studied at Gottingen; was tutor of the princes of Dessau; and, in 1800, professor of the gymnasium of Joachimsthal; at present, second librarian and member of the academy of sciences in Berlin. (See Löwe's *Autobiography of*
BUTTONS are of almost all forms and materials—wood, horn, bone, ivory, steel, copper, silver, similar, &c. The tailor covers them with stuffs, and the female artisan envelopes them with a texture of thread, silk, cotton, and gold or silver thread. The non-metallic buttons, called also moults, are made of the substances first mentioned, by sawing them into little slips, or the thickness of the button to be made, which are then cut into the form required, by an instrument adapted to the purpose. Metallic buttons are cast in moulds, or cut by a fly-press. Any figure or inscription may be impressed on them at the same time that they are cut. The little wire ring, by which they are attached to a garment, is called shank, and is soldered separately on each button.

The details of smoothing, polishing, boiling, &c., would occupy too much room. The face of the button is generally plated or gilt. Doctor Church, an American, obtained a patent, in England (1829), for an improved manufacture of buttons with a metallic shank, the face being either of polished metal, or covered with any fabric. The various operations of shaping the discs, forming the shanks, cutting the cloth, and covering the faces of the buttons, are all effected by one revolving shaft.

Buttresses, in Gothic architecture, are lateral projections on the outside of the walls of an edifice, extending from the top to the bottom, at the corners and between the windows. They are necessary to support the walls, and prevent them from spreading under the weight of the roof.

Buttura, Antonio; an Italian poet, born at Verona, 1771. When the combined Austrian and Russian armies overthrew the young Italian republics in 1797, B. took refuge in France. At this time, he was known in his own country by some pleasing sonnets, and an Italian translation of Arnault's tragedy of the Venetians. In Paris, he translated Boileau's Art Poétique into Italian verse, with a strict adherence to the ideas of the original. The attempt was the more difficult, as Boileau had so largely ensured the master-work of Tasso. Nevertheless, the translation met with approbation in Italy. This approbation of the public induced him to translate, also, Racine's Iphigénie en Aulide into Italian verse. In 1811, he printed a volume of poems, mostly odes, full of enthusiasm for France. His Essay on the History of Venice, in Italian prose, received the highest approbation in Italy and France, as likewise did his Tablons de la Littérature Italienne, which is merely an introduction to his lectures at the Athénées, in Paris.

Buxhowden, Frederic William, count of; descended from an ancient Livonian family; born on the isle of Moń, near Osol; was educated at St. Petersburg, and engaged in the war against the Turks in 1769, and for some time subsequent. In 1783, he was made colonel, owing his promotion chiefly to his marriage with Natalia Alexijeff, 1777. In 1790, he commanded a Russian division in 1792 and 1794. At the storming of Prague, he restrained, as far as he was able, the fury of the soldiers. Suwaroff intrusted him with the command of Warsaw and the administration of Poland. His moderation and disinterestedness gained him the esteem of the Poles. While military governor in Petersburg, he fell into disgrace under the emperor Paul. Alexander made him inspector of the troops in Livonia, Esthonia and Courland, with the dignity of governor-general. In 1805, he commanded the left wing at Austerlitz, which advanced, whilst the centre and the right wing were beaten. In 1806, he
commanded 50,000 Russians, and withstood the French in the eastern part of Russia. After the defeat of Pultusk, he was unjustly superseded by Count Bennigsen. After the battles of Eylau and Friedland, he was again made commander-in-chief. In 1808, with 18,000 Russians, he conquered Finland, obliged Sweden to capitulate, and terminated the war at Torna. In 1809, he resigned on account of his health, and died in 1811.

Buxton: a market-town in the county of Derby, England, situated in a valley, celebrated for its mineral waters. The springs discharge 60 gallons a minute; the temperature of the water is 82°. It is colorless, and devoid of taste or smell. It contains calcareous earth, vitriolic salts, and is an active remedy for diseases of the skin. It is used both externally and internally. The Crescent is an extensive edifice, divided into three hotels, and a private lodging-house. The lowest story forms a colonnade, extending the whole length of the front, the span of which is 257 feet. The season for the Buxton waters is from June to the end of October. It was known to the Romans; and the unfortunate Mary Stuart, while in captivity, resided some time at the Hall. She left it with the farewell, Forte mihi posthac non adeunda, vale!

Buxton, Jedediah, an extraordinary calculator, was born in Eberdon, in Derbyshire. His education was wholly neglected: he was never taught to read or write; and how he first learned the proportions of numbers, their powers and denominations, he never could remember. His power of abstraction was so great, that no noise whatever could disturb him; and, when asked any question, he would reply, and immediately return to his calculation, without the least confusion. He was also the author of Dissertations on the Old and New Testament; Florilégium Hebraicum; Exercitationes Philologico-criticas, &c. &c. He died at Basel, in 1864. There were two other Buxtons—John James, and John—relations of the former, who both were professors in the same chair at Basel, and both writers on Hebrew literature.

Buyukdere (i.e. great valley, from bayuk, great, and dere, valley); a charming little town on the western side of the Bosporus, not far from Constantinople and the Black sea, so called from the great valley in which it lies, whence also the stream passing through it is called B. The valley, as well as the river, is called Bahceshèrin, i.e., the deep-bosomed. It was formerly called the fair land (çakici eyalet). This splendid walk is now called the meadows (Bahceshèrin, la praire). In the lower part of this meadow is one of the most splendid groups of trees on the Bosporus, consisting of seven plane-trees, which are called, together, JerKemjuch, i.e., the seven brothers.
of Bouillon encamped in these meadows, in 1096, with an army of crusaders. The place consists of the lower and the upper town. In the former are the houses of the Greeks, Armenians, and some Turks. In the upper part are the summer-houses and gardens of the European ambassadors, besides which, many also have houses in Belgrade. Among these houses, the most splendid is the palace of the Russian ambassador, with its gardens.

This and several other palaces lie together on the beautiful quay, which is one of the best frequented walks of the people of B. A long and handsome street, running through the place, consists of two rows of houses, built for the most part, in the European fashion. Foreigners often pass the winter here, on account of the beauty of the country. B. is also the general resort of the higher classes, if a contagious disease prevails in Constantinople, Galata or Pera, as well as when an insurrection of the people is apprehended. (See Frankland's Journey to and from Constantinople, London, 1829.)

**BUYKDERE-BUZZARD.**

*Vultur aura, Will. ; catharctes aura, Illig. ; commonly called turkey-buzzard, or turkey-vulture.* This bird is found over a vast extent of territory on the American continent, in the West India islands, and in the southern parts of Europe and Asia. In the U. States, they are most numerous in the southern parts, and appear in the Northern States only during the summer. The turkey-buzzard is a perfectly harmless creature, and derives its food exclusively from the putrid carcasses which are to be found within its range. It is, therefore, seldom disturbed by man, and does not exhibit much timidity, though by no means in the habit of frequenting the immediate vicinity of human dwellings, like its allied species, the black vulture, or carrion crow of the south. The turkey-buzzard is gregarious, and flocks of considerable size are always found to feed and roost together. For the latter purpose, they generally choose the limbs of dead trees, upon which they may be seen sitting, with both wings outspread, in the morning, as if for access to their bodies. When their favorite carrion is to be obtained, they are very voracious, gorging themselves until actually unable to contain more, and even, for a time, rendering themselves unable to fly. Under such circumstances, it is unadvisable to approach them, as they are sure to be revenged upon their disturbers by vomiting over them a torrent of horribly disgusting filth. This is the only mode in which they attempt to defend themselves; and they especially resort to it when any one interferes with their nests. The turkey-buzzard flies in a very beautiful manner, rarely flapping the wings, except in rising from the earth, but sailing and dipping in beautiful curved lines, traversing a vast extent of territory at wonderful celerity and ease, or soaring to the higher regions of the atmosphere, until entirely lost to sight. Like all the birds of their class, the buzzards possess strong powers of vision; but the sense of smelling is that by which they are principally guided to their food. This they are capable of discovering from immense distances, and the most striking facts illustrative of the acuteness of their olfactory organs are on record. Notwithstanding these, and the obvious evidence afforded by the structure of their smelling apparatus, a recent writer has undertaken to assert that they are possessed of little or no power of smelling. The places chosen by the turkey-buzzard for laying are generally in remote and solitary swamps, or dense forests, where a hollow stump or rotten log serves for a nest. The eggs are from two to four, of a dull-white or cream color, splashed with chocolate and black, the patches of this color being largest and thickest towards the larger end. The egg resembles that of a goose, but is blunter at the small end; it is two inches and three fourths long by two broad. The young are covered by a whitish down, somewhat similar to that upon a young gosling. Some years since, we obtained a young buzzard while still covered with long, white down, with the exception of the wings, which were partly feathered. It was unable to fly, and had advanced to a party of wood-cutters, while at work, having apparently wandered too far from the nest to retrace its steps. As it seemed hungry, one of them gave it some meat, which it greedily swallowed, and afterwards remained with them until they returned home, and brought it with them. This young buzzard speedily became domesticated, and as opportunistically demanded food as any of the regular tenants of the poultry-yard. It ate all sorts of meat and garbage, uniformly preferring the most filthy. As it acquired full plumage, it began to kill and devour the young ducks and chickens, placing one foot upon the victim, and leisurely tearing it to pieces with the bill. As this buzzard learned to fly, he frequently made excursions, and returned to
soaring over his residence, and never roost upon a kitchen chimney. At length he one day joined a flock which was soaring over his residence, and never after returned. The turkey-buzzard is two feet, and a half long, and his wings are six feet two inches from tip to tip. The head and neck, for an inch and a half below the ears, are furnished with a rich, wrinkled skin, beset with short, black hairs, which also cover the bill, as far as the anterior angle of the nostrils, which are oval. The plumage is black, the neck feathered equally all round, and the wings not reaching beyond the tail. The tail is rounded. There is no obvious difference between the male and female.

BUZZARD-BAY; a bay on the south coast of Massachusetts, opposite Barnstable bay. It runs up between Scituate point on the west, and Chatamunk, one of the Elizabeth islands, on the east; is 35 or 40 miles long, and 7 wide. It appears within 35 miles of Barnstable bay. It has been contemplated to unite these bays by a canal. Lon. 70° 33' to 71° 10' W.; lat. 41° 27' to 41° 42' N.

By-Law is a particular law made by a corporation, or by any other distinct portion of the community, for the regulation of the affairs of its members in such of their relations as are not reached by the general laws of the land. Such private laws may legally be made by all incorporated bodies, as civic corporations, trading companies, &c., and even by the body of the inhabitants of a town or parish, provided they involve the infraction of no public laws, but are merely calculated to supply their want of application in the particular instance. These private laws are binding only on the members of the body for which they are formed, and will not be recognised as valid unless they appear to be intended for the general good of that body, and not for the mere furtherance of private or personal interests.

Byles, doctor Mather, was born in Boston in 1706, and educated at Cambridge. After completing his studies in theology, he was ordained the first pastor of the church in Hollis street, Boston. He contributed many essays to the New England Weekly Journal, and several occasional poems, some of which were collected in a volume. He corresponded with Pope, Lausdowne and Watts. In 1776, his connexion with his congregation was dissolved, on account of his Toryism, for any disaffection to the cause of the colonies could no longer be tolerated. In 1777, he was denounced, in town-meeting, as an enemy to his country, and afterwards was tried before a special court. The charges against him were, that he remained in the town during the siege, that he prayed for the king, and received the visits of the British officers. He was sentenced to confinement, with his family, on board a guard-ship, and to be sent to England with them. On being brought before the board of war, he was treated with respect, and was ordered to be confined to his own house for a short time. He possessed, in a remarkable degree, a ready and powerful wit, which he sometimes exerted where good nature would have restrained, and left a lasting sting by a transient jest. He exhibited this love of ridicule in various ways. On one occasion, when sentenced, under suspicion of Toryism, to be confined to his own house, with a sentinel over him, he persuaded this sentinel to go on an errand for him, promising to take his place. The sentinel consented to the arrangement, and, to the great amusement of all who passed, B. was seen very gravely on his shoulder, keeping guard over himself. During his confinement in his own house, a guard was placed over him, and then removed. On some further complaint, a sentinel was again placed over him. He was soon freed, and no further noticed. In speaking of these transactions, he said, "I have been guarded, regarded, and disregarded." Directly opposite to his house there was a very bad slough in wet weather. It happened one day, that two of the select-men, who had the care of the streets, stuck fast in this hole, and were obliged to get out in the mud to extricate their vehicle. B. came out, and, making them a respectful bow, said:—"Gentlemen, I have often complained to you of this nuisance, without my attention being paid to it, and I am very glad to see you curing it in this matter now." A ship from London brought out 300 street lamps for the town of Boston. It chanced that, on the same day, a female neighbor, who was a new light, with a weak mind and a whining manner, called to see him. "Wishing to get rid of the visitor, he soon asked, with a tone calculated to excite curiosity, if she had heard the news. "O, no! dear doctor, what news?" "Why, 300 new lights have come over in the ship that arrived this morning from London, and the select-men have wisely ordered them to be put in effect immediately."
visitor at once hurried away, in great anxiety, to make further inquiries. B. lived in retirement the last 12 years of his life, and died July 5, 1788, at the age of 82.

Byron, John, served under his father, admiral George B., and by his merits, as well as the influence of his name, was raised to the rank of admiral. His attempts to relieve fort St. Philip, in Minorca, when blockaded by a French fleet under La Galissonière, proved abortive; and his hesitation in engaging the enemy, when a bold attack might have perhaps gained him the victory, excited the clamor of the nation against him. The ministry, who wished to avert the public odium from their unsuccessful measures, beheld with seeming satisfaction the unpopularity of B.; and, when he was condemned by a court martial, they suffered him, though recommended to mercy, to be sacrificed to the general indignation, and he was shot at Portsmouth, March 14, 1757, meeting his death with calm resignation.

Byxkeshoek, Cornelius van; a Dutch lawyer, born at Middelburg in 1675. He studied at the university of Franeker, and, after practising as a barrister at the Hague, became professor of law at Leyden, and president of the council of Holland. He died in 1743. B. was one of the most learned among modern civilians. His works were published at Geneva in 1761, and at Leyden in 1766. They are written in Latin; and his treatise De Foro Legatorum complectente was translated, by Barbyruc, into French, under the title of Du Juge competent des Ambassadeurs, 1728, 4to. B. edited a periodical publication, called The New Mercury of the Hague, which was suppressed, owing to the offence taken at the strain of satire which it exhibited.

Byron (George Gordon) lord, an English peer and poet of elevated genius, was born at Dover, Jan. 22, 1788. He was the grandson of admiral John B. (q. v.), and succeeded his great uncle, William lord B., while at school, in 1788. His father was the admiral's only son, captain John B. of the guards, notorious for his gallantries and reckless dissipation. By the eccentricity and misconduct of the old lord B., and of the captain his nephew, the reputation of the family of B., so ancient and honorable in English history, had been considerably tarnished. The former was tried by his peers for killing his relation, Mr. Chaworth, in a combat with swords, after a tavern dispute, under circumstances so equivocal, that he was indicted for murder, and only saved from the penalty attendant on manslaughter by pleading his peregrine—an escape which did not prevent him from being consigned, by public opinion, to a life of seclusion and obscurity. Captain B., the poet's father, was so dissipated, that he obtained the name of the mad Jack Byron. He was one of the handsomest men of his day, but so immersed in all the fashionable vices, that, at length, to be seen in his company was deemed discreditable. In his 27th year, he seduced Amelia, mar-

chioness of Carmarthen, daughter of the earl of Holdernesse, to whom, on a divorce following, he was united in marriage. This ceremony the ill-fated lady did not survive more than two years, when he took, for a second wife, Miss Gordon, whose fortune he quickly dissipated, leaving her a destitute widow, in 1791, with a son, the celebrated subject of this article, then only three years of age. Previously to the death of her husband, having been deserted by him, Mrs. B. retired, with her infant son, to Aberdeenshire, where she lived in narrow circumstances, and great seclusion. The singular circumstances attendant upon the early childhood of B. seem to have operated very materially in the formation of his very striking character. Until seven years of age, the care of his education rested solely on his mother, to whose excusable, but injudicious indulgence, some of the waywardness, by which it was subsequently marked, was, even by himself, attributed. Being then of a weakly constitution, that disadvantage, added to a slight malformation in one of his feet, naturally rendered him an object of peculiar solicitude; and, to invigorate his constitution, he was not sent to school, but allowed to brace his limbs upon the mountains in the neighborhood; where he early acquired associations, and encountered a mass of legendary lore, which indubitably nurtured his poetical tendencies. At the age of seven, he was sent to the grammar-school at Aberdeen, where he was more distinguished for great occasional exertions, in order to make up for the intervals of absence, rendered necessary by his delicacy of health, than by his general application. In all boyish sports, however, the ardor of his temper-
was removed from the immediate care of his mother, and placed under the guardianship of the earl of Carlisle, who had married the sister of the late lord B., a lady of considerable poetical abilities. On this change, the youthful lord was placed at Harrow, where he distinguished himself by his love of poetry, and by his untamed spirit, than by attention to his studies, or submission to school discipline; but, although, in a subsequent part of his life, he indulged in some animadversion upon the tendency of the system in public schools, he always cherished an affectionate remembrance of Harrow, and of its master, doctor Drury. While yet at school, he fell deeply in love with Miss Chaworth, the daughter and heiress of the gentleman who had fallen by the hand of his great uncle, whom he met with on his occasional visits to Newstead. This lady, to whom he very beautifully alludes in a well-known poetical Dream, although some interviews and billets seem to have passed between them, ultimately married the sister of the late lord B., a lady of considerable poetical abilities. On this occasion, it happened, too, singularly enough, that, owing to party and other predilections, a number of the persons satirized in this poem, no long time after, were murdered among the friends of the author; for which reason, after it had passed through 4 editions, he suppressed it. It is unpleasant to relate, that, about this time, B. gave into a career of dissipation, too prevalent among the youthful possessors of rank and fortune, when altogether uncontrolled. Thus his fortune became deeply involved before he had attained legal maturity, and his constitution much impaired by the excesses in which he spent it. This, however, was not a course to last; and, in the year 1809, he determined to travel. Accordingly, in company with his fellow collegians, John Cam Hobhouse, Esq., he embarked at Falmouth for Lisbon, and proceeded through the southern provinces of Spain to the Mediterranean. His subsequent peregrinations in Greece, Turkey, &c., need not be detailed here, having been rendered so famous by his fine poem of Childe Harold's Pilgrimage. He returned home in June, 1811, after an absence of two years, and had not long arrived, before he was summoned to Newstead, in consequence of the dangerous illness of his mother, who breathed her last before he could reach her. In 1812, he gave to the world the two first cantos of Childe Harold's Pilgrimage. This assumption of the character of a wayward libertine, satiated, by an over cultivation of pleasure, into misanthropy, melancholy and listlessness, and that in such manner, that the application would necessarily be made to himself, afforded proof both of the perversity feeling and of the originality of B. There was, however, a boldness in the repulsive personification, and a force and an energy in the mode of supporting it, so indicative of great powers, that it at once produced its impression. Eulogy now flowed in from all quarters. Even the readers who disapproved the misanthropy and sombre views of human nature, displayed in this extraordinary production, confessed its genius. Thus the feelings of admiration became general, and, the strong current of fashion turning directly in his favor, his acquaintance was widely, not to say universally, courted; and his first entry on the stage of public life may be dated from this era. Nor were the manners, person and conversation of B. of a nature to dissipate the charm with which his talents had invested him. Although easy and affable in his general manners, the latent reserve of conscious genius was...
always observable; added to which, the associations connected with his identification with his own Childe Harold excited a mysterious and indefinable curiosity. Even his physiognomy was eminently calculated to keep up the interest which he otherwise inspired; the predominant expression of his fine features being that of deep and habitual thought, although, when engaged in interesting discussion, they as forcibly exhibited gayety, indignation and satire. Thus, in the initiatory world of fashion, the cathartic looked on him to admire, the serious to admonish, and the soft with a desire to console. The latter sympathy he excited too powerfully in certain quarters, and a course of noxious intrigue was the consequence. It is more gratifying to observe, that, in the midst of all this license, he was capable of delicate and generous actions, of which a number of well authenticated instances are on record. The quick and scrutinizing glance which he had cast on Eastern character and manners was now manifested in the Giaour, the Bride of Abydos, the Corsair (the copyright of which, as well as that of Childe Harold, he gave to Mr. Dallas), Lara, and the Siege of Corinth, which followed one another in quick succession. For parliamentary duties he seems to have had a decided distaste; and it was not until his return from the continent, that he ventured to speak. He made his maiden speech in February, 1812, from the opposition bench, against the frame-work bill, and was argumentative and lively, if not very original. Having now become a character whose support might be of considerable consequence, he was congratulated accordingly. Another time, he addressed the house in support of Catholic emancipation, and a third and last time on presenting a petition from major Cartwright. On the 21st of January, 1815, he married Anna Isabella, only daughter of Sir Ralph Milbanke Noel, baronet, to whom he had proposed himself a year before, and been rejected. The fortune received with his lady was not large, and, his own having been previously much enthralled, the reckless system of splendor which succeeded the marriage could not be long maintained; and, after enduring considerable embarrassments, it was finally settled, that lady B., who had presented his lordship with a daughter on the 10th of December, should pay her father a visit, until better arrangements could be made. From this visit lady B. ultimately resolved to return, and a formal separation ensued. This rupture produced a considerable sensation in the world of fashion, and the most contradictory rumors prevailed, in the midst of which B. left England, with an expressed resolution never to return. He crossed over to France, through which he passed rapidly to Brussels, taking, on his way, a survey of the field of Waterloo. He then visited the banks of the Rhine, Switzerland, and the north of Italy, and, for some time, took up his abode at Venice. Here he was joined by Mr. Hobhouse, who accompanied him on a visit to Rome, where he completed his third canto of Childe Harold. Not long after appeared the Prisoner of Chillon, a Dream, and other Poems; and, in 1817, Manfred, a tragedy, and the Lament of Tasso. In one of his excursions from Italy, he resided, for some time, at Abydos, and thence proceeded to Tenedos and the island of Scio, where he likewise spent three months; during which time he visited every classical scene, and frequently slept in the peasants' cottages, to whom his liberality made him a welcome guest. He also visited several other islands, and at length repaired to Athens, where he sketched many of the scenes of the fourth and last canto of Childe Harold, which poem was published in 1818, and sustained the high reputation of the author. In the same year appeared the jeu d'esprit of Beppo, in the mixed and pointed manner of the Italian style of poetical humor, and marked by a tone of loose morality, which ripened into licentiousness in Don Juan. In 1819 was published the romantic tale of Mazeppa, and the same year was marked by the commencement of Don Juan, which his bookseller, Mr. Murray, declined openly to publish. Of this celebrated production, it is as vain to deny the prodigy as the genius. In 1820 was published Marino Faliero, Doge of Venice, a tragedy, written with an avowed attention to the exploded system of the dramatic unities, which too frequently subtracts from the interest all that it gives to more cold and classical qualities; nor did this effort of B.'s prove an exception. The next year, he addressed a letter to Mr. W. Lisle Bowles, in defence of the poetical character of Pope, which had been rated very low in that writer's life of him. This dispute arose out of a disposition, in certain critics, to ground poetical character exclusively on a tendency to deal with the primary associations connected with natural objects and affections,
rather than on the more complex and factitious combinations produced by art and cultivation. This school not unfrequently pushes its theory to an extreme, as in the case of Pope, whom B., on the other hand, may have somewhat hyperbolically exalted. In the same year appeared the drama of Sardanapalus, indisputably the finest of his tragic offspring; the Two Foscari, a tragedy; and Cain, a mystery. The last is a production of much power, but marked by the same rashness of speculation and recklessness of moral effect, which disfigure many of the author's productions.—When B. quitted Venice, after visiting several parts of the Italian dominions of Austria, he settled at Pisa; where he became connected with the Gambia family, in whose behalf he endured some inconvenience, which ended in the banishment of the counts Gamb, and the open residence of the countess with B. In 1822, in conjunction with Mr. Leigh Hunt, who, on invitation, had become his guest, and Mr. Percy Bysshe Shelley, the periodical publication called the Liberal was commenced, which, principally owing to the unhappy result of their information induced him to advance £12,000 for the relief of Missolunghi. The dissensions among the Greeks gave him great pain, and involved him in considerable difficulties. At length he sailed from Argostoli with two Ionian vessels, and, taking considerable specie on board, proceeded to Missolunghi, where, after considerable hazard and danger, and the loss of one of his vessels, he finally arrived, and was received with every mark of honor Grecian gratitude could devise. His influence was immediately salutary in the mitigation of the ferocity with which the war was waged on the part of the Greeks; but it was much more difficult to produce union among their leaders. He immediately began to form a brigade of Suliotes, 500 of whom were taken into his pay, with a view to an expedition against Lepanto; but such was the disorderly and unsettled temper of these troops, that he was obliged to postpone it. This unexpected disappointment preyed on his spirits, and, Feb. 15, he was attacked with a severe fit of epilepsy. He had, subsequently, other attacks, but at length the violence of the disorder began to yield to the skill of his physician, and he was recommended to remove, for a while, from the flat, marshy and unhealthy site of Missolunghi, to Zante. This step, with his usual tenacity, he refused to take. "I cannot quit Greece (he wrote to a friend) while there
is a chance of my being even of (supposed) utility. There is a stake worth millions such as I run, and while I can stand at all, I must stand by the cause. While I say this, I am aware of the difficulties, dissensions and defects of the Greeks themselves; but allowance must be made for them by all reasonable people." On the expedition against Lepanto being given up, other projects were proposed with reference both to military operations and to congresses for uniting Eastern and Western Greece; but, unhappily, the fatal moment was at hand. His illness, some fine traits of humanity and feeling for his attendants were exhibited by B., and nearly his last words, previous to sinking into the lethargy which ended in death, were, "My wife, my child, my sister! — you know all — you must say all." His utterance then failed him, as it had previously done in referring to the same near connections. Thus, in his 37th year, prematurely died this extraordinary genius, to the deep affliction of the people whose cause he had espoused, who deemed every possible public testimony of their sorrow. Nor was his death a subject of less regret to many, who looked for a noble recompense, in the maturity of his life, for the faults of its commencement and preceding progress. Many of his errors were evidently the result of a too early release from all discipline and control, and the neglect which family circumstances had thrown round him. In other respects, the vices and failings of B., undeniable, it is true, were much magnified by the peculiarities of his genius and character, which attracted an intensity of observation to all which concerned him. The disposition of the public at once to admire and condemn, accompanied as it was with an involuntary tendency to confound the character of the poet with some of the most romantic creations of his imagination, however it might annoy him in the first instance, in the sequel too obviously nurtured a degree of personal vanity, which formed one of the greatest weaknesses of his character. Commonplace censure produces little effect when coupled with great admiration, and still less is effected by the violence of party attack, or by direct personal hostility. The morals of B., on the score of gallantry, his carelessness of female reputation, and hasty and vindictive spirit of resentment, are altogether indefensible; but it is certain that they were mixed up with great humanity, benevolence and generosity. It was evident, too, from his death, and many other circumstances, that, whatever his pride and resentment at being so decisively abandoned, he nurtured the natural feelings of a husband and father deep in his bosom. In respect to several disputed points of his conduct, the Memoirs, by himself (which he gave to Mr. Moore to raise a loan from Mr. Murray, the bookseller, and which that gentleman, at the instance of his family, thought proper to destroy), would, doubtless, have given much information to the world. As it is, certain journals of visitors, and of temporary companions, professing to record his conversation, but poorly supply their place. The body of B. was brought to England, and laid in state in London. It was subsequently interred near his own seat of Newstead abbey, where a plain marble slab merely records his name and title, date of death, and age. Besides his only legitimate child and heiress, B. left another daughter in Italy, to whom he bequeathed £5000, on the condition of her not marrying an Englishman. The successor to his estate and title was his cousin, captain George Anson Byron, of the royal navy.

Byron, John, an English commodore, born in the year 1723, embarked, at the age of 17, in one of the ships of lord Anson, which was fitted out for a voyage round the world, but was wrecked on the coast of the Pacific, north of the straits of Magellan. B., with some of his unfortunate companions, was conducted, by the Indians, to Chili, and remained there till 1741, when he embarked on board a ship of St. Malo, and, in 1745, returned to Europe. In 1758, he commanded three ships of the line, and distinguished himself in the war against France. George III., who wished to explore the part of the Atlantic ocean between the cape of Good Hope and the southern part of America, gave B. the command of a frigate, with which he set sail, June, 1764, having under his order the frigate Tamar. Both ships touched at Madeira and the Cape
Verd islands, and proceeded thence to the Rodin hand, opposite the city of that name. B. then sailed to the southern part of the Atlantic ocean, and, after having searched in vain for Pepys' islands, he visited the Falkland islands, and, passing through the straits of Magellan, continued his voyage in the South sea. Here he fell in with Bougainville, who was engaged in founding a colony in the Falkland islands. B. directed his course northward to the island of Macalbeo; then, sailing westward, he passed the Dangerous Archipelago, lying on the east of the Society islands, and discovered the isles of Disappointment and King George's Islands. Thence he directed his course north-west, and discovered the islands called Danger and Byron's island; sailed by the Carolinas into the Chinese sea; thence proceeding southerly, he passed through the straits of Bunco to Batavia; from whence he set sail at the close of the year 1765, and, in May, 1766, arrived in England. Although B.'s voyage was not fruitful in discoveries, it still deserves an honorable place in the history of voyages round the world, since he was the first of those renowned circumnavigators of the globe, including Wallis, Carteret and Cook, whose enterprises were not barely mercantile, but were directed to scientific objects.

Byron's Island; a small island in the Pacific, about 12 miles in length, abounding in cocoa-trees. It was discovered by commodore Byron (q. v.) in 1765. Lon. 173° 10' E.; lat. 1° 15' S.

Byssus (gossypion and xylon), cotton, was brought from India about the time of Herodotus, and still earlier from Egypt. In this latter country, it was used in embalming, and the mummies are still found wrapped in it. As an article of dress, it was worn only by the rich. Dives, in Christ's parable (Luke xvi, 19), was clothed in byssus, and it is mentioned among the riches of fallen Babylon (Rev. xviii, 12). Byssus was formerly erroneously considered as a fine kind of linen. The fine stuff manufactured from the byssus is called, more particularly, sindon. Foster derives the word byssus from the Coptic. Byssus was also used by the ancients, and is still used, to signify the hair or thread-like substance (called beard), with which the different kinds of sea-muscles fasten themselves to the rocks. The pinna marina, particularly, is distinguished by the length and the silky fineness of its beard, from which very durable cloths, gloves and stockings are still manufactured in Sicily and Calabria. (See Foster De Bysso Chalcopyro, 1770.)

Byzantine Empire. The Byzantine or Eastern Roman Empire comprised, at first, in Asia, the country on this side of the Euphrates, the coasts of the Black sea, and Asia Minor; in Africa, Egypt; and in Europe, all the countries from the Hellespont to the Adriatic and the Danube. This survived the Western Empire 1000 years, and was even increased by the addition of Italy and the coasts of the Mediterranean. It commenced in 395, when Theodosius divided the Roman empire between his two sons, Arcadius and Honorius. The Eastern Empire fell to the elder, Arcadius, through whose weakness it suffered many misfortunes. During his minority, Rufinus was his guardian and minister, between whom and Stilicho, the minister of the Western Empire, a fierce rivalry existed. The Goths laid waste Greece. Eutropius, the successor, and Gainas, the murderer, of Rufinus, were ruined by their own crimes (399). The latter lost his life in a civil war excited by him (400). Arcadius and his empire were now ruled by his proud and covetous wife, Eudoxia, till her death (404). The Ostrogoths and the Huns wasted the provinces of Asia and the country along the Danube. Theodosius the Younger succeeded his father (408), under the guardianship of his sister Pulcheria. Naturally of an inferior mind, his education had made him entirely incapable and unfit for self-command. Pulcheria, who bore the title of Augusta, administered the kingdom ably. Of the Western Empire, which had been ceded to Valentinian, Theodosius retained West Illyria (423). The Greeks fought with success against the king of the Persians, Vannes. The kingdom of Armenia, thrown into confusion by internal dissensions, and claimed, at the same time, by the Romans and the Persians, became now an apple of contention between the two nations (440). Attila laid waste the dominions of Theodosius, and obliged him to pay tribute (448). After the death of her brother, Pulcheria was acknowledged empress (450). She was the first female who attained this dignity. She gave her hand to the senator Marcian, and raised him to the throne. His wisdom and valor averted the attacks of the Huns from the frontiers, but he did not support the Western Empire, in its wars against the Huns and the Vandals, with sufficient energy. He afforded shelter to a part of the Germans and Sarmatians, who were
driven to the Roman frontiers by the incursions of the Huns. Pulcheria died before him, in 453. Leo I (457), a prince praised by contemporary authors, was chosen successor of Marcellus. His expeditions against the Vandals (457) were unsuccessful. His grandson Leo would have succeeded him, but died a minor shortly after him, having named his father, Zeno, his colleague (474). The government of this weak emperor, who was hated by his subjects, was disturbed by rebellions and internal disorders of the empire. The Goths depopulated the provinces till their king Theodoric turned his arms against Italy (493). Ariadne, widow of Zeno, raised the minister Anastasius, whom she married, to the throne (491). The nation, once excited to discontent and tumults, could not be entirely appeased by the alleviation of their burdens and by wise decrees. The forces of the empire, being thus weakened, could not offer an effectual resistance to the Persians and the barbarians along the Danube. To prevent their incursions into the peninsula of Constantinople, Anastasius built the long wall, as it is called. After the death of Anastasius, the soldiers proclaimed Justin emperor (518). Notwithstanding his low birth, he maintained possession of the throne. Religious persecutions, which he undertook at the instigation of the clergy, and various crimes, into which he was seduced by his nephew Justinian, disgraced his reign. After his early death, in 527, he was succeeded by the same Justinian (q.v.), to whom, though he deserves not the name of the Great, many virtues of a ruler cannot be denied. He was renowned as a legislator, and his reign was distinguished by the victories of his general Belisarius; but how unable he was to revive the strength of his empire, was proved by its rapid decay after his death. Justin II, his successor (565), was an avaricious, cruel, weak prince, governed by his wife. The Lombards tore from him part of Italy (568). His war with Persia, for the possession of Armenia (570), was unsuccessful; the Avari plundered the provinces on the Danube, and the violence of his grief at these misfortunes deprived him of reason. Tiberius, his minister, a man of merit, was declared Caesar, and the general Justinian conducted the war against Persia with success. The Greeks now allied themselves, for the first time, with the Turks. Against his successor, Tiberius II (578), the empress Sophia and the general Justinian conspired in vain. From the Avari the emperor purchased peace; from the Persians it was extorted by his general Mauricius or Maurice (582). This commander Tiberius declared Caesar in the same year. Mauricius, under other circumstances, would have made an excellent monarch, but, for the times, he wanted prudence and resolution. He was indebted for the tranquillity of the eastern frontiers to the gratitude of king Chosroes II, whom, in 591, he restored to the throne, from which he had been deposed by his subjects. Nevertheless, the war against the Avari was unsuccessful, through the errors of Commentius. The army was discontented, and was irritated, now by untimely severity and parsimony, and now by timid indulgence. They finally proclaimed Phocas, one of their officers, emperor. Mauricius was taken in his flight, and put to death (602). The vice of Phocas, and his incapacity for government, produced the greatest disorder in the empire. Heracleus, son of the governor of Africa, took up arms, conquered Constantinople, and caused Phocas to be executed (610). He distinguished himself only in the short period of the Persian war. During the first 12 years of his reign, the Avari, and other nations of the Danube, plundered the European provinces, and the Persians conquered the coasts of Syria and Egypt. Having finally succeeded in pacifying the Avari, he marched against the Persians (622), and defeated them; but, during this time, the Avari, who had renewed the war, made an unsuccessful attack on Constantinople, in 626. Taking advantage of an insurrection of the subjects of Chosroes, he penetrated into the centre of Persia. By the peace concluded with Siroes (628), he recovered the lost provinces and the holy cross. But the Arabsians, who, meanwhile, had become powerful under Mohammed and the caliphs, conquered Phoenicia, the countries on the Euphrates, Judea, Syria and all Egypt (631—641). Among his descendants there was not one able prince. He was succeeded by his son Constantine III, probably in conjunction with his step-brother Heraclonas (641). The former soon died, and the latter lost his crown in a rebellion, and was mutilated. After him, Constans, son of Constantine, obtained the throne (642). His sanguinary spirit of persecution, and the murder of his brother Theodosios (650), made him odious to the nation. The Arabsians, pursuing their conquests, took from him part of Africa, Cyprus and Rhodes, and defeated him even at sea.
Internal disturbances obliged him to make peace. After this, he left Constantinople (659), and, in the following year, carried on an unsuccessful war against the Lombards in Italy, in which he lost his life, at Syracuse (660). Constantine IV, Pogonatus, son of Constans, vanquished his Syracusan competitor, Mezizius, and, in the beginning of his reign, shared the government with his brothers Tiberius and Heraclius. The Arabians inundated all Africa and Sicily, penetrated through Asia Minor into Thrace, and attacked Constantinople, for several successive years, by sea (660). Nevertheless, he made peace with them on favorable terms. But, on the other hand, the Bulgarians obliged him to pay a truce (680). Justinian II, his son and successor, weakened the power of the Maronites (685), but fought without success against the Bulgarians (688) and against the Arabians (692). Leo dethroned this cruel prince, had him mutilated and sent to the Tauric Chersonese (695). Leo was dethroned by Ap­simar, or Tiberius III (698), who was himself dethroned by Theobald, king of the Lombards, who restored Justinian to the throne (705); but Philippicus Bardanes rebelled anew against him. With Justinian II the race of Heraclius was extinguished. The only care of Philip­picus was the spreading of monotheism, whilst the Arabians waged war in Asia Minor and Thrace. In opposition to this prince, who was universally hated, the different armies proclaimed their leaders emperors, among whom Leo was chosen. He restored Leo to the throne (705); but Philippicus Bardanes was defeated (709). During the reign of the latter, the Arabians conquered Sicily, Lower Italy, Crete and other countries. He prohibited the worship of images; as did also his son Theophilos. Theodora, guardian of his son Michael III, put a stop to the dispute about images (811). During a cruel persecution of the Manicheans, the Arabians devastated the Asiatic provinces. The dissolute and extravagant Michael, who came to the throne in 687, was not altogether a contemptible monarch. He died 696. The reign of his learned son, Leo V, was not very happy. He died 811. His son Constantine VIII Porphyrogenitus, a minor when he succeeded his father, was placed under the guardianship of his colleague, Alexander, and, after Alexander’s death, in 812, under that of his mother, Zoe. Romanus II, previously a general, obviated, in 819, to share the throne with him and his children. Constantine subsequently took sole possession of it again, and reigned mildly, but weakly. His son Romanus II succeeded him in 853, and fought successfully against the Arabs. To him succeeded, in 885, his general Nicephorus, who was put to death by his own general, John Zimisces (970), who carried on a successful war against the Russians. Basil II, son of Romanus, succeeded this good prince. He vanquished the Bulgarians and the Arabs. His brother Constantine IX (1025), was not equal to him. Romanus III became emperor (1028) by a marriage with Zoe, daughter of Constantine. This dissolute but able
princess caused her husband to be executed, and successively raised to the throne Michael IV (1034), Michael V (1041) and Constantine X (1042). Russians and Arabians meanwhile devastated the empire. Her sister Theodora succeeded her on the throne (1053). Her successor, Michael VI (1056), was deposed by Nicephorus Comnenus in 1057, who became a monk (1059). His successor, Constantine XI, Ducas, fought successfully against the Uzes. Eudokia, his wife, guardian of his sons, Michael, Andronicus and Constantine, was intrusted with the administration (1067), married Romanus IV, and brought him the crown. He carried on an unsuccessful war against the Turks, who kept him for some time prisoner. Michael VII, son of Constantine, deposed him of the throne (1071). Michael was deposed by Nicephorus III (1078), and the latter by Alexius I, Comnenus (1081). Under his reign the crusades commenced. His son, John II, came to the throne (1118), and fought with great success against the Turks and other barbarians. The reign of his son, Manuel I, who succeeded him (1143), was, also, not fortunate. His son, Alexius II, succeeded (1180), and was deposed by his guardian, Andronicus, as was the latter by Isaac (1185). After a reign disturbed from without and within, Isaac was deposed by his brother, Alexius III (1186). The crusaders restored him and his son, Alexius IV; but the seditious Constantinopolitanians proclaimed Alexius V, Ducas, emperor, who put Alexius IV to death. At the same time, Isaac II died. During the last reigns, the kings of Sicily had made many conquests on the coasts of the Adriatic. The Latins now forced their way to Constantinople (1204), conquered the city, and retained it, together with most of the European territories of the empire. Baldwin count of Flanders was made emperor, Boniface marquis of Montfort obtained Thessalonica as a kingdom, and the Venetians acquired a large extent of territory. In Attalia, Rhodes, Philadelphia, Corinith and Epirus, independent sovereigins arose. Theodore Lascaris seized on the Asiatic provinces, bore the title of emperor at Nice, and was, at first, more powerful than Baldwin. A descendant of the Comneni, named Alexius, established a principality at Trebisond, in which his great-grandson John took the title of emperor. Neither Baldwin nor his successors were able to secure the tottering throne. He himself died in captivity, among the Bulgarians (1306). To him succeeded Henry, his brother, with Peter, brother-in-law of Henry, and his son Robert (1321). With the exception of Constantinople, all the remaining Byzantine territory, including Thessalonica, was conquered by John, emperor of Nice. Baldwin II, brother of Robert, under the guardianship of his colleague, John Brienne, king of Jerusalem, died in 1327. Michael Palaeologus, king of Nice, conquered Constantinople in 1201, and Baldwin died in the West, a private person. The sovereigns of Nice, up to this period, were Theodore Lascaris (1204); John Ducas Patatzes, a good monarch and successful warrior (1222); Theodore II, his son (1259), who was deprived of the crown by Michael Palaeologus (1260). In 1261, Michael took Constantinople from the Latins. He labored to unite himself with the Latin church, but his son Andronicus II (1282), renounced the connexion. Internal disturbances, and foreign wars, particularly with the Turks, threw the exhausted empire into confusion. Andronicus III, his grandson, obliged him to divide the throne (1322); and, at length, wrested it entirely from him. Andronicus died a monk (1329). Andronicus IV, who ascended the throne in the same year, waged war unsuccessfully against the Turks, and died 1341. His son John was obliged to share the throne with his guardian, John Cantacuzene, during 10 years. The son of the latter, Matthew, was also made emperor. But John Cantacuzene resigned the crown, and Matthew was compelled to abdicate (1335). Under the reign of John, the Turks first obtained a firm footing in Europe, and conquered Gallipolis (1337). The family of Palaeologus, from this time, were gradually deprived of their European territories, partly by revolt, partly by the Turks. The sultan Amurath took Adrianople (1561). Bajazet conquered almost all the European provinces except Constantinople, and obliged John to pay him tribute. The latter was, some time after, driven out by his own son, Andronicus, who was succeeded by his second son, Manuel (1311). Bajazet besieged Constantinople, defeated an army of western warriors, under Sigismund, near Nicopolis (1396), and Manuel was obliged to place John, son of Andronicus, on his throne. Timur's invasion of the Turkish provinces saved Constantinople for this time (1402). Manuel then recovered his throne, and regained some of the lost provinces from the contending sons.
of Bajazet. To him succeeded his son John (1425), whom Amurath II stripped of all his territories except Constantinople, and extorted a tribute from him (1444). To the emperor John succeeded his brother Constantine. With the assistance of his general, the Genoese Justinian, he withstood the superior forces of the enemy with fruitless courage, and fell in the defence of Constantinople, by the conquest of which, May 29, 1453, Mohammed II put an end to the Greek or Byzantine empire. In 1451, David Comnenus, emperor of Trebizond, submitted to him, and, at a subsequent period, was put to death. (See Comneni.)

Byzantine Historians: a series of Greek authors, whose works relate to the history of the lower Greek empire, from the fourth century until the conquest of Constantinople by the Turks, and to the Turkish history until the end of the 16th century. These authors display the faults of a degenerate period; but they contain, also, the relics of former excellence. They are the principal source of the history of the decay of the Roman empire, and a correct delineation of the condition and character of the modern Greeks requires an intimate acquaintance with them, of which D'Anse de Villeison is an example. They contain, besides, an inexhaustible store of materials relative to the great migration of the nations, and the new political system to which it gave rise in the north of Asia and in Europe, and illustrative of ecclesiastical history. These too much neglected authors have been collected in an edition, published at Paris—Corpus Scriptorum Historiae Byzantinae (Paris, royal press, 1645—1752, 20 vols.); reprinted at Venice, with a different arrangement of the works (1729—1733), and explained by several French scholars, particularly by Du Cange, who have rendered great service by their commentaries and glossaries. These collections, however, are rarely to be found complete. Hase has enlarged the list of these writers, by his edition of Leo Diaconus (Leoni Diaconi Coloniensis Historia, &c., &c.), which, in form and the value of the contents, approaches the great Paris edition. He has promised, also, to publish Psellos. Stritter, keeper of the royal archives at Moscow, under Paul, has provided, by an excellent extract (Memorie Populorum ad Danubium, Pontum Euxinum, Palasium Meotidem, Mare Caspium et Inde magna ed Septentrionem Incertam, Paris, 1771—79, 4 vols., 4to.), their importance as sources of ancient Russian history. Four of them form a continued history of the Byzantine empire to the year 1470, viz.: 1. Zonaras; 2. Niceas Acominatus Choniates; 3. Nicephorus Gregoras; 4. Laonicus, or Nicholas Chalcodylas of Athens. The other authors, who have treated only single parts of the Byzantine history, are almost all to be found in the Corpus Byzantinum, which appeared at Paris, in 1648, in three splendid folio volumes. The most remarkable among these, are in chronological order: 1. Procopius of Cesarea, rhetorician at Constantinople. We have from him eight books of histories, viz., Pericza, in four books, and Gothica, in four books, published separately by Höschel (Augsburg, 1607); and Secret History (Anecdota), in nine books (in which, contrary to the opinions expressed in his first work, he shows himself very inimical to the emperor Justinian), published by Reinhart, at Erlangen and Leipzig (1753).—2. Agathias, after the death of Justinian, wrote an account of his reign, in five books, published at Paris (1640, folio).—3. Theophylact of Egypt. We have from him a history of the emperor Maurice, in eight books, to 694 (Paris, 1644).—4. Nicephorus, patriarch of Constantinople, who has left several learned theological writings. His Byzænæ Historiarum extends from the death of the emperor Maurice to 770 (Venice, 1750).—5. John Scylitzes held several offices at Constantinople. We have from him an abridgment of history, from 811 to the time of Isaac Comnenus (1057). It appeared in a Latin translation (Venice, 1570). The same work he continued to the time of Alexander Comnenus, 1644. The continuation is yet in manuscript.—6. Anna Comnenus, daughter of the emperor Alexius I, died about 1150. She wrote an Alexia, or a work on the history of her father, Alexius Comnenus, in 13 books, edited by Höschel in Augsburg, 1610. (A more complete edition, Paris, 1631, folio).—7. George Acropolita, a statesman in Constantinople, wrote an abridgment of the Byzantine history, from the capture of Constantinople by the Latins, 1204, to its recapture, 1261 (Paris, 1651, folio).—8. George Pachymer held high offices in church and state in Constantinople. He wrote Byzantine History, in thirteen Books, from the Birth of Michael Palaeologus, 1158, to 1308 (Frankfort, 1668, folio).—9. John Cantacuzenus, the emperor, is the author of Byzantine History, in four Books, from 1320—54 (Paris, 1645).—10. George Co-
dimus, intendant of the palace in Constantinople. We have from him several works on the antiquities of Constantinople. The most important of them is On the Offices and Services appertaining to the Court and the Church of Constantinople (Paris, 1645, folio).—11. Constantinus Porphyrogenetus, or Porphyrogenetos, emperor, wrote the life of his grandfather Basilius Macedo, edited by John Meursius. We have also a work of his on government, written for his son, and on the provinces of the Eastern and Western Empire, besides other writings and collections. The most important treats of the ceremonies of the Byzantine court. It was edited by Leich and Reiske (Leipsic, 1751—54, 2 vols.).—12. After the capture of Constantinople, Ducas wrote a Byzantine history, from 1341 to the capture of Lesbos, 1462.—13. Anselm Banduri, a Benedictine monk, left an extensive work on the antiquities of Constantinople, in which several works of more ancient writers are contained.—14. Peter Gilles. From him we have three books on the Thracian Bosphorus, and four books on the topography and antiquities of Constantinople.—15. Zosimus wrote a Roman history, in six books, from Augustus to Honorius. This work is of particular importance for the later epochs; published by Reitmeyer (Leipsic, 1784).—16. George Phranza died, after the capture of Constantinople, in a monastery of Corfu. We have from him a chronicle of the Byzantine history, in four books, from 1401—77, published by Alter (Vienna, 1796).

A new and highly-improved edition of this important collection was commenced, in 1828, by that distinguished scholar, Mr. Niebuhr, to be published by Webers, the well-known bookseller at Bonn in Germany. Three volumes of this edition, in octavo, have been received in the U. States, and will fully justify the high expectations entertained by the learned of this Herculean undertaking. By a singular concurrence of circumstances, the college at Cambridge, Massachussets, happens to be possessed of a valuable manuscript of one of the Byzantine historians, Michael Glycas, which, as we are informed by a gentleman who has cursorily examined it, appears never to have been collected, and will furnish several curious readings of importance in the emendation of the text. This MS. is one of a number purchased in Constantinople, and brought to the U. States by the Hon. Edward Everett, in the year 1813, and a particular account of which is given by him in the Memoirs of the American Academy, vol. 4, p. 413. It is on parchment, and is supposed to have been written as early as the 13th century. A collation of it is now begun, as we are informed, for the purpose of being transmitted to the learned editor in Germany.

**Byzantine School of Art.** After Constantine the Great had made the ancient Byzantium the capital of the Roman empire, and ornamented that city, which was called after him, with all the treasures of Grecian art, a new period commenced in the history of art. From this time it became subservient to Christianity, as the religion of the state. All the productions of heathen artists, which formed suitable ornaments for Christian cities and temples, were now employed in the service of the invisible God, and art began, by slow degrees, to rise from its degeneracy, under the influences of Christianity. At the time when Constantine converted Byzantium into an imperial residence, splendor and ornament had already supplanted the simplicity of ancient taste. Asiatic luxury had become predominant, and this laid more stress on richness of material and decoration than on purity of conception. Architecture, which adorned the forum Augusteum, in Byzantium, with a fourfold colonnade, and created splendid courts, imperial palaces, baths, theatres and porticoes, preserved, for a long time, the grand forms of classic times, and deviated from them slowly and gradually, at first in the Christian churches, as a model for which Justinian built the church of St. Sophia, and decorated it with Oriental magnificence, in 537. But, even in architecture, the costliness and color of the marble was soon considered as of more importance than the proportion of the parts and the distribution of the columns. There are, however, as late as the ninth century, admirable works of Greek architecture, particularly those of Theodosius the Great and Justinian. This period was still less favorable to the simplicity of sculpture. The mythology of ancient Greece abjured sacred subjects to the statuary. Gods appeared in the human form, and the human figure, in the Grecian model, was raised to the classical ideal. On the introduction of the Christian religion, sculpture was confined to the imitation of nature; afterwards to portraits, and to mere purposes of ornament; for Christianity is averse to sensible representations of the Divinity. Statues of emperors, of great statesmen and generals, became the
subjects of the sculptor, and seem, eventually, to have given rise to the introduction of the worship of images in the Christian churches, since the custom of erecting monuments and statues to the emperors, bishops, and other noble persons, who gratified their vanity not only with purple garments, but by the extravagant use of pearls and precious stones, which were worn in long pendants from the ear, in bracelets and in necklaces. The whole mantle was often garnished with precious stones, and round the edge ran a double row of pearls. Such garments the emperors used to change several times a day. As such exterior ornaments are foreign from sculpture, which prefers the naked figure, or a simple drapery, it is easy to see why the production of statues ceased so soon. In the lists of Byzantine works of sculpture given by authors of the first centuries, there are no images of Christ, no statues of apostles and saints. Instead of them, we find only crucifixes, painted, or ornamented with mosaic work. If there were any such images in earlier times, they must have been destroyed in the time of the Iconoclasts (q. v.), as was the case with the bronze statue of Christ, near that of Constantine, which was demolished by Leo, the general destroyer of images, and the representations of the Good Shepherd, praised by Eusebius, and that of Daniel among the Lions, with which Constantine adorned the public fountains. An image of the Savior, surrounded by angels, and worked in mosaic, is described by Photius. We also find mention of the images of two angels upon the forum of Constantine, the representation of Adam and Eve, the bronze statue of Moses, with which Justinian is said to have ornamented the curia, and that of Solomon, of an earlier date. According to Eusebius, the roof of the palace in Constantinople was also decorated with rich mosaics of gold and costly stones, representing scenes from the passion of Christ; and another, which Justinian erected, in Chalcis, contained representations of events in the war against the Vandals. The most celebrated of all the mosaics in the interior of St. Sophia's church in Constantinople has been preserved in fragments to modern times. The taste of those times included, in general, more to mosaic works than to sculpture; because the former were rendered attractive by the costliness and colors of the stones. Sculpture was employed particularly in ornamenting altars, baldacchins, holy vessels and urns, which were made of the most precious marble. The art of engraving on stones was also long preserved. In the art of painting, which was initiated in mosaic, the taste of this age was the same as in sculpture—pleased with gold and lively colors, but careless about truth of representation, and beauty and grandeur of
BYZANTINE SCHOOL OF ART.

conception. The first germ of a Christian style of art was, however, developed in the Byzantine pictures. The ideal representations of human figures, which the ancient Grecian artists had exhibited in their master-works, were necessarily given up by Christian artists; another ideal was to be formed, which should not recall the odious features of paganism. But the ideal of the Savior, of the mother of Christ, and of his apostles, could be formed only by degrees. The artists, who had nothing real and material before them, but were obliged to find, in their own imaginations, conceptions of the external appearance of sacred persons, could give but feeble sketches of their ideas by means of their imperfect art. In their representations of Jesus and his apostles, they finally adopted the national features of the Jews. In the figure, and sometimes even in the countenance, they imitated the external appearance of some revered bishop. The hands were often lifted, as in blessing, or one hand was laid upon the breast, or holding a book. Thus the figures of the founders of the Christian church were first represented in paintings. They were also exhibited in mosaic, but not in marble. Christian subjects, indeed, are generally more suited to painting, which gives the outward expression of the mind, by means of light, and shade, and colors, than to sculpture, which, on the contrary, elevates the external form to a kind of spiritual dignity. As the artists cared but little for a faithful imitation of nature, but were satisfied with repeating what was once acknowledged as successful, it is not strange that certain forms, introduced by the authority of some celebrated artists, and approved by the taste of the time, should be made, by convention, and without regard to truth and beauty, general models of the human figure, and be transmitted as such to succeeding times. In his treatise on the continuation of the arts in Constantinople (Comment. Soc., Götting, vol. xii), Heyne remarks, that art continued to be exercised here, as far as it consists in mechanical skill, in the use of instruments, in particular rules and general precepts; but taste, and a sense for truth and simple beauty, had vanished. Delicacy, elegance and gracefulness in design, proportion of parts, harmony of the figures, and beauty of form, were lost. The artists did not even aim at an accurate representation, but were contented with rules and general outlines, as may be seen in the coins of the time. These deformed and meagre figures were slavishly copied, and labor was lavished on costly, and often tasteless, ornaments. A certain propensity to the grotesque prevailed, even in architecture. The influence of ancient works of art continually decreased as their number was diminished by the violence of war, by superstition, by avarice, and by the hand of time. Most of the then existing works of antiquity perished in the capture of Constantinople, during the crusades of 1204 and 1261; and thus the city had long been deprived of its most beautiful ornaments, when it was taken by the Turks, in 1453. This was, in general, the state of art in the Byzantine empire. Its influence has been felt ever since; in earlier times, by the connexion of the imperial residence in the East with the Western Empire, and afterwards by commercial intercourse and the crusades. Let us first consider this connexion of the lower Greek art with the west of Europe, and, in particular, with Italy. According to Stieglitz (on German Architecture), the character of the lower Greek architecture was tranquillity and simplicity, originating from poverty of ideas and materials, and terminating in heaviness. But this architecture, which prevailed till the earlier part of the middle ages, preserved the seed, from which, in later times, a new and better style sprung up. Constantinople became a school of architecture, from which artists issued to all parts of the Roman empire, as far as Britain, to erect churches after the model of St. Sophia. They also penetrated into the countries of the East, introducing their art among the Arabians, who applied it to the erection of their mosques, and among the Moors in Spain, who formed their own style from it. The lower Greek or Byzantine style kept itself pure and uncorrupted in Italy, under the Lombards, as well as under the Goths, whose artists came from the East; and thence it spread, during the reign of Charlemagne, to Germany, Gaul and England. The style of architecture introduced by Charlemagne into Germany, was a corruption of that prevailing in the lower Greek empire, from which, together with the Arabian and German style, sprang the true German or Gothic architecture, which flourished from the 13th to the 16th century. (See Architecture, History of.)
ii, p. 104, tab. xxix), representations of Italian and Gallic sculpture, which, in their drapery, ornaments and architectural forms, betray a Byzantine origin. In regard to painting, we are indebted to the Byzantines for the preservation of some portion of its ancient excellence. As, in the early period of Christianity, Grecian and Roman art, in general, differed but little, since both sprung from the ruins of ancient art, so, in painting, no striking difference is to be observed between them. They became, however, constantly more and more distinct, in later times, as Greece and Italy became more and more separated. Short, thick bodies, stiff and forced attitudes, exaggeration of the characteristic parts, in particular of the eyes, faces contracted above and broad below, and marked with overcharged tints, short thick hair, highly-arched eyebrows, awkward drapery, loaded with unnatural folds, distinguish the Greek pictures as far back as the fifth century. The better paintings, which are found particularly in manuscripts, show a neat, accurate and diligent execution. When art declined in Italy, particularly in the ninth century, painting was still cultivated by the Greeks, who, driven from home by the disputes concerning images, carried it into Italy and other countries, and adorned the churches there. Thus the lower Greek or Byzantine school was the mother of the old Italian school, and of the lower Rhenish, which preceded the German. More exact accounts are wanting of the historical connexion of the lower Rhenish and of the old Italian school with the Byzantine style of art. (On the earlier times of the Byzantine art, see Histoire de l'Art par les monuments depuis sa Decadence au 14me Siecle, jusqu'a son Renouvellement en 16me; Paris, 1810, folio).

BYZANTIUM (from its original founder, Byzas), lying on the Thracian Bosphorus, on a triangular promontory, the present Constantinople, even in ancient times a flourishing city, was at first a Megarian colony, and was afterwards enlarged and embellished by the Milesians and other Greeks. Near it was a small bay of the Propontis, called Kerpe, forming three harbors. The situation of B. was highly favorable to trade, and gave it the command of the commerce of other nations in the Black sea, and the opportunity of imposing tolls and duties. These circumstances increased the resources of the city; but it suffered much from the attacks of the Thracians, Bithynians, Gauls, and even the Greeks. It was severely treated in the Peloponnesian war, but afterwards rose again, and, under the emperors, was in the most flourishing condition. From the time of Constantine, it was the second city in the Roman empire, and the residence of the emperor, who endeavored to give it the splendor of old Rome. It was, like Rome, divided into 14 districts; had an amphitheatre, a Roman forum, a circus, and a multitude of splendid buildings and statues, some of which had been brought from Rome. (See Constantinople.)
C, the third letter of the alphabet in most of the European dialects. "In English," says Ben Jonson, "it might well have been spared, for it has no peculiar sound." It has the simple power of k, before a, o, u, and most of the consonants; and the power of z, before e, i, y. The Greeks had no c in their alphabet, and they supplied the use of it in Roman words by k or s, as the Romans often indicated the kappa and sigma, in Greek words, by a c. The earlier Romans also used it in many words which were at a later period written with a g; as, legiones for legiones. This renders it probable that it was originally the Greek gamma, as the form of the letters, in ancient inscriptions, is very similar. The Roman g was invented, according to Phtarch, by Spurius Carvilius. Q and C are often interchanged on monuments; thus we find QFVM for CFVM, colidite for cuvidite. Its arithmetical significations, and its principal uses in abbreviations, have been explained in the article Abreviations (q. v.). On medals, it stands for many names of persons, as, Cesar, Caius, Cassius, &c.; of offices, as, censor, consul; of cities, as, Carthago, &c.; also for cives, civitas, colonia, cohors, cypens, castra, circensis. In the calendars and fasti, it denoted the days in which the consuls might be held. In trials, the opinions of the judges were given by writing on a little cube or die (tessera) the initial C, condemno, A, absolvor, or N, non liquet. For this reason, Cicero (pro Mil. G.) calls C, littera tristis, and A, littera salutaria.—C, in music; the name of that note in the natural major mode, to which Guido applied the monosyllable ut, but which has long since been relinquished by the Italians for that of do, as softer and more vocal. C sometimes, in Italian music, stands for canto, as C I. canto primo. It stands, likewise, when placed at the chief, for common time, and, with a line run through it, perpendicularly, for cut time, or a quicker kind of movement.

CABAL; the infamous English ministry under Charles II (q. v.), which consisted of five men famous for their intrigues—Clifford, Ashley, Buckingham, Arlington, and Lauderdale, whose initial letters form this word. (Burnet, Own Times, An. 1673.) Some think the use of the word cabal, to denote an intrigue, or a body of intriguers, is derived from this circumstance. "Never," says Hume (ch. 65), "was there a more dangerous ministry in England, nor one more noted for pernicious counsels. Ashley (more known as the earl of Shaftesbury), bold, ambitious, eloquent, insinuating, subtle, united great industry with a sound judgment of business and of men. Buckingham, with the advantages of a graceful person, high rank, splendid fortune, and a lively wit, but without prudence or principle, sacrificing, in turn, honor to interest, interest to pleasure, and pleasure to caprice, dissipated his fortune, and ruined his health, by his riot and debauchery, and destroyed his character, in public life, by his want of secrecy and constancy. Lauderdale, tyrannical, ambitious, implacable, insolent, yet abject, had a great ascendancy over the king. Clifford, daring, impetuous, yet artful, and eloquent, and Arlington, of moderate capacity, without courage or integrity, were, secretly, Catholics. Shaftesbury was at once a deist, and addicted to astrology; Lauderdale a bigoted, and, earlier, a furious Presbyterian."

Cabal; a beverage made in Portugal, by bruising 50 pounds of raisins, and saturating them with white wine during 3 months. The mixture is rich, clear and agreeable.

CABALA, or CABALA, (i.e. oral tradition,) is used by the Jews to denote sometimes the doctrines of the prophets, sometimes the traditions of their ancestors, sometimes, and most commonly, their mystical philosophy. The opinions of scholars respecting the origin of the cabalistical philosophy are very various. The Jews derive the cabalistical mysteries from the most ancient times of their nation, nay, even from Adam himself. But, although a secret doctrine existed among the Hebrews in the earliest ages, this had reference merely to religious worship. The origin of the philosophical cabala is to be sought for in Egypt, and dates from the times of Simeon Schetachides, who conveyed it from Egypt to Palestine. It
was first committed to writing in the 2d century, that it might not be lost with the dispersion of the Jewish nation. Later expositors have mingled with it much foreign matter. The cabala is divided into the symbolical and the real. The symbolical portion treats principally of letters, to which it gives mystical significations. The real, which is opposed to the symbolical, and comprehends doctrines, is divided into the theoretical and practical. The aim of the theoretical is to explain the Holy Scriptures according to the secret traditions, and to form therefrom a philosophical system of metaphysics, physics and pneumatology. The practical portion, on the other hand, pretends to teach the art of performing miracles, and that merely by an artificial application of the divine names and sentences in the Sacred Scriptures. After the revival of science, many scholars studied the cabala. The most famous modern cabalists are Henry Morus and Christian Knorr, the last of whom has made a compilation of the most important parts of the cabala, in two Latin volumes, in 4to. (Respecting the mysteries of the cabala, see Pet. Beer's History of the Doctrines and Opinions of all the Jewish Sects, and of the Cabala, Brün, 1822, 2 vols.; also Brunner's History of Philosophy, by doctor Enfield, vol. ii. Allen's Modern Judaism, ch. v.; and Budéni Introductio ad Historiam Philosophiam Hebraeorum.)

CABANIS, Peter John George, physi­cian, philosopher, and litterateur, born at Cognac, 1757, went to Paris in his 14th year, and devoted himself with zeal to the sciences. In his 16th year, he went to Warsaw as secretary of a Polish lord. The proceedings of the stormy diet of 1773 filled him with melancholy and contempt of mankind. He began at Paris a complete translation of the Iliad. In 1782, and a company to trade with the Philippine islands. After the death of Charles III, in 1788, he fell into disgrace. In 1790, he was arrested; in 1792, released, and made a nobleman; and, in 1795, appointed minister plenipotentiary at the congress of Rastadt. He died in 1810, in Madrid. The nearness of the city enabled him to become acquainted with several learned men and metaphysicians, as Olavides and the count of Campomanes. During the North American war, in which Spain took part against England, and was consequently cut off from her resources in America, C. advised the minister of the finances to make an issue of paper money, payable with interest, of which 10,000,000 piastres were put in circulation with the greatest success. He afterwards established the bank of San Carlos, 1795, and a company to trade with the Philippine islands.

CABARRUS, François, count of, born 1732, at Bayonne, was destined for commerce by his father, who sent him to a commercial friend, Galbert, at Saragos­sa, whose daughter he married in secret, against the will of both families, in 1772. His father-in-law, however, gave him the charge of a soap manufactury, near Madrid. The nearness of the city enabled him to become acquainted with several learned men and metaphysicians, as Olavides and the count of Campomanes. During the North American war, in which Spain took part against England, and was consequently cut off from her resources in America, C. advised the minister of the finances to make an issue of paper money, payable with interest, of which 10,000,000 piastres were put in circulation with the greatest success. He afterwards established the bank of San Carlos, 1795, and a company to trade with the Philippine islands.

CABBAGE. The cabbage, including many species of the numerous genus of Brassica, is a biennial plant, too well known to need description, and constitutes one of our most valuable classes of vegetables. There are several species of the wild or original stock, from which the garden cabbage has been derived by cultivation. These are natives of various parts of Europe, Africa, &c., and, although very remote in appearance from the full, round head, which our plants present, are scarcely more so than are the kale, cauliflower, broccoli, &c., all of which belong to the cabbage family. In general terms, we may consider this plant as divided into three classes—the common headed cab­bage of the field and garden; the cauliflower, broccoli, &c., which form their stalks into a loose head, and the kale, colewort, &c., which grow in a natural branching way, without forming any heads at all. Of these, the common cab­bage is by far the most valuable, both to man and to the beasts, by whose assistance he is able to make the earth so for­
Cabbage—Cabinet.

te. It is also the most productive; for it is believed that an acre of ground will yield a greater weight of green vegetable matter (and thus be more profitable to the farmer), in the shape of cabbage, than in that of any other vegetable whatever. It is very abundantly produced by clay soils, which are unfit for turnips, and the farmers who cultivate such soils will find it a vegetable worthy of much attention. The cabbage furnishes green fodder for cows and sheep, which is, at least, as good as turnips or carrots, fattening the animals equally fast, and rendering their milk, butter, &c., to the full as sweet; and is far preferable, as it keeps later in the spring, and thus supplies green food when no other can be procured. It is eaten by men in three forms, all of which have their admirers, but which vary much in respect to their wholesomeness and digestibility. These forms are, the sliced raw cabbage, plain boiled cabbage, and salted cabbage or sour-créut, the favorite dish of the whole German nation. In the first form, of raw cabbage, sliced fine, and eaten with vinegar, whether entirely cold, or hot enough merely to wilt the vegetable, it is one of the lightest and most wholesome articles of vegetable food, and, in this shape, will supply a green summer vegetable through the whole of the winter. Its use cannot be too highly recommended. Boiled cabbage, is, on the contrary, one of the worst articles of diet that a weak stomach can be tried with, and is rarely got rid of without a troublesome colicky pain. Sour-créut, or, properly, sour-kraut, is much eaten by the Germans in the U. States, and they consider it very wholesome, although it is nearly, if not quite, as difficult of digestion as boiled cabbage. It is prepared in the following manner—Cabbage is sliced up fine, and a layer of it placed in the bottom of a barrel, which is plentifully salted; it is then well bruised with a heavy mall or pestle, or is trodden down by a pair of heavy boots, till the barrel is half filled with the froth that arises from this operation. Successive layers of cabbage and salt are added in this manner, each receiving the same treatment, till the vessel is nearly full. Some cold water is then poured in, and the top of the barrel is pressed down with heavy stones. The contents undergo a brisk fermentation, which continues for a week or two, during which time the brine must be drawn off, and replaced by new, until it remains perfectly clear, when the process is finished. It must be kept covered with brine, and is thus simply a fermented, or half sour, salted mass of cabbage. The other forms of cabbage, as the cauliflower, &c., supply the epicures of all countries with some of their greatest delicacies, while the hardy kale, which endures all degrees of cold, affords the poor, and the farmers of poor soils, a valuable fodder for cattle of all kinds.

Cabra. (See Cabala.)

Cabello. (See Porto Cabello.)

Cabinda; a sea-port of Africa, in Coppero; lon. 13° 30' E.; lat. 5° 40' S. It is situated on the coast, a little to the north of the river Zaire, and has a safe and easy landing. It is a great emporium for trade in slaves. The situation is so distinguished for beauty and fertility, that it has been called the paradise of the coast.

Cabin; an apartment in a ship for officers and passengers. In large ships, there are several cabins, the principal of which is occupied by the commander. In small vessels, there is only one cabin, which is in the stern. The bed-places in ships are also called cabins, or, more commonly, berths. Berth is used, likewise, for the room where a number of men mess and reside.

Cabinet; 1. a small apartment adjoining a larger one; 2. the most retired part of a private dwelling, designed for work, for amusement, or for collections of valuable articles. 3. In the abode of a prince, the cabinet is a room set apart for the ruler's particular use; also, the apartment where he transacts government business, advises with his privy counselors, and issues his decrees. Hence, in political language, the cabinet is put for the prince's particular use; also, the apartment where he transacts government business, advises with his privy counselors, and issues his decrees.

Cabinet painter is one who executes small highly-finished pictures, suitable for cabinets.

Cabi; sacred priests or deified heroes, venerated by the pagans as the authors of religion and the founders of the human race. The multiplicity of names applied to the same character, the interchange of the names of the deities then-

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selves with those of their priests, the oracular law, which enjoined the preservation of ancient barbaric names, and thus led to a double nomenclature, sacred and profane, together with the profound secrecy of the rites, have involved the subject in great obscurity. Some have thought that the Eastern mythology and the Druidism of Western Europe contain traces of the Cabiri. Herodotus (ii. 51) says that their worship was brought to Samothrace by the Pelasgi. Strabo (x. 472) says they are the same as the Corybantes. Others have identified them with the Dioscuri, the Penates, the Discuri, &c. Some say there were 6, 3 male and 3 female, children of Vulcan and Cabiri, daughter of Proteus. Others make 2, sons of Jupiter or Bacchus. In Samothrace, they were venerated. In Egypt, their temple was never entered by any but the priests. In Phocis, Rome (where, according to Pausanius, they had an altar in the circus maximus), and other countries of Europe and Asia, traces of their worship are found. But the mysteries (Cabiria) celebrated at Samothrace were the most famous. The mysteries of Isis, Ceres, Mnemosyne, Bacchus, Rhea, Adonis, Osiris, and other similar customs of Egypt, Greece, Hindostan and Britain, seem to be merely varieties of the Samothracian rites, which were celebrated in the secrecy of night, and with the most profound secrecy. (See Faber on the Mysteries of the Cabiri, Oxford, 1803, 2 vols. 8vo.; Potter's Grecian Antiquities, ii. c. 20.) After a previous probation of abstinence, chastity and silence, the candidates for initiation were purified by water and blood; they then offered a sacrifice of a bull or ram, and were made to drink of two fountains, called Lethe (oblivion) and Mnemosyne (memory), to wash away the memory of their former guilt, and to enable them to remember the new instructions. They were then transported into a dark tower by the most appalling sounds, the rushing of waters, the roar of thunder, dreadful yells, with occasional gleams of light; then playing the most horrible phantoms, with a dead body exposed on a bier. Thus filled with terror, they were suddenly hurled into another scene; light and cheerful music succeeded to darkness and the dismal sounds, the dead body revived, and the temple resounded with rejoicings. The hidden doctrines and secret rites were now communicated. Dances and orgies, in which the mystic phallus or lingam, and the yoni (αὐτός γυναικός), were introduced, closed the ceremony.

**Cable, in architecture:** 1. wreathed circular mouldings resembling a robe; also, the staff which is left in the lower part of the fluting of some examples of the Corinthian and Composite orders. — 2. In nautical affairs, it is a long thick rope, formed of 3 strands of hemp, &c. It is sometimes introduced for confining a vessel to its place by means of an anchor or other fixed body. The long and heavy chains, which have been recently introduced for this purpose, are also called cables.

**Cable, in shipbuilding:** A rope, 2½ inches in circumference, is formed ready for service 3 cables—the sheet cable, the best bower cable, and the small bower cable. They should be at least 100-120 fathoms in length. A best bower cable, of 25 inches in circumference, is formed of 3240 threads. The invention of iron cables is of recent date, and they have supplanted those of hemp in ships of war. They are stronger, less liable to be destroyed on rocks, &c. It is sometimes desirable to cut the cable when of hemp; this contingency is provided for in iron cables by a bolt and shackle at short distances, so that, by striking out the bolt, the cable is easily detached. — **Cable's length** is used to signify the measure of 120 fathoms, the usual length of a cable.

**Caboose:** the cook-room or kitchen of a ship. In smaller vessels, it is an enclosed fireplace, hearth or stove, for cooking, on the main deck. In a ship of war, the cook-room is called a galley. — Caboose also signifies the box that covers the chimney in a ship.

**Cabot, George,** was born in Salem, Massachusetts, in the year 1732, and early manifested distinguished talents. He spent the early part of his life in the employment of a shipmaster. But he did not neglect the improvement of his mind, even amid the restlessness and danger of a seafaring career. Before he was twenty-six years of age, he was chosen to the provincial congress, which met at Concord, with the visionary project of ordaining a maximum of prices, in order that commodities might be cheapened by constraining the owners to sell at reduced and fixed rates; and there he first displayed that intimate acquaintance with the true principles of political economy, for which he was thenceforward preeminent. Before Adam Smith was known in the United States, and Say and the other continental writers had formed any correct notions on the subject, Mr. Cabot maintained the present enlightened doc-
trines, and strenuously contended for the entire liberty of domestic and international commerce. Mr. Cabot was a prominent member of the state convention assembled to deliberate on the adoption of the federal constitution, and, soon after that event took place, was elected a senator of the United States, an office which his sense of public duty caused him to accept, although against his inclinations. In that station, he enjoyed the unlimited confidence, not only of the august body of which he was a member, but also of Washington and Hamilton; and to his commercial knowledge and profound views of finance and political economy, the latter was greatly indebted in the formation of his financial system. With Fisher Ames, also, Mr. Cabot was long linked by ties of the most affectionate friendship. At a recent period, when, in the late war, the exigencies of the country seemed to him to require his co-operation, he presided over a body of delegates from New England, who, in a season of extreme solicitude, attempted to provide means for averting a dreadful storm of public calamity. Mr. Cabot died at Boston, April 15, 1823, in the 72d year of his age.

Was a seaman of great eminence and abilities, was born at Bristol, about the year 1477. He was the son of John Cabot, a Venetian pilot, who resided at Bristol, and was highly esteemed for his skill in navigation. Sebastian was early instructed in the mathematical knowledge required by a seaman, and, at the age of 17, had made several voyages. In 1495, John Cabot obtained from Henry VII letters patent empowering him and his three sons, Lewis, Sebastian and Sanctius, to discover unknown lands, and conquer and settle them. In consequence of this permission, the king supplied one ship, and the merchants of London and Bristol a few smaller ones, and, in 1496, John and Sebastian sailed to the north-west. In July of the same year, they discovered Newfoundland, and explored it up to latitude 67°. The accounts of this voyage are attended with much obscurity; but it seems, that, in a subsequent voyage, the father and son sailed as far as Cape Florida, and were actually the first who saw the main land of America. Little, however, is known of the proceedings of Sebastian Cabot for the ensuing 20 years; but it seems, that, in the reign of Henry VIII, by the patronage of sir Thomas Peart, vice-admiral of England, he procured another ship to make discoveries, and attempted a southern passage to the East Indies, in which he failed. This disappointment is supposed to have induced him to quit England, and visit Spain, where he was treated with great respect, and appointed pilot-major. An opulent company of Spanish merchants soon after gave him the command of an expedition to the Spice islands, through the newly-discovered straits of Magellan. Accordingly, in 1525, he sailed from Cadiz to the Canaries and Cape de Verd islands; and, failing, from the opposition of his crew, in his view of reaching the Spice islands, he proceeded to the river La Plata, where he discovered St. Salvador, and erected a fort there. He subsequently reached the great river Paraguay, and remained on the American coast a considerable time, with the view of forming an establishment. Being disappointed in the expected aid from Spain, he ultimately returned home with all his crew, but was not very favorably received, owing to his failure in respect to the Spice islands, and his severe treatment of the mutineers of his crew. He notwithstanding continued in the service of Spain for some years longer, but at length returned to England towards the latter end of the reign of Henry VIII. At the beginning of the reign of Edward VI, he was introduced, by the protector Somerset, to the young king, who took much pleasure in his conversation, and settled a pension on him as grand-pilot of England. From this time, he was consulted on all questions relating to trade and navigation; and, in 1533, being governor of the company of merchant adventurers, he drew up instructions, and procured a license for an expedition to discover a passage to the East Indies by the north. These instructions, which are preserved in Hakluyt's collection of
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voages, form a very honorable proof of his sagacity and penetration. He was also governor of the Russian company, and was very active in their affairs. He is supposed to have died in the year 1557, at a very advanced age, leaving behind him a high character, both as a skilful seaman and a man of great general abilities. He was the first who noticed the variations of the compass; and, besides the ordinances to be found in Hackluyt, he published a large map of the world, as also a work under the title of Navigazione noto poli Septentrionali, per Sebastiano Caboto (fol., Venice, 1553).

CABRERA; one of the Balearic isles in the Mediterranean, belonging to Spain; lon. 3° E.; lat. 36° 30' N. (See Baleares.)

CABUL, or CAUBUL, capital of the kingdom of Afghanistan, is a very ancient city, situated in a spacious and well-watered plain, enclosed on three sides by a semicircular range of hills, on the summit of which is a fortification. The Bala Hissar, or Upper Fort, contains the palace and other public buildings. The houses are mean, the bazars well supplied, and crowded by Usbecks, Afghans and Hindoos. The vicinity is famous, in the East, for flowers and fruits. Cabul is a great mart for horses from Tartary, which are exported to foreign countries. Please, with pink veins, or, in some of the varieties, to a delicate yellow or lemon color. Each of the pods contains from 20 to 30 nuts or kernels, which, in shape, are not much unlike almonds, and consist of a white and sweet pulpy substance, enveloped in a parchment-like shell. These are the cacao or chocolate-nuts.—Plants of cacao are numerous on the banks of the river Magdalena, in South America. They are usually formed in morass-y situations, and are sheltered from the intense heat of the sun by larger trees, which are planted in them. There are two principal crops of cacao in the year; the first in June, and the second in December. As soon as the fruit is ripe, it is gathered, and cut into slices; and the nuts, which are, at this time, in a pulpy state, are taken out, and laid in skins, or on leaves to be dried. They are now a sweetish acid taste, and may be eaten like any other fruit. When perfectly dry, they are put into bags, each containing about a hundred weight, and, thus packed, are exported to foreign countries. Previously to being formed into chocolate, these nuts are generally toasted or parched over the fire in an iron vessel, after which process their thin external covering is easily separated. The kernel is then pounded in a mortar, and subsequently ground on a smooth, warm stone. Sometimes a little annatto is added; and, with the aid of water, the whole is formed into a paste. This is put, whilst hot, into cacao moulds, where, in a short time, it congeals; and in this state it is the chocolate of the shops. In South America and Spain, other modes are adopted: the chocolate is mixed with sugar, long pepper, vanilla, cinnamon, cloves, almonds, and other ingredients, according to the taste of the respective inhabitants. Mr. Edwards was of opinion, that the cakes of chocolate used in England were made of about one half genuine cacao, and the remainder of flour or castile soap. That from Caracas is considered the best.—By the natives of South America, the chocolate-nuts are used for food. A white, oily matter, about the consis­
\end{verbatim}

CABULISTAN. The country comprehend under this name has already been described in the articles Afghanistan and Belidistan. It is sometimes called Cabul, or Cashel, from the capital; sometimes Cabulistan; sometimes Cashkar, from another capital. It was formerly, also, called Ghizne, from another city, for the same reason. The origin of the name Afghans is unknown. Their own name for their nation is Pooshtoon, whence, probably, the Indian name for them, Patna (See Afghans.)

Cacao. Chocolate is a kind of cake, or hard paste, the basis of which is the pulp of the cacao, or chocolate-nut, a production of the West Indies and South America. The cacao-tree (Theobroma cacao), both in size and shape, somewhat resembles a young cherry-tree, but separates, near the ground, into four or five stems. The leaves are about four inches in length, smooth, but not gossy, and of a dull green color. The flowers are salmon-colored, and very beautiful. The fruit of the cacao-tree somewhat resembles a cucumber in shape, but is furrowed deeper on the sides. Its color, while growing, is green; but, as it ripens, this changes to a fine bluish-red, almost purple, with pink veins; or, in some of the varieties, to a delicate yellow or lemon color. Each of the pods contains from 20 to 30 nuts or kernels, which, in shape, are not much unlike almonds, and consist of a white and sweet pulpy substance, enveloped in a parchment-like shell. These are the cacao or chocolate-nuts.—Plants of cacao are numerous on the banks of the river Magdalena, in South America. They are usually formed in morass-y situations, and are sheltered from the intense heat of the sun by larger trees, which are planted in them. There are two principal crops of cacao in the year; the first in June, and the second in December. As soon as the fruit is ripe, it is gathered, and cut into slices; and the nuts, which are, at this time, in a pulpy state, are taken out, and laid in skins, or on leaves to be dried. They are now a sweetish acid taste, and may be eaten like any other fruit. When perfectly dry, they are put into bags, each containing about a hundred weight, and, thus packed, are exported to foreign countries. Previously to being formed into chocolate, these nuts are generally toasted or parched over the fire in an iron vessel, after which process their thin external covering is easily separated. The kernel is then pounded in a mortar, and subsequently ground on a smooth, warm stone. Sometimes a little annatto is added; and, with the aid of water, the whole is formed into a paste. This is put, whilst hot, into cacao moulds, where, in a short time, it congeals; and in this state it is the chocolate of the shops. In South America and Spain, other modes are adopted: the chocolate is mixed with sugar, long pepper, vanilla, cinnamon, cloves, almonds, and other ingredients, according to the taste of the respective inhabitants. Mr. Edwards was of opinion, that the cakes of chocolate used in England were made of about one half genuine cacao, and the remainder of flour or castile soap. That from Caracas is considered the best.—By the natives of South America, the chocolate-nuts are used for food. A white, oily matter, about the consistence of suet, is also obtained by bruising them, and boiling the pulp. The oil is by this means liquified, and rises to the surface, where it is left to cool and coagulate, so that it may the more easily be separated. This, which is called butter of cacao, is without smell, and, when fresh, has a very mild taste. Its principal use is as
an ingredient in pomegranate. From the nuts, when slightly roasted, an oil is occasionally used in medicine.

Cachao, Kacho, Hecho, or Bac-King; capital of the kingdom of Tonquin, on the river Songkoi, about 100 miles from its mouth. It is an open, straggling town, with wide streets, the houses of mud, or wood thatched with straw. It was formerly the residence of the king; and the English and Danes had factories there. It is a commercial place of some consequence. Gold, beautiful silks, and the finest lacerated ware, is exported. Lat. 21° 27' N.; lon. 105° 12' E.

Cachet, Lettres de; secret warrants, by means of which, under the former kings of France, and their ministers, any body could be imprisoned or banished to a certain place, without any reason given. The introduction of them is ascribed to the famous Capuchin padre Joseph, under the ministry of cardinal Richelieu. In this sense, the term lettres de cachet is commonly used, but it has, in fact, a more extensive signification. All despatches from the royal state-chancery were issued either openly, as lettres patentes, or sealed, as lettres closes, or de cachet. The first were always written upon parchment, the name of the king signed by a minister of state, commissioned by the minister, not folded, but only the lower part turned over, and stamped with the great seal of state. They commenced with the words À tous présens et à venir Salut! and ended with the form Car tel est notre plaisir.

The shape, all edicts, ordinances, charters, privileges, &c. were issued, but all had to be recorded by the parliament of the district to which they referred. The representatives of the parliament often prevented these lettres patentes from being carried into effect. The others, the lettres closes, were only written on paper, some in the name of the king (who spoke in the first person, and concluded with the formula Sur ce je prie Dieu, qu'il vous ait dans sa sainte et divine garde, and signed with his name), some by commission from the king. In the latter case, they began with the words De par le roi; il est ordonné b, and were signed by a minister. They were then closed, and sealed with the small royal seal, so that the contents could not be seen. The lettres closes were used for many purposes besides that of arrests. All the orders sent to officers and private individuals (e.g., to report opinions, to repair to a certain place, to leave their place of residence, or go into banishment) were issued in this form. Warrants also were often issued in this form, because the courts, and particularly the police, could not have acted without such authority in urgent cases. To the lieutenant-general de la police of Paris a number of them were always given, to fill out the blanks as occasion might require. Without them, he would not have been authorized to arrest suspected persons. Frequently the arrest by lettre de cachet was a favor on the part of the king, as it withdrew the accused from the severer punishment to which he would have been liable upon a trial before the courts. (See Lingeot's Mémoires sur la Bastille, London, 1783; and Mirabeau's Des Lettres de Cachet et des Prisons d'État, 1782.) These letters were detestable instruments of arbitrary power, hostile to every principle of right.

Cacique; in some parts of America, the title of the native chiefs at the time of the conquest by the Spaniards.

Cagodemon. (See Demon.)

Cacophon; a fault of style, which consists in a harsh and disagreeable sound, produced by the meeting of two letters or two syllables, or by the too frequent repetition of the same letters or syllables. It destroys the harmony of the whole period; it is unpleasant in prose and intolerable in verse. Thus the Roman was shocked with the

O fortunata nautum, me consule Romani;
and, according to Juvenal, a few more such cacophories would have saved Cicero's head. A French ear is offended, with Voltaire for the expression gloria sa main. Pope says,

And oft the ear the open vowels tire.

Cactus, in botany; a genus of succulent plants, containing 22 species, permanent in duration, singular and various in structure, generally without leaves, having the stem or branches jointed, for the most part armed with spines in bundles, with which, in many species, bristles are intermixed. They are natives of South America and the West Indies. Several of the species are cultivated in other countries, for curiosity, in green-houses. Gardeners divide them into, 1. melon-thistles; these are of a roundish form: 2. torch-thistles; erect, supporting themselves: 3. cereuses; creeping with lateral roots: 4. prickly-pears, or Indian figs; compressed, with proliferous joints.
The two first sorts appear like large, fleshy, green melons, with deep ribs, set all over with strong, sharp thorns, setting close to the surface of the earth, and differing in height, from a foot to a yard. When these plants are cut through the middle, their inside is found to be a soft, pale-green, fleshy substance, very full of moisture, the taste of which is agreeably acid. The fruits are frequently eaten in moisture, the taste of which is agreeably acid. The fruits are frequently eaten in

When the plants are large, several flowers will open in the same night, and there will be a succession of them for several nights together. The calyx, when expanded, is about six inches, sometimes nearly a foot, in diameter, yellow within, and dark-brown without. The petals are many, and of a pure white, and the great number of recurved stamina surrounding the style in the centre of the flower make it a grand appearance. It generally flowers in July.

Cactus, a robber in Italy, the terror of the Aventine wood, of the surrounding inhabitants and of strangers, a monstrous giant, according to some, vomiting fire, of enormous strength and terrible appearance, was a son of Vulcan. A deep, winding cavern was his residence, over the entrance of which hung the heads and arms of those whom he had slain. This cave he closed with a stone, which 20 pair of oxen could not remove. When Hercules was driving the herd of Geryon through Italy, C. robbed him of some of them; and, to conceal their tracks, dragged them backwards into his cave. But their looking betrayed them; upon which Hercules attacked the robber, and, after a terrible conflict (see Virgil's Aeneid, b. 8), killed him with his club. To express his gratitude for his victory, Hercules erected the ara maxia, and Evander, with his Arcadians, performed divine honors to Hercules as their benefactor.

Cadoz, Joseph, a man of very respectable standing among the later writers of Spain, was born at Cadiz, in 1741, of an ancient and noble family, and educated in Paris, where he made himself master of Greek and Latin, and the principal languages of modern Europe. He afterwards travelled through England, France, Portugal, Germany and Italy. At the age of 20, he returned home, and joined the Spanish forces then employed against Portugal. He returned in the Zango, but his death, in 1782, attentive to his military duties, though devoted to literature. He was the friend of the most distinguished writers that were living in Spain, and, by his advice and example, contributed much to bring out the talent of several among them. He was killed by a shell at the siege of Gibraltar, in 1782. He is the author of Cartas Marruecas, a series of letters written in the character of a Moorish traveller in Spain, and containing reflections upon Spanish institutions and manners. It is a work of much merit.
on his return to England (1450), in the de' JYegri della Bassa Etiopia, di Luigi ships continued their course as far as the river Casamansa and the Rio Grande, and returned to Portugal. C. remained there till 1463, in which year prince Henry died. The description of his travels, Prima Navigazione per l'Oceano alle Terre de' Nigri della Bassa Etiopia, di Luigi Cada Mosto (Vicenza, 1507, and Milan, 1519), the oldest of the voyages of the moderns, is a master-piece. The arrangement is admirable, the narrative interesting, the descriptions clear and accurate.

Cade, John (better known as Jack Cade); a man of low birth, who had been obliged to fly into France for his crimes. Observing the discontent of the people on his return to England (1450), in the reign of Henry VI (q. v.), he took the name of John Morton, published complaints against the abuses of government, and soon found himself at the head of 20,000 men, common people of Kent. Having defeated a force sent against him, he advanced to London, which opened its gates; but the riotous disposition of his followers alarmed the citizens. They drove out and defeated the rebels, who soon dispersed, and Cade was killed by one Iden, a gentleman of Kent.

Cadence, or Reprise; a pause or suspension at the end of an air, to afford the performer an opportunity of introducing a graceful extempore close. The word cadence is also frequently applied to the embellishment itself.

Cader Idris; a mountain of Wales; the commencement of a chain running north-easterly. There are here several small lakes, abounding in fish. The height of the mountain is 3550 feet above the level of the sea. It is three miles south of Dolgelly, Merionethshire.

Cadet (French); 1. a younger brother.-2. In the French service, a cadet was a gentleman who served in the ranks without pay, for the purpose of learning the art of war.—3. It is now applied, in England and the North American U. States, to the pupils of a military academy, (q. v.)

Cadet de Vaux, Antoine Alexis, a chemist, member of the French collège de pharmacie, and of many learned German societies, born in Paris, 1743, was at first an apothecary, but for many years has been a successful practical agriculturalist, and active, even in his old age, in improving the soil and the manufactures of his country. He has discussed the effect of the destruction of mountain forests in diminishing the copiousness of the springs in the valleys, the improvement of vineyards, the cultivation of foreign plants, and the providing of substitutes for the usual articles of food in times of scarcity. He is one of the principal editors of the Journal d'Economie rurale et domestique, and of the Cours complet d'Agriculture pratique. He has also been engaged in politics.

Cadiz, in Arab.; a judge or jurist. Among the Turks, cadi signifies an inferior judge, in distinction from the molla, or superior judge. They belong to the higher clergy, as the Turks derive their law from their prophet.

Cadiz, the principal port, and one of the handsomest cities of Spain, is situated at the extremity of a long tongue of land projecting from the island of Leon. The narrowness of the land communication prevents its capture by a military force, while the garrison is master of the sea. This was exemplified in the long blockade of 1810, 11, 12. It is walled, with trenches and bastions on the land side, and, the population being large (70,000), the houses have been built high, and the streets are narrow. It has been much extended, and adorned with handsome buildings, since 1788. The chief buildings are the great hospital, the custom-house, the churches, and 13 monasteries. From the harbor, the town has a fine appearance. The bay of C. is a very fine one. It is a large basin enclosed by the main land on one side, and the projecting tongue of land on the other. It is from 10 to 12 leagues in circumference, with good anchorage, and protected by the neighboring hills. It has 4 forts, 2 of which form the defence of the grand arsenal, La Caraca, in which are 3 basins and 12 docks. This bay is the great rendezvous of the Spanish navy. C. was the centre of Spanish American trade, and the commerce of the port was very extensive, before the separation of the colonies. An important branch of industry in the vicinity is the preparation of salt: the pits belong to the government, and supply many of the fishermen of different countries of Europe. The city was taken by the earl of Essex in 1596, and from its bay Villeneuve sailed, previous to the battle of Trafalgar, in 1805. In 1803, it became the seat of the central junta, and afterwards of the Cortes. It sustained a long blockade from the French (Feb. 6, 1810, to Aug. 25, 1812), which was not raised till after the battle of Salamanca. In 1823, the French entered it (Oct. 3), after a short siege. In 1825, it
was declared a free port. On the island of Looen, the village of Las Cabezas is also situated, where Riego began the military revolution, Jan. 1, 1820. [See Spain.]

**Cadiz, Straits of;** that part of the Atlantic which has the coasts of Algarve and Andalusia on the north, those of Fez and Morocco on the south, and the straits of Gibraltar on the west. 

**Cadmus;** the name of several persons in mythology and history. The most famous is the son of Aegeon and grandson of Neptune. With his brothers, he was sent, by his father, to seek for his sister Europa, who had been carried away by Jupiter, and he was not to return without her. After several adventures, C. inquired of the oracle at Delphi, which commanded him to desist from further search, to intrust himself to the guidance of a heifer, and where she should stop to build a city. He accordingly went to Boeotia, where he wished to sacrifice the cow to Minerva. But his companions, in attempting to fetch water from the fountain of Mars, for the purpose of the sacrifice, were slain by the dragon that guarded it. C. killed the dragon, and, at the command of Minerva, sowed its teeth in the earth; armed men immediately sprang up, whom he called Sparti (the sowed), but who perished in a contest with each other, excepting only five. With the remainder, he built the city of Cadmea or Thebes (see Thebes). Jupiter then married him to Harmonia, and all the gods were present at his nuptials. He became, by this marriage, the father of Antiope, Ino, Semele, Agave and Polydorus. After ruling, for a time, the city which he had built, and the state which he had founded, he proceeded, at the command of Bacchus, to conquer their enemies, the伊利rians, became their king, and begat another son, Hyllus. Jupiter finally changed him and Harmonia into serpents, or, as some say, into lions, and transported them to Elysium. Tradition states, that C. came to Boeotia from Pharnacia, 1550 B. C., conquered the inhabitants who opposed him, and, in conjunction with them, founded the above-mentioned city. To promote the improvement of his new subjects, he taught them the Phoenician alphabet, the employment of music at the festivals of the gods, besides the use of copper, &c.—Another C. of Miletus, a son of Pandion, was regarded, among the Greeks, as the first who wrote in prose. He lived about 600 years before Christ.

**Cadiz;** an island near the coast of Flanders, at the mouth of the Scheldt; lon. 3° 18' E; lat. 51° 23' N. This island is preserved by lofty dikes, constructed at a vast expense, from the inundations of the sea; and yet is nearly free from danger when the N. W. wind blows with violence. The land is fertile, and the corn is equal to any produced in the United Provinces; the meadows are abundant, and the farmers make a large quantity of excellent cheese.

**Caduceus, a wand of laurel or olive, with two little wings on the upper end, about which two serpents, bare-twisted, with their heads turned towards each other, and their crests not bristled, served for a symbol of peace. It was borne by the heralds, whose persons were then sacred and inviolable. The fable tells us, that Apollo gave this staff to Mercury, in consideration of his resigning to him the honor of inventing the lyre. As Mercury entered Arcadia with this wand in his hand, he saw two serpents fighting together; he threw the staff between them, and they immediately wound themselves around it in friendly union. The serpents which adorn this staff were, according to Boeotius, originally, emblems of the knots with which the oldest merchants of the Mediterranean sea secured their chests and goods. The C. is Mercury's peculiar mark of distinction. With this he conducted the shades to the lower world, and from it received the name Caduceus; yet we find it, on ancient coins, in the hands of Bacchus, Hercules, Ceres, Venus and Anahim. Among the moderns, it serves principally as an emblem of commerce.

**Cadwalader, John, was born in Philadelphia, and, at the commencement of the revolution, commanded a volunteer corps, of which almost all the members received commissions in the line of the army. He was afterwards appointed colonel of one of the city battalions, from which rank he rose to that of brigadier-general, and was intrusted with the command of the Pennsylvania troops in the winter campaign of 76—77. He acted in this command, and as a volunteer, in the battles of Princeton, Germantown, Monmouth, and on other occasions, and received the thanks of general Washington, whose confidence and esteem he always possessed. C. was appointed to command one of the divisions into which the army was separated when Washington determined to attack the enemy at Trenton; but, in conse-
Cadwalader—Caermarthens.

sequence of the ice in the river, neither he nor general Irvine, the commander of another division, could cross the river in time. But, the day after Washington's return, he effected the passage, supposing him still on the Jersey side, and pursued the vanquished enemy to Burlington. In 1778, he was appointed by congress general of cavalry—an appointment which he declined on the score of being more useful in the station which he occupied. He died Feb. 10, 1786, in the 44th year of his age.

Caerleon, a small town in England, 26 miles from Bristol, on the Usk, in which the tide rises 30 feet. (See Bristol Channel.) It was the site of the town Silurum, the chief Roman station in the country of the Silures. The ruins of baths, temples and a theatre were to be seen here in the 12th century; and Roman coins, statues and sepulchral monuments are yet found. There are also the vestiges of an amphitheatre, which the inhabitants call king Arthur's round table, from a tradition that he instituted the round table in this place. Population, in 1821, 1852.

Caern; a large and well-built town of France, the ancient capital of Lower Normandy, and the chief place in the department of Calvados. According to Dupin (Forces producitives commerciales de la France, 1828), it is one of the most important cities of the west of France, with a population of 37,000 inhabitants, the centre of an important domestic trade, the market of a rich agricultural district, a seaport and a manufacturing city. Its institutions, literary, charitable and scientific, are numerous, and very well organized. The antiquarian society, the Linnean society, the agricultural society, and the academy of science, arts and literature, are distinguished. C. also contains one of the 26 academies of the university (académie universitaire), a royal college, a large and valuable public library, an academy of drawing, architecture and sculpture, a gallery of paintings, and many other useful and liberal institutions.

The hospital of the abbaye-aux-dames is one of the best regulated in France. The noble hospital of the bon-stauaire is divided into the asylum for the insane, the dispensary for the sick and wounded, the school for the deaf and dumb, the lying-in-hospital, a boarding school for young ladies, and a free school for 120 destitute girls. The whole is administered by 125 charitable females (sœurs hospitalières). The streets are less narrow and crooked than is usual in France, and the houses are mostly of white stone. It has 12 parish churches, of which the principal are the abbaye-aux-hommes, built by William the Conqueror, who lies buried in it, and notre-dame. The city was formerly fortified, but the fortifications are now in ruins. Henry VI of England founded a university here in 1431, C. having been in the possession of the English, of whom it is now a favorite retreat, from 1417 to 1418. Admiral de Coligny captured it for the Protestants in 1562, and, in 1515, it was occupied by the Prussians. Linen, serge, particularly rich lace, with stockings, caps, paper-hangings and oil, are the principal articles of manufacture. A sugar refinery has lately been established, in which a steam-engine is employed. A large fair is held here annually, and an exhibition of the manufactures of the department biennually. Malherbe, De Laplace, Vaquelin, were born in this city or in its vicinity. It is 132 miles N.W. of Paris. Lon. 21° 38' W.; lat. 49° 11' 12" N.

Caermarthenshire, South Wales. It is situated on the Towy, the picturesque beauties of the vale of which are seen to great advantage from the celebrated Grosegar hill and the ruins of Dynevor castle. The streets are many of them steep and irregular. The river is navigable for vessels of 300 tons burden. In the history of romance, C. is famed as the birthplace of Merlin, and three miles from the town is a spot called Merlin's grove, in which tradition relates that the Lady of the Lake intoned the unhappy magician (Forsc Queen, iii. 31). Merlin's chair, from which he uttered his prophecies, is also shown. Roman roads, coins and sepulchral antiquities are found in the neighborhood. About eight miles from the town there is an immense cairn, 18 feet high and 150 in circuit, covered with turf. The top is hollow, with a stone chest in it, covered with an oval stone nine feet long. Between the Towy and the Cowen there is a barrow with a stone chest in it, C. is 212 miles west from London. Population, in 1821, 8006.
CAERNARVON—CESER.

CAERNARVON, the principal town of North Wales, stands on the Menai strait, with a good harbor, but difficult of access. It is built in the form of a square, enclosed on three sides with walls. Edward I built it in 1282, and his son, Edward II, first prince of Wales, was born here. Cæsar stands near the site of the ancient Segontium of Antoninus, the Caer Seiont of the Britons. Being formerly a strong hold, it was frequently attacked in the wars between the Welsh and English, and in the civil wars. Population, 5,788. Distant 231 miles N. W. from London.

CAERPHILLY, or Cærphilly: a small market-town in the county of Glamorgans, distinguished for the ruins of one of the most magnificent castles in Great Britain. The date of its foundation is unknown; but, till the time of Henry III, it was called Cær Mawr. The great hall, 700 feet by 30, and the hanging tower, nearly 80 feet high, and inclining about 11 feet from the perpendicular, are remarkable objects. The position of the latter was produced by the steam of a quantity of water which was thrown upon a furnace of melted iron beneath the tower. Distant 135 miles west from London.

CAERWYST; a village of England, supposed to be the birthplace of Micarus, son of Antoninus. The vestiges of a large Roman camp are visible. A mosaic pavement of blue, white, yellow, and red was discovered here some years ago. Distant 17 miles N. W. from Bristol.

CAERWYS, a small town of North Wales, is noted for the celebration of the Eisteddfod, or competition of the bards (q. v.). They recited their odes, or performances, appointed by the native princes. The prize was a silver harp. Distant 212 miles N. W. from London.

CAESAR, the family name of the five first Roman emperors. With Nero the imperial family became extinct (A.D. 68), and Cæsar became merely a title of dignity. The emperor, who bore this title of Augustus, appointed his successor, with the title of Cæsar. On medals and monuments we find the title Cæsar preceding the name of the emperor, as, Imp. Caesar Neronis Trayanus Augustus, and following that of the designated successor, as, Marc. Aurel. Antonia. Cæsar. In the lower Greek empire, a new dignity of Schastaker or successor was conferred, and that of Cæsar became the third rank in the state.

Cæsar, Caius Julius, a great general, statesman and historian, was born July 10th (Quintidies), B. C. 100. He was the son of the prætor Caius Julius Cæsar, and of Aurelia, a daughter of Aurelius Cotta. From his earliest boyhood, he discovered extraordinary talents. He had a penetrating intellect, a remarkably strong memory, and a lively imagination; was indefatigable in business, and able as we are told by Pliny, to read, write, hear and dictate, at the same time, from four to seven different letters. When the party of Marius gained the ascendancy in Rome, Cæsars gave his daughter Cornelia in marriage to C., with the view thereby to establish his own power more firmly. Sylla, when he came to Rome, tried to prevail on him to repudiate her. His refusal provoked the anger of the usurper, who was prevented only by the earnest entreaties of his friends from putting him under prescription. The saying of Sylla, that "the sons in this striping match," of Marius," hastened the departure of C. from Rome. He travelled into the Sabine territory, was seized by the soldiers of Sylla, and was obliged to procure his release by a bribe of two talents. He then proceeded to the court of Nicomedes, king of Bithynia. Thence he went to M. Mummius Thermus, the prætor in Asia, who intrusted him with the command of the fleet which was to blockade Miletus. On the way, he was taken by pirates, and compelled to pay 50 talents for his release. To revenge himself, he fitted out some vessels at Miletus, took the pirates, made the greatest part of them prisoners, and had them crucified before Pergamus. He now returned to Rome, and became military tribune, questor and edile. At the same time, he had the address to win the favor of the people by affability, by splendid entertainments and public shows; and, trusting to his popularity, he ventured to erect again the statues and trophies of Marius, who was hated by the senate and the patricians. By means of one of his relations, L. Julius Caesar, whom he had aided in obtaining the consulship, he caused many of Sylla's followers to be banished or put to death. In the conspiracy of Catiline he certainly had a secret part. He defended the conspirators, who were arrested, and succeeded in raising a tumult against Cato, who strongly opposed him, so that he was obliged to quit the rostrum, and even his life was endanger-
Cæsar

ed. Cato, however, prevailed, and C. was for a time kept out of the pretorship. But he was soon after chosen pontifex maximus, and was about to go as governor to Farther Spain. His creditors refusing to let him depart, Crassus became his bondsman for the enormous sum of 830 talents. It was on his journey to Spain, that he expressed, on seeing a miserable village, the well-known sentiment, that "he would rather be first there, than second at Rome." In Spain, he made several conquests, and returned to Rome with money enough to pay off his debts. In order to gain the consulate, he now found it expedient to bring about a reconciliation between Pompey and Crassus, whose enmity had divided Rome into two parties. He succeeded in his design, and all three agreed to divide the sovereign power between them. This was the first triumvirate in Roman history (B.C. 60.) C. then became consul with M. Calpurnius Bibulus, confirmed the measures of Pompey, and procured the passage of a law, in opposition to the senate and his colleague, to distribute certain lands among the poor citizens. This brought him into the highest favor with the people. With Pompey he formed a still more intimate connexion by giving him his daughter Julia in marriage, and gained the favor of the equestrian order by remitting a third part of their taxes. In vain did the heads of the patriotic party, Cicero and Cato, raise their voices against the triumvirate; they only drew upon themselves their vengeance. When the year of his consulship had expired, C. obtained the government of Gaul for five years, with the command of four legions. After his marriage with the accomplished Calpurnia, the daughter of one of the new consuls, Calpurnius Piso, he repaired to Gaul, compelled the Helvetians, who had invaded that province, to retreat to their native country, subdued Aroerisius, who, at the head of a German tribe, intended to settle in the country of the Adui, and conquered the Belgians. In nine years, he reduced all Gaul, crossed the Rhine twice (B.C. 55 and 53), and twice passed over to Britain, defeated the gallant natives of this island in several battles, and compelled them to give him hostages. The senate had continued his government in Gaul for another period of five years, while Pompey was to have the command of Spain, and Crassus that of Syria, Egypt, and Macedonia for five years also. But the death of Crassus, in his campaign against the Parthians, dissolved the triumvirate; and the death of Julia, which took place about the same time, cooled the friendship between C. and Pompey. Meanwhile the power and authority of Pompey were constantly increasing. C., too, strove to strengthen and enlarge his own party in the capital by enormous bribes. He made Gaul a Roman province, and governed the conquered lands with policy and kindness. Pompey, on the other hand, promoted C.'s enemies to the consulate, and persuaded the senate to pass a decree, by which C. was to leave his army, and resign his government of the province. He declared himself ready to obey, if Pompey would do the same. Hereupon the senate ordered that C. should resign his offices and command within a certain time, or be proclaimed an enemy to the state, and appointed Pompey general of the army of the republic. Upon this, C. urged his soldiers to defend the honor of their leader, passed the Rubicon (49 B.C.), and made himself master of Italy without striking a blow, as Pompey, destitute of troops to meet him, had left the city with the consuls, senators, and magistrates. C. then levied an army with the treasures of the state, and hastened into Spain, which he reduced to submission without coming to a pitched battle with Pompey's generals. He next conquered Marseilles, and returned to Rome, where he was appointed dictator by the pretor, M. Cæcilius Metellus. At the same time he was chosen consul for the following year by the people. In the meanwhile, Pompey had collected an army in the east, and his rival hastened to Epirus with five legions by land. But when the vessels which were intended to transport the rest of his troops had been captured by Pompey's fleet, C. proposed an accommodation, which, however, was refused. Meanwhile C. received the expected reinforcements, and challenged his antagonist to battle. Pompey declined coming to an engagement, but, at last, being surrounded in his camp, was forced to take a decisive step, in order to break through the enemy's line. This measure was successful, and C. retreated to Pharsalia, where, in a bloody but decisive engagement (48 B.C.), he gained the victory. Pompey fled to Asia, and then to Egypt, to raise a new army. As his party was only weakened, but not destroyed, C. hastened after him, passed over the Hellespont, where Cassius surrendered to him with his fleet, and then went to Egypt. Here he received
intelligence of the murder of Pompey. He shed tears at the tragical end of his rival, gave his body an honorable burial, and loaded his followers with favors, by which many of them were won to embrace his cause. Being detained by contrary winds, he made use of the time to compose the differences between Polemy and his sister Cleopatra (q. v.). In Rome, the senate and the people strove eagerly to gain the favor of the victor. They appointed him consul for five years, dictator for a year, and tribune of the people for life. Pharnaces, king of Pontus, a son of Mithridates the Great, having attempted to recover the territories of his father in Asia, C. marched against him, pardoned king Dejotarus, an adherent of Pompey, on his way, and finished the war so speedily, that he announced his success to his friends in the famous words *veni, vidi, vici.* Returning to Rome, he granted an amnesty to all the followers of Pompey, and gained, by his clemency, the universal love of the people. When his dictatorship had expired, he caused himself to be chosen consul again, and, without changing the ancient forms of government, ruled with almost unlimited power. In Africa, however, the friends of the republic had gathered under the standard of Cato and other generals. C. passed over with an army, and fought several battles with various success, till the victory at Thapsus over Scipio Metellus decided the contest in his favor. Cato, who was in Utica, stabbed himself, and the city surrendered to the conqueror. C. then made Mauritania and Numidia Roman provinces, and gave orders for the rebuilding of Carthage and Corinth, which was accomplished in a year. In Rome, he was received with the most striking marks of honor. The term of his dictatorship was prolonged to 10 years, the office of censor conferred on him alone; his person was declared inviolable, and his statue placed by that of Jupiter in the capitol. In a speech to the people on this occasion, he declared his resolution to use his power for the good of the state; and put an end to the apprehensions, which some still entertained, by the pardon of Marcellus, one of his most open and bitter enemies. He soon after celebrated the four triumphs which had been decreed him over Gaul, Egypt, Pharnaces and Judea, all in one month, and among the most magnificent ever witnessed in Rome. He now passed many useful laws, and invited the learned men of foreign countries to Rome. Amongst other things, he undertook the reformation of the calendar (q. v.). During these peaceful occupations, the sons of Pompey had collected new forces in Spain, so that C. took the field in person against them. Corduba was captured after a most obstinate resistance; and, soon after, the parties came to a general engagement at Munda. A fortunate accident decided the battle in favor of C., after victory had been for a whole day doubtful. In seven months, Spain was conquered, and C. entered Rome in triumph. He was now made perpetual dictator, and received the title of *imperator,* with full powers of sovereignty. He continued, meanwhile, to conciliate his enemies by clemency, and to heap honors upon his friends. The number of senators he increased from 300 to 900. But this degradation of the senate offended the Romans, and their displeasure was increased by the arrogance with which he conducted towards that order. On one occasion, as he was sitting in the rostrum, in his chair of gold, Mark Antony offered him a royal diadem. He refused it, however, and his refusal drew shouts of applause from the people. The next morning, his statues were decked with diadems. The tribunes of the people, who had them taken off, and imprisoned the persons who had done the act, were deposed from their office by C. This was the occasion of an animosity, which ended in a conspiracy, of which Caius Cassius was the prime mover. C., having no suspicion of the danger which threatened him, was forming new projects. He resolved to subdue the Parthians, and then to conquer all Scythia, from the Caucasus to Germany and Gaul. C.'s friends gave out, that, according to the Sibylline books, the Parthians could be conquered only by a king; and, therefore, proposed that C. should retain the title of dictator with regard to Italy, but should be saluted with that of king in all the conquered countries. For this purpose, a meeting of the senate was appointed for the 15th of March; and this was the day fixed on by the conspirators for the execution of the plot. A soothsayer warned C. of his danger; and his wife, disturbed by a frightful dream, conjured him not to go to the senate-house. His doubts, however, were overcome by Decimus Brutus, one of the conspirators, and he proceeded to the capitol. On his way thither, a billet was handed him, giving him information of the conspiracy; but, in the crowd, he put it by without reading it. The conspirators had concerted, that Metellus
Cimber should entreat a pardon for his brother, and, if C. should refuse, he was to tear the mantle from his shoulders, which was to be the signal for their rushing upon him with their daggers. All was done as they had planned. Casca's dagger first pierced him in the neck. Scarcely had C. turned, and uttered the words "Accursed Casca, what dost thou?" when the conspirators rushed upon him from all sides. He defended himself, however, undauntedly. But, when he descried Brutus among the conspirators, he exclaimed, "And thou, too, my son?" covered his face with his mantle, and fell, pierced with 23 wounds, at the foot of Pompey's statue. Thus died this remarkable man, the best who ever aspiring to sovereignty in Rome, the victor in 500 battles, and the conqueror of a thousand cities, B. C. 44, 15th of March, in the 50th year of his age.—Of C.'s writings, we have his history of his wars with the Gauls and with Pompey, written in a simple, noble style. The most esteemed editions are those of Clarke (London, 1712, fol.), Gravius (Leyden, 1713, 2 vols.), and Oudendorp (Leyden, 1737, 2 vols. 4to.). One of the best modern small editions is that of Oberlin (Leipsic, 1805).

**C.ESAREA**; the ancient name of many cities.—1. C. Philippi, or Panes, built by Philip, tetrarch of Galilee, son of Herod the Great.—2. C. Stratonis, on the shores of the Mediterranean, about 75 miles north-west from Jerusalem. Herod the Great enlarged it, and it became the metropolis of Palestine, and the seat of the Roman proconsul. (Joseph. Arch. 15, 9, 6.) It is the place where Herod Agrippa was smitten by the angel (Acts xii. 20—23), where Cornelius the centurion resided (x.), and St. Paul was imprisoned two years (xxii. —xxv.) It is now, according to Clarke, in utter desolation.—2. The capital of Cappadocia, and now called Kaisarich. It was once supposed to contain 400,000 inhabitants. Lucas (3d Voyage, xviii.) says that all the mountains in the environs are perforated with grottoes, which served as summer residences, and that there are 200,000 little pyramids in the vicinity. It has now 25,000 inhabitants, and considerable trade in cotton.—There were many other towns of this name.

**CESAREAN OPERATION.** (See **Midwifery**.)

**CESTUS**; the boxing-glove of the Greek and Roman pugilists. The original Greek cestus was made of raw hide, fastened to the hand, and reaching to the wrists, intended for defence. It was afterwards enlarged, so as to reach to the elbow, and loaded with metal, to increase the weight of the blow. The combat with the cestus was not more dangerous than a common English boxing-match. Theocritus (Idyll. 22) has described one of these combats.

**CAESAR,** in Latin verse; the separation of the last syllable of any word from those which preceded it, and the carrying it forward into another foot. It always renders the syllable on which it falls long, and is accompanied by a slight pause, hence called the **cesural pause,** as in the following line:

**Dile later nivea nolle fultus hyacinthi.**

In English poetry, it is equivalent to a pause. (See **Versification**.)

**CAP**; a mountain, which, if we believe the Mohammedans, environs the whole earth, which is thus set within it like a finger in a ring. Its foundation is the stone Sakhral, one grain of which enables its possessor to work miracles. The agitation of this stone, which is an emerald, whose reflection gives the sky its tints, is the cause of earthquakes. The Dives, or giants, and the Peri, or fairies, dwell in it.

**Caffe.** (See **Coffee-House.**)

**Caffa;** one of the principal ports of the Crimea, formerly a large and rich city, now much reduced. On the south stood the Genoese town, of which ruined walls and massive magazines remain. On some neighboring heights was the Armenian town, and near this the Tartar city, whose reflection gives the sky its tints, is the cause of earthquakes. The Dives, or giants, and the Peri, or fairies, dwell in it.

**Caffarelli.** (See **Majorano.**)

**Caffarelli du Falga.** Among five brothers of this name, all of whom have distinguished themselves in different departments of politics and literature, the best known are,—1. Louis Marie Joseph Maximilian, born in 1756. He was killed in 1799, before St. Jean d'Arc, while general of division. His works, which gained him a place in the national instit-
CAFFARELLI DU FALGA—CAFFRES. 383

tute, relate to mathematics, the necessity of better public instruction, and various political and philosophical subjects. His whole life was devoted to learning, and to the welfare of mankind. He adopted the principles of the revolution, and served as a captain in the army of the Rhine; but, when the national convention made known to the armies the condemnation of Louis XVI, in 1793, he declared his disapprobation of it, and was, on that account, deprived of his office, and imprisoned 14 months. He was afterwards set at liberty, employed in the department of war, and finally returned to the army of the Rhine. The loss of a leg did not prevent him from engaging in the expedition to Egypt, as chief of the corps of engineers—2. His brother Augustus, lieutenant-general, born in 1766, served first in the Sardinian troops, and afterwards in almost all the campaigns of the revolutionary war, under the standard of France. In 1804, Napoleon sent him to Rome to induce the holy father to go to France, to make him at his coronation. He was then made governor of the Tuileries, received a command in the army, and was, from 1806 to 1810, minister of war in the kingdom of Italy, and afterwards in active service in the war in Spain. Napoleon gave him the command of the first military division during the “hundred days.”

Caffé, Daniel; a painter in crayons; born at Kustrin, 1750. After having passed his childhood and youth in want, he left a comfortable office from his love to painting, and was received, at the age of 32 years, as a pupil of the academy of painting in Dresden. Here he studied, chiefly, the pictures of Mengs, and soon acquired a great reputation by his portraits. He also established a manufactury of crayons. He copied many pictures in the galleries of Dresden, with a vigor and warmth uncommon in a painter in crayons. He died in 1815.

Caffera; a company of merchants or travellers who join together for security, in some eastern countries. It differs from the caravans by being in the employ of some sovereign or company, while the former is composed of merchants trading each on his own account.

Caffearia; a name adopted, by the Portuguese, from the Arabs, who called all the African continent, southward from Sofala (their most southerly settlement), the land of Caffes (infidels). It was first applied to the whole width of the continent, from cape Corrientes on the east to cape Negro on the west. As the names of particular states and people became known, the extent of C. diminished; and the term is now applied only to the territory on the north-eastern borders of the Cape Colony. C. is but imperfectly known. (See Caffres.)

Caffres. In the south-eastern part of Africa, there is a race distinguished from the Negroes by a larger facial angle (the nose being formed like that of Europeans), a high nose, hair frizzled, but less woolly than that of the Negroes, and a brown or iron-gray complexion, differing from the shining black of that race. They have many Arab words in their dialects, and the custom of circumcision prevails among them. These people were called, by the Portuguese, Caffres, mistaking the Mohammedan term Cufir (heretics) for a national appellation. It is now retained, by geographical writers, to denote the savage tribes, whose physical characteristics have already been described, extending from Quilwa southward, and the Cape Colony eastward. The history, origin and actual extent of this race is unknown, and is reserved to instruct or confound future explorers in these unknown regions. This name has been given to the tribe whose true name is Kaasass, living on the confines of the Cape Colony. They are a handsome, vigorous race, of simple habits, their principal food being milk in the form of curd. They use no salt: water is their only drink. They are all passionately fond of tobacco. Their dress is made of the skins of sheep. Ivory rings, worn on the left arm, are their chief ornaments. The women have their breasts and breasts furrowed by tearing up the skin with a sharp instrument. Both sexes paint the whole body red. Their dwellings are low, circular cabins, constructed by the women. Plurality of wives is allowed, but it is rare that they have more than two. Cattle are of the first importance, and the chief object of affection to a Caffre. They obey and follow their master like dogs. The ground is cultivated by the women. At the age of 12, the boys are appointed to the care of cattle, and exercised publicly in the use of the javelin and the club. The girls, under the inspection of the chiefs' wives, are taught to perform the work of the hut and the garden. The Caffres are of a peaceful disposition, but display great activity and skill in the use of arms, when necessary. Their weapons are the lasso, the shield and the club. Previous to commencing hostili-
ties, they send heralds to the enemy. They are fond of the chase, pursuing the lion and the elephant. Each horde has a hereditary and absolute chief. The cupidity of the English colonists has found pretences for depriving them of their finest territory (1821), now called Albany; and this lately kind and happy people seem destined to extinction, or to a miserable and degraded condition. (See Lichtenstein’s Travels in Southern Africa.)

Cape; the well-known national dress of the Turks, in the form of a night-gown, and generally white, with pale-yellow flowers. It is made of woollen or silk, and sometimes lined with costly fur. It consists of four parts,—1. the castle, on the top of the hill; 2. the Marina; 3. Estempanche; 4. the Villa Nuova. It is strongly fortified, and is the residence of the viceroys, of an archbishop, and the seat of a university with 300 students, which was revived and remodelled in 1765. It contains a royal society for the promotion of agriculture, established in 1815, a museum of natural history, and the one of antiquities. Population, 26,000. It has some manufactories.

Cagliari, the capital of the island of Sardinia, is situated on a hill near the sea. It consists of four parts,—1. the castle, on the top of the hill; 2. the Marina; 3. Estempanche; 4. the Villa Nuova. It is strongly fortified, and is the residence of the viceroys, of an archbishop, and the seat of a university with 300 students, which was revived and remodelled in 1765. It contains a royal society for the promotion of agriculture, established in 1815, a museum of natural history, and the one of antiquities. Population, 26,000. It has some manufactories.

Cagliari, Paul; known under the name of Paul Veronese; a painter of Verona, born, 1532. His father, who was a sculptor, wished to educate his son for the same profession; but the young man betrayed a greater inclination for painting, and was, therefore, placed under the care of his uncle, Antonio Badile, a painter. Under this able instructor, Paul made considerable progress; but, as the school of Verona already possessed distinguished artists, such as Forbici, Gioseino, Ligozzi, Brussorci and Farinato, he obtained, at first, but little celebrity. He went to Mantua and Vicenza, and afterwards to Venice. Here he imitated Titian and Tintoretto, but, at the same time, appeared desirous of surpassing them by a more studied elegance, and a richer variety of ornament. It soon became evident, from his works, that he had studied the casts of ancient statues, and the etchings of Parmesan and Albert Durer. In his first great works, which are in the church of St. Sebastian, in Venice, his pencil is yet timid. The History of Esther, in fresco, which he afterwards painted in this church, excited general admiration; and the execution of important works was intrusted to him, among which are many that adorn the library of St. Mark’s. He afterwards accompanied the Venetian ambassador Grimani to Rome, where he saw, with enthusiasm, the beautiful models of Raphael and Michael Angelo, and painted, after his return, his fine Apotheosis of Venice. His numerous banquetting pieces are also excellent. Six, at least, of these are found at Venice, in the refectories of the monasteries, among the best of which are the Marriage at Cana, comprising 120 figures, many of which are portraits, and the Feast of Christ with Simon. In the former piece, the extravagant display of Asiatic pomp, and the confusion of different persons and dresses, have been justly censured. In the latter, the air of pride in the aspect of Christ, instead of a simple expression of dignity, the placing of the principal personage in a corner of the picture, and the running into each other of the white table-cloth and the architecture of the background, have been considered blemishes. In his Pilgrims of Emmaus, Paul violated all the unities of time, place and action. But, with all these faults, he displays splendid talents and great truthfulness of conception. His portraits are spirited and noble, and his coloring splendid. He died in 1588. His scholars were, Charles and Gabriel, his sons, and Benedetto, his brother, besides Michael Parrasio, Naudi, Maffei Veron, Francesco Montemazzano.

Cagliostro, count of (real name Giuseppe Balsamo), was born in 1743, at Palermo. His father died when he was young, and he was educated by his maternal relations. He entered the order of the Brothers of Mercy, where he found an opportunity to cultivate his talents for medical science, by which he afterwards distinguished himself. But he showed, at the same time, a great love of dissipation, and was, at last, compelled to separate from the order. He returned to Palermo, where, among other tricks, he deceived some credulous persons by his pretended skill in magic and the finding of hidden treasures. He also showed
himself adroit in counterfeiting handwriting, and attempted to get possession of a contested estate by means of a forged document, but was discovered, and obliged to flee. He now determined to go to Rome, and, in his journey through Calabria, became acquainted with the beautiful Lorenza Feliciani, daughter of a beltrami. She appeared to him intended by fortune to assist his designs. He formed an intimacy with her, and soon compelled her to assist in the accomplishment of his purposes by the loss of her virtue. They now began their travels, in which he assumed the character of a man of rank, first appearing under the name of the margrave Polignac, and finally under that of the count Cagliostro. He travelled through many countries of Europe, stopped in the capital cities, and, by his chemical mixtures, by his tricks, and by the amours of his lady, gained considerable sums. We find him in Madrid, Lisbon, Paris, London, and many other cities. He knew how to cheat with great ingenuity, and was always fortunate enough to preserve himself by an early flight, if men's eyes began to be opened, or waking justice threatened him with imprisonment. The discovery of the philosopher's stone, the preparation of a precious elixir vita, &c., were the pretensions, under which he extracted from credulous people considerable sums in ready money. Many had recourse to his assistance, not, indeed, to be initiated into the mysteries of magic, but to purchase, at a high rate, different kinds of medicines, one of which was the water of beauty. This profitable business employed our hero many years; but, with the failing charm of his lady, many sources of wealth failed. His trade in medicine also began to grow less lucrative, and he determined to seek his fortune as the founder of a new and secret sect. In pursuance of this plan, he passed himself off, during his second residence in London, for a freemason, and played the part of a magician and worker of miracles, in which character he drew upon himself the eyes of all the enthusiasts in Europe. The countess C., on her part, did not remain idle. She was the first and most perfect scholar of her husband, and played the part of a priestess to this new order in as able a manner as she had before played that of a priestess to another goddess. His plan for reviving an old Egyptian order, the founders of which he declared to be Enoch and Elias, contained a mass of the greatest absurdities and nonsense. But his pretensions to supernatural power, the mystery with which his doctrines were enveloped, his pretended ability to work miracles, his healing the sick without pay, with the greatest appearance of generosity, and the belief that, as the great Kophtha (this name he had taken, as the restorer of Egyptian masonry), he could reveal the secrets of futurity, gained him many friends and supporters. C. again travelled through Europe, and attracted great attention in Munich, Strasburg, Lyons and Paris. While in this last city (1783), he had the misfortune to be implicated in the scandalous affair of the necklace, and was banished the country as a confidant of cardinal Rohan. He now returned to London, and sent many epistles to his followers, wherein he bitterly complained of the injury he had received in France, and painted the French court in the blackest colors. From London, where he could not long remain, he went to Bâle, and other cities in that quarter. But, at length, listening to the repeated entreaties of his wife and other friends, he returned (1789) to Rome. Here he busied himself about freemasonry; but, being discovered, and committed to the castle of St. Angelo, he was condemned, by a decree of the pope, to imprisonment for life, as a freemason, an arch-heretic, and a man very dangerous to religion. He died, in the summer of 1785, in the castle of St. Leo, a small city in the States of the Church. A biography of madame von der Recke, in the Zeitschriften, No. xi, contains an account of C.'s residence in Riga, and his connexion with madame von der Recke ; and in Casanova's memoirs there is some interesting information concerning him.

Cagnoli, Anthony, astronomer, member of the French national institute, and president of the Italian academy of sciences, was born at Zante, and was attached, in his youth, to the Venetian embassy at Paris, where, after the year 1776, he showed more love for astronomy than for diplomacy. Having settled in Verona in 1782, he constructed an observatory in his own house, by his observations in which he enriched the science of astronomy with many discoveries. After the destruction of his observatory by the French (1792), who, however, compensated him for his loss, his instruments were transferred to the observatory of Berra, in Milan, and he was appointed professor of astronomy in the military school at Modena.
They are mostly poor beggars, performing the meanest offices, and covered with dirty rags, retiring, in the night, to barns and hovels; of a thin and pale aspect, generally mutilated, lamed in their feet, bored with an iron, and their hands forced to wear an egg-shell on their palms); translated into French by Chompré (2d edition, Paris, 1804, 4to.).

CAGNOLI-CAILLE.

CAGOTs; an unfortunate race of men, resembling the Cretins. They are found in the south of France, near the Pyrenees. They are mostly poor beggars, performing the meanest offices, and covered with plates); translated into French by Chompré (2d edition, Bologna, 1804, 4to.); and bis best works are (2d edition, Paris, 1804, 4to.), translated into French by Chompré (2d edition, Paris, 1804, 4to.).

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CAILLE.

his way, the lake Delo (misspelled, on the maps, under the name of Dibbie), he reached Timbuctoo April 20th. Leaving this city May 4th, he crossed the Great Desert, and reached Tahliet, July 23d, whence he passed through Fez to Tangiers. Thus this intrepid young traveller, at the age of 26 years, has achieved alone, and by his own resources, what the exertions of powerful societies, the aid of governments, and the most devoted efforts of experienced travellers, had in vain attempted. This account is the substance of the report of a committee of the geographical society of Paris, by whom his accounts have been examined. The prize offered by that society to the first traveller who should reach Timbuctoo has been awarded to him; the king has bestowed on him the cross of the legion of honor, and 3000 francs, with a pension of 3000 francs for the years 1823 and 1830, to enable him to pursue the studies necessary to prepare him to renew his visit to those hitherto unknown regions.

CAILLE, Nicholas Louis de la, born at Rouen, April 29, 1730, to enable him to pursue the studies necessary to prepare him to renew his visit to those hitherto unknown regions. C. ended his surveys in the course of some months; during which he measured two bases more, and made the astronomical observations at Paris and Dunkirk. After his return, he commenced the calculations for which he had prepared the materials by these long operations, and, by a comparison of the different areas which he had measured, showed that the degree of longitude of the equator to the poles—a result diametrically opposite to the old measurement. His works on geometry, mechanics, astronomy and optics, which followed each other in a few years, show with what ability he discharged the duties of professor. His Ephemerides, and the numerous and able memoirs which he presented to the academy of sciences, and his calculations of the eclipses for 1800 years, in the first edition of his Art de vérifier les Dates, prove with what ardor he pursued his astronomic studies. He had undertaken the correction of the list of stars, according to the method of corresponding heights. In 1746, he was in possession of an observatory erected for him at the college Mazan. True to the laborsious method which he believed the best, C. spent his days and nights, for 14 years, in making observations on the sun, the planets and the stars, to rectify the astronomical catalogues and tables. He had received the two six-foot sectors, with which he had verified the meridian of France. Desirous of observing the stars of the southern hemisphere, which never appear above the horizon at Paris, he formed the plan of a voyage to the cape of Good Hope. He saw immediately the advantage to be derived from this change of place, in determining the parallax of the moon, of Mars and Venus, and the refraction of the rays of light. Laqarde (q. v.), then 19 years old, was sent to Berlin, which lies nearly under the same meridian as the cape, to take corresponding measures at the same time. This astronomic undertaking cost four years of journeys and labor. C. determined the
position of about 10,000 stars, in 127 nights, with wonderful accuracy. As his departure from the Cape was delayed, he employed the interval in measuring a degree of the southern hemisphere. He also received orders to superintend the construction of an accurate chart of the Isle of France and the Isle of Bourbon, though one had recently been executed by the celebrated navigator d'Après. After his return, he employed himself, with great industry, in comparing the different methods which had been proposed for solving the problem of the longitude. (See Longitude, Geogr.) He chose for this purpose, the distances of the moon from the sun or stars, showed the advantage of this method, and proposed a plan for a nautical almanac, since universally adopted. For the use of navigators with but little knowledge, he contrived ingenious and graphic means of assistance, by which they were made acquainted, in an easy manner, with a method which must otherwise have terrified them by the length of the calculations. C. divided his time between his observatory, his calculations, his duties as an academician and professor, and the publication of his different works. Now appeared his tables of the sun, his Astronomie Fundamenta noctemima Sole et Stellarum observat. stabil. (Paris, 1757), the continuation of his Ephemerides. He was particularly engaged in observations of the moon, and the stars of the zodiac. Finding the method of corresponding heights too slow for the vast plan which he had formed, he fixed in his observatory a meridian telescope, which gave him the right ascension of the stars with much more ease. But, in order to attain the degree of accuracy at which he aimed, he made it a rule to admit no star into his new catalogue, which he had not observed for three or four days, comparing it each time with several of those, the places of which he had previously determined with so much care. He thus attained a greater degree of accuracy than his celebrated rivals, Bradley and Mayer, who were furnished with better instruments, and generally contented themselves with a single observation of the stars of lesser magnitude. It is to be regretted, that this great work has not been edited with greater accuracy by the friend and scholar of C. Engaged in so many employments, C. still found time for other labors. From the manuscripts of Bouguer, who had intrusted them to him at the time of his death, he published Traité de la Gradation de la Lumières, and wholly revised the Traité de Navigation. He afterwards published the observations of the landgrave of Hesse-Cassel and Walther, the travels of Chazelle to Egypt, and Feuilleré's voyage to the Canary islands. A violent attack of the gout having interrupted his labors, he resumed them, as soon as he was able, with too much eagerness, exhausted his weak frame, and died in 1752. He bequeathed his manuscripts to his friend Maraldi, who published the Cid Austral, preceded by an eloge of the author, by Brotier. Never was there a greater friend of labor and truth than C. The number, as well as the accuracy of his observations, is worthy of admiration, more particularly if we consider that all his astronomical labors took place within 27 years. His Journal du voyage fait au Côté de bonne Espérance was edited by Cagnier (Paris, 1763). CAYMAN (lieutenant); a title of the grand signior, the grand vizier, and the governor of Constantinople. CAIAMAN. (See Ceyman Islands.) CAYMAN. (See Alligator.) CAIN; the eldest son of Adam and Eve; the first murderer. Jealous of the favor shown to his younger brother (see Abel), he murders him in the field. The avenging voice of conscience asks him the terrible question, "Cain, where is thy brother?" which he vainly endeavors to evade—"Am I my brother's keeper?" The curse is pronounced upon him; he is declared a fugitive and a wanderer on the face of the earth. His remorse and despair fill him with the apprehension of retribution—of death from the land of whoever shall meet him. But a mark is set upon him, as a sign, lest any one should kill him. He then, continues Moses (Gen. iv. 16-24), went out and dwelt in the land of Midian, on the east of Eden. (q. v.) His wife bore him a son, Enoch, who built a city. Jabal, one of his descendants, is called the father of those who live in tents (sceunies). Jabal, brother of Jabal, was the first musician, and Tubal-cain, another brother, was the first smith. This is the last information which the Mosaic history gives of the family of Cain, unless we suppose the beautiful daughters of men (Gen. vi. 4), or the giants (Gen. vi. 4), to be his posterity. The conciseness of the sketch of antediluvian history in Genesis has left a wide field for conjecture. Why was Abel's offering preferred? What was the sign which indicated the acceptance of
the one and the rejection of the other? What was to be the effect of this preference? Did Abel manifest a more lively faith? Was his offering consumed by a fire from heaven? Were the privileges of primogeniture transferred to him from the eldest born, as was frequently done in the patriarchal times? Who were the avengers whom he feared? Preadamites, as some have gravely conjectured, some have probably conjectured (Bayle, art. Cain), or descendants of Abel? Was the mark set upon Cain, or does the original signify that a sign was given him to inspire him with confidence in the promise? Josephus relates, that he became the leader of a band of robbers, committed all sorts of licentiousness, corrupted the simplicity of primitive manners by his luxury, established the right of property by setting up landmarks, and was the inventor of weights and measures.

CAIRENE, GRAND, a small island among the Bahamas; lon. 70° W.; lat. 19° 50' N. The Little C. lies south-west of the former.

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CAINEAMS, or BLUE MOUNTAIN; a mountain of Scotland, belonging to the Grampian hills. It is partly covered withia crystalized for the crystals on it, called cairngorms, of various colors and sizes. They have now become scarce. They are, in general, of a smoky or yellowish hue (smoky quartz and yellow quartz), and are used for seals and other trinkets.

Cairo (in Arabic, Kahira, which signifies victorious); the capital city of Egypt, and one of the largest cities in the world. It lies on the east bank of the Nile, in a sandy plain, and contains Old Cairo, Boulaç (the harbor), and New Cairo, which are, to a considerable degree, distinct from each other. The city itself, separate from the gardens and plantations which surround it, is 31 leagues in circuit, has 31 gates, and 2,400 irregular, unpaved streets, which, during the night, are closed at the end of the quarter, to prevent disturbances; also 25,840 houses, for the most part built of brick, with flat roofs, and more than 200,000 inhabitants—Arabs or Mohammedans, Coptish Christians, Maronites, Greeks, Syrians, Armenians, Jews, and natives of various countries of Europe. The castle, situated on a rock containing Joseph's well, 276 feet deep, is the residence of the pacha. There are 80 public baths, 300 mosques, 2 Greek, 12 Coptish, and 1 Armenian church, 30 synagogues, and many silk, camel, tapestry, gunpowder, leather, linen and cotton factories. The commerce of the city is very great, since it is the centre of communication between Europe, the Mediterranean sea, Asia, and the north of Africa. Here is also a Mohammedan high-school, a printing-office, and a library of 25,000 volumes. A line of telegraphs extends from hence to Alexandria, about 255 miles distant, by which intelligence is communicated in 40 minutes. In the neighborhood is an aqueduct of 317 arches; also Boulaç, the harbor of C., which contains an institution for 100 scholars, supported by the pacha, and a printing-office. In 1798, C. was taken by the French. (See Egypt.)

CAISSON; 1. a chest filled with combustibles, and buried under ground, in order to explode at a particular time. It is also a covered wagon for the provisions and ammunition of an army.—2. In architecture, a kind of chest, case, or flat-bot-
toned boat, used in the construction of bridges, large enough to contain an entire pier, which is built in it; the caisson is then sunk to the bed of the river, and the sides removed from the bottom, which is left as a foundation for the pier. Floating vessels, under the same name, are used to close the entrances of docks and basins. A groove is worked in the masonry of the entrance, and a vessel of the shape of a doze, the entrances of docks and basins. The scuttles, being opened, the caisson sinks, and fills up the groove. The scuttles are then shut, and the water is prevented from entering the dock, or from discharging itself from the basin. If the dock is to be filled, the scuttles are opened, till the water is nearly on a level on each side, when the scuttles are again shut, the caisson emptied by the pumps, and then floated off.

Caiaus, or, in the Greek manner of writing, Gaius; a learned lawyer of the time of Adrian and Antoninus Pius (117—161), of whose life but very little is known. Of his numerous works, his In stitutes are particularly important; first, as having been, for centuries, down to the time of Justinian, one of the most common manuals of law; secondly, as having been the foundation of the official compendium of the same name; and, thirdly, as having been the source of the genuine oil, the green color depends on the presence of copper; for, when rectified, it is colorless.

Calabar, Old; a country of Africa, on a river of the same name, in Upper Guinea. Duke Town, the principal place on the river, is in lon. about 5° E., lat. 5° 4' N., and contains 2000 inhabitants. Creek Town, eight miles N. W. of Old C., contains about 300 houses, and is the centre of the Dutch commerce in this country.

Calabash-Tree. The calabash-tree (cremocarpus giganteus) is a production of the West Indies and the continent of America, about the height and dimensions of an apple-tree, with crooked, horizontal branches, wedge-shaped leaves, pale-white flowers on the trunk and branches, and a roundish fruit, from two inches to a foot in diameter. The uses to which the fruit of the calabash-tree is applied are very numerous. Being covered with a greenish-yellow skin, which encloses a thin, hard, and almost woody shell, it is employed for various kinds of domestic uses. The present professor, Bethmann Holweg offered his services to them, and, by their united efforts, the greatest part of the book has been brought into order; and that part which was before illegible wholly restored. The fragments of C. were printed at Berlin, 1825. The manuscript has been again examined, by professor Blume, and many additional discoveries have been made, which have been introduced into a new edition (Berlin, 1825). They have opened new views upon many points of the history of Roman law, and have also destroyed many acute and learned hypotheses.

Carpet Oil; the volatile oil obtained from the leaves of the cajeput-tree—the cajeputa officinarum (Melaleuca leucadendron of Linnaeus). The tree which furnishes the cajeput oil is common on the mountains of Ambayoua, and the other Molucca islands. It is obtained, by distillation, from the dried leaves of the smaller of two varieties. It is prepared, in great quantities, in the island of Banda, and sent to Holland in copper flasks. As it comes to us, it is of a green color, very limpid, lighter than water, of a strong smell, resembling camphor, and of a strong, pungent taste. It burns entirely away, without leaving any residuum. It is often adulterated with other essential oils, colored with the resin of nile oil. In the genuine oil, the green color depends on the presence of copper; for, when rectified, it is colorless.

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vessels, such as water-cans, goblets and cups, are almost every description. So hard and close-grained are these shells, that, when they contain any fluid, they may even be put several times on the fire as kettles, without any injury. When intended for ornamental vessels, they are sometimes highly polished, and have figures engraved upon them, which are variously tinged with indigo and other colors. The calabash contains a pale-yellow, juicy pulp, of an unpleasant taste, which is esteemed a valuable remedy in several disorders, both external and internal.

**Calabrese:** The appellation of a painter, by which Mattia Preti, a native of Calabria; born 1643, died 1699.

**Calabria:** A mountainous country, lying on the sea-coast, about 164 miles in length, and from 30 to 60 broad, forming the southern part of the Italian peninsula. It extends in the southern part of Naples, along the Apennines and the Tyrrhenian sea, to the capes of Spartavento and Squillace on the south, and to the gulf of Taranto in the Mediterranean sea on the east. In a space of 6800 square miles, it contains more than 800,000 inhabitants, among whom are many Arnauts. The accurate accounts of this country, so famous in fame and history, but hitherto not very accessible to travellers, we owe to the war which the French, under Joseph and Jerome, carried on against the proud and fanatical natives, until 1810. In ancient times, C. was a part of Magna Graecia, the residence of Pythagoras, the birth-place of Chloronidas, of Zaleucus, Praxiteles, Agathocles, and other distinguished men. The country where the luxuriant Sibyls once flourished is now sunk in deep barbarism. The climate was much esteemed in antiquity; but, in some places, the stagnant waters, to the dazzling of which no one pays any attention, produce contagious diseases in the hot season. The heavy dews preserve, during the greater part of the year, a delightful verdure, which is increased by numerous springs and streams. Pliny extols the fertility of the dark soil, which, with the exception of the great plain Marcesato, resembling an entire waste, covers the calcareous rocks of C. Beautiful groves of pine, firs and larch, the pitch-bearing trees of the wood of Sila, famous in ancient times, shade the sides of the Apennines. The evergreen-oak, the Oriental plane-tree, the Indian chestnut, the beech, the alder, the box, various nut-trees, and others, flourish here. The Calabrian ash affords manna. The fields

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most of the families, and an individual never goes abroad without carrying arms under his black mantie. In the night, they barricade their houses. They have no idea of social pleasures, and the rich think only of scraping together money. The females are not beautiful: they marry early, and soon fade. Even those of the higher classes cannot, in general, read or write. The husbands are so jealous, that they always confine their wives, and treat them severely. The recourse to lawsuits and chicanery is common, although the administration of justice is wretchedly defective. The clergy are as ignorant as they are corrupt, and superstition rules all classes. Even the robber carries relics in his bosom, which he supplicates for assistance in his enterprises. The people are naturally intelligent. Their language is a corruption of the Italian, difficult to be understood, but full of original and pointed expressions. The classes which are in some degree well informed express themselves with great ease and warmth. Their gestures are extremely lively. They have great powers of persuasion. If they cannot attain their end in this way, they revenge themselves by murder. They are passionate hearts and giddy tempers, and eyes full of fire and expression, but passionate hearts and giddy heads. They are, like the Sardinians and the Corsicans, the savages of Europe. (See Sevour d'un Ofiicier Prantais en Calabre, Paris, 1816.) In regard to government, the country is divided into Calabria Citra on the north, and Calabria Olra I and II on the south. The former contains Cutera, which has 15,000 inhabitants; the latter, Reggio, which has 16,500, and Catanzaro, the capital city, which has 11,000. These, alone, among the few cities, are of importance, on account of their manufactures and commerce. There are some silk manufactories at Monteleone (the Grecian Hipponium, called, by the Romans, Fibona, now containing 13,000 inhabitants, and the ruins of a temple of Orcus). The seaport Cutera has some commerce. The city of Gerace is built on the ruins of Locri. Pizzo, where Murat was seized, Oct. 13, 1815, is called, from that event, the most faithful city, and is freed from all city taxes and excise. Many marks of the earthquake, which, in February, 1783, laid waste the southern part of C., destroyed 300 cities and villages, and buried 60,000 men, are still to be seen.

Calahorra (anciently Calagurris); a town of Spain, in Old Castile, near the south side of the Ebro, on the borders of Navarre; 136 miles N. N. E. of Madrid; lon. 2° W.; lat. 42° 10' N.; population, 7200. It is a bishop's see, and contains three parish churches and three convents.

In the year of Rome 682, this town, then called Calagurris, sitting with Secutorius, was besieged by Afranius, one of Pompey's generals, and the inhabitants reduced to such extremity, that they fed on their wives and children; whence the Romans were wont to call any grievous famine "famines Calagurritana." Quintilian was born here.

Calais; a French sea-port on the channel which separates England from France, called by the French the "Pas de Calais" and La Manche; by the English, the English channel. This strongly-fortified city is protected by a citadel and the fort of Nieuwet. It contains 5,500 inhabitants, and has a harbor which is too shallow for large ships, and is important only because passage boats run continually from here to Dover. The strait is 24 miles wide, and the passage by the steam-boat seldom exceeds 5 hours. In 1316, C. was taken by Edward III, king of England, after such a bold defence as made the siege one of the most remarkable in history. It remained in the possession of the English until 1558, when it was lost, together with all the English possessions in France. Near the harbor a monument has been erected to commemorate the return of Louis XVIII, April 24, 1814. In the year 1819, 15,577 travellers landed here, and 11,533 embarked from this port.

Calais, Pas de (i. e., straits of Calais); a department of France, formerly the province of Artois, lying east of the channel, and south of the straits. Population, in 1827, 642,503; chief place, Artes (See Departments.)

Calais, straits of. (See Dover, straits of.)

Calaisie. (See Turquie.)

Calamancu; a woollen stuff, principally manufactured in the Netherlands. The English manufactures of it have declined of late years. The warp is sometimes mixed with silk or goats' hair. This stuff is made plain, colored, striped or watered.

Calamata. (See Greece.)

Calamine. (See Zinc.)

Calamines, or Calaminas; a cluster of islands in the Indian sea, among those called the Philippine islands. They are 17 in number, one of which is 30 miles
long, and 12 broad, divided between the
king of Borneo and the Spaniards, with
some independent natives in the interior
ports, who live without chiefs and with­
out laws: they are black, and have no
fixed places of abode. About 1200 on
the sea-coast have submitted to the Span­
iards, who have a garrison at a place
called Talay. The country is mountain­
ous, and produces some rice, and great
quantities of wax and honey. Lon. 120°
20' E.; lat. 12° N.

C Alameines; a reed.—1. The C. pastura­lis was a simple reed or cane, used as a
musical instrument. The *fisuta, or shep­
herd's pipe, was made of this substance: it
is hence figuratively used by the poets
for the pipe itself. 2. The C. chartarius,
or chartarius, was used by the ancients to
write on materials which the style would
injure, as papyrus, parchment, &c. It
was generally made of the Egyptian,
sometimes of the Persian reed. It was
sharpened with a knife, or a rough stone,
and split like our pens. 3. The
C. aromatics (the occur of botanists) is an
odoriferous reed, formerly brought from
India, now found also in the north of Eu­
or, and in North America. It is used
by the distillers of Dantzic to correct the
empyreumatic odor of spirits, and to give
them a peculiar flavor.

Calandra. (See Orders.)

Calas, John. This unfortunate man,
who died on the scaffold, a victim of fa­
naticism, was born, 1608, in Laecarido, near Calas, in Languedoc, educated in
the Protestant religion, and established as
a merchant in Toulouse. He had three
sons and three daughters, whom he edu­
cated himself, and was held in general
esteem, when in his 60th year, he was
suddenly accused of the dreadful crime
of murdering his son. In 1761, his oldest
son, Marc Antoine, was found strangled
in his father's house. It was reported
that the unfortunate youth had been put
to death by his father, because he had be­
come a Catholic. John C. and his whole
family were arrested, and a prosecution
instituted against him, in support of
which numerous witnesses, whose insuf­
ficiency was apparent, appeared against
him. In vain did the old man plead his
affection for his son, and that son's me­
ancholy; in vain did he assert that he had
another son, who had embraced the Cath­
olic religion, who still received his yearly
allowance; that it was impossible for him,
weak old man, to execute such a deed
of violence on a youth full of strength,
and that he had not murdered a Catholic
maid-servant whom he had in the house.
The parliament of Toulouse condemned
him, by 8 voices against 3, to be tortured,
and then broken on the wheel; and, on
the 9th of March, 1762, the sentence was
executed. He suffered the torture with
firmness, and ascended the scaffold with
these words: — "I die guiltless, but Christ, who
was himself guiltless, suffered a death even
more dreadful." The youngest son was
banished for ever, but the mother and the
maid were acquitted. The family of the
unhappy man retired to Geneva. Vol­
taire, who was then at Bern, became
acquainted with them, and formed the de­
sign of defending the memory of C. He
brought the cause before the bar of public
opinion, and directed the attention of men
to the defects of the criminal law. The
widow and children of C. solicited a re­
vision of the trial. Fifty judges once
more examined the circumstances, and
declared C. altogether innocent. The king,
by his liberality, sought to recompense the
family for their undeserved losses, and
eagerly was arrested, and a prosecution
now found also in the north of Eu­
or, and in North America. It is used
by the distillers of Dantzic to correct the
empyreumatic odor of spirits, and to give
them a peculiar flavor.

Calatrava. (See Orders.)

Calcar, John van; a Dutch painter of
the school of John van Eyk, born about
1500, at Calcar, in Cleves. His paintings
are true to nature. He studied so thor­
oughly the works of Titian, that their
pictures cannot always be distinguishecl.
The Mater dolorosa, in the collection of
Hoisseree (q. v.), in Stuttgart, a perfect
work of art, is by him. Another small
picture of his, the Infant Christ with the
Shepherds, was a favorite of Rubens. In
this piece, the light is represented as pro­
ceeding from the child. He designed
almost all the portraits in Vasari's Lives,
and the figures for the anatomical work
of Vesalius. He died in Naples, 1540.

Calcareous Spar. (See Lime.)

Calchas; son of Thestor; priest and
prophet of the Greeks at the time of the
Trojan war. When the fleet destined for
Troy assembled in the harbor of Alulis,
the Greeks, before their departure, at­
temted to propitiate the favor of the gods
by sacrifices on an altar under a plane­
tree, when a serpent, creeping from under
the altar, crawled up the tree, devoured a
sparrow on her nest, with 8 young ones,
and was then changed into a stone. The
prophet now foretold to the Greeks that
Troy would not be subdued by them till
the 10th year of the siege. He himself
accompanied the army to Troy. During
the siege, the Greeks were attacked by a
plague, and C. declared that it was the
effect of Apollo's anger, because they had
deprived his priest of his daughter Chry-
sis, whom Agamemnon had selected as
his mistress. He counselled the Greeks to
appease Apollo by restoring theiesel;
it was at his advice that they after-
wards built the wooden horse. He
prophesied that the Trojan Aeneas would
found an empire in Italy. After C.'s
death, an oracle was dedicated to him on
mount Drium in Daunia.
Calcination. Calcination, as com-
monly understood, consists in heating
bodies in a steady fire, at a greater or less
temperature. The product is a powder
we umlerstand by this process
burning them in the open air, or by the
wet method, which consists in dissolving
the metal, and precipitating its calx. Take,
for instance, a quantity of lead, and melt
it in the open air in a flat vessel; it soon
assumes a grayish hue, the earthy sub-
stance forming a coat on the surface.
Upon the removal of this, the metal
appears, having a brilliant lustre, and, after
some time, the same gray coat reappears.
It may be removed as long as any lead
remains. This substance is the calx. Calci-
cined lead is specifically lighter than the
metal, but its absolute weight is consid-
erably greater, so that 10 pounds of metal
make 11 pounds of calx. Platinum, gold
and silver are not affected in this way in
so great a degree, on which account they
are called the perfect metals. Chemists
are now convinced, that, in this process,
the atmospheric air is decomposed, and a
portion absorbed by the metal, which ac-
counts for its increase of weight. Calci-
nation is, therefore, nothing but oxidation;
and, as the body is not saturated with ox-
gen, no acid is formed, but the resilt is
a metallic oxide.
Calcograph (See Engraving.)
Calculus. The lower or common
analysis (q. v.) contains the rules neces-
sary to calculate quantities of any definite
magnitude whatever. But quantities are
sometimes considered as varying in mag-
nitude, or as having arrived at a given
state of magnitude by successive vari-
tions. This gives rise to the higher anal-
ysis, which is of the greatest use in the
physico-mathematical sciences. Two ob-
jects are here proposed : First, to descend
from the elements of quantities to the
quantities themselves. This method is
called the integral calculus. Both of
these methods are included under the
general name infinitesimal analysis. Those
quantities which retain the same value
are called constant; those whose values
are varying are called variable. When
variable quantities are so connected that
the value of one of them is determined by
the values ascribed to the others, that va-
riable quantity is said to be a function
of the others. A quantity is infinitely great
or infinitely small, with regard to another,
when it is not possible to assign any quan-
tity sufficiently large or sufficiently small
to express the ratio of the two. When
we consider a variable quantity as increas-
ing by infinitely small degrees, if we wish
to know the value of those increments,
the most natural mode is to determine the
value of this quantity for any one instant,
and the value of the same for the instant
immediately following. This difference
is called the differential of the quantity.
The integral calculus, as has been already
stated, is the reverse of the differential cal-
culus. There is no variable quantity ex-
pressed algebraically, of which we cannot
find the differential; but there are differen-
tial quantities, which we cannot inte-
grate: some, because they could not have
resulted from differentiation; others, be-
cause means have not yet been discovered
of integrating them. We have made
these elementary observations for the pur-
pose of introducing the history of the dis-
coveries of this mighty instrument. For a
full examination of the subject, we refer
to Lacroix's works, Carnot's Méthodes
du Calcul Integral, and Lagrange's Calcul
des Fonctions. Newton was the first dis-
coverer, having pointed out the principles
in a treatise written before 1669, but not
published till many years after. Leibniz,
meanwhile, made the same discovery, and
published it to the world before Newton,
and independently of Newton's prior
discoveries, with a much better nota-
tion, which is now universally adopted.
The methods analogous to the infinites-
imal analysis previously employed were
that of exhausions, known to the ancients,
that of indivisibles of Cavalieri, and Des-
cartes' method of indeterminates. Leib-
niz considered the differences of the
variable quantities as infinitely small, and
conceived that he might reject the higher
powers of those differences without sen-
sible error; so that none of those powers
but the first remained in the differential
Equation finally obtained. Instead of the actual increments of the **flowing** or **variable** quantities, Newton introduced the **fluxions** of those quantities; meaning, by fluxions, quantities which had to one another the same ratio which the increments had in their ultimate or evanescent state. The **fluxions** of Newton corresponded with the **differentials** of Leibnitz; and the **fluents** of the former with the **integrals** of the latter. The fluxionary and the differential calculus are therefore two particular cases of one general method.

The problems which relate to the **maxima** and **minima**, or the greatest and least values of variable quantities, are among the most interesting in mathematics. When any function becomes either the greatest or the least, it does so by the velocity of its increase or decrease becoming equal to nothing: in this case, the fluxion which is proportional to that velocity must become nothing. By taking the fluxion of the given function, and supposing it equal to nothing, an equation may be obtained in finite terms, expressing the relation of the quantities when the function assigned to nothing, an equation may be obtained which the **increment** and the differential calculus are therefore peculiarly adapted to physical researches. It alone affords the means of measuring forces, when each acts separately and instantaneously, under conditions that can be accurately ascertained. The momentary increments represent precisely the forces by which the changes in nature are produced; so that this doctrine seemed created to penetrate into the interior of things, and take cognizance of those powers which elude the ordinary methods of geometrical investigation. It alone affords the means of measuring forces, when each acts separately and instantaneously, under conditions that can be accurately ascertained. In comparing the effects of continued action, the variety of time and circumstance, and the continuance of effects after their causes have ceased, introduce uncertainty, and render the conclusions vague and unsatisfactory. The analysis of infinites here goes to the point; it measures the intensity or instantaneous effort of the force, and removes all those causes of uncertainty. It is by effects, taken in their nascent or evanescent state, that the true proportion of causes must be ascertained.

**Calculus.** Little stones, anciently used for computation, voting, &c., were called **calci**. The Thracians used to mark lucky days by white, and unlucky by black pebbles; and the Roman judges, at an early period, voted for the acquittal of the accused by a white, and for condemnation by a black calculus: hence, **niger calclus**, or **albus calclus** a favorable or unfavorable vote. Sometimes the ballots were marked with characters, and then were made of wood. **Calculus insorus or latrones** were counters used in a game, something like backgammon. **Calculus Minervae** was an expression employed to signify that the accused escaped by an equal division of the votes of the judges. He was said to be acquitted **calculo Minervae** (by the **vote of Minerva**), because Orestes was acquitted by the vote of that goddess when the judges were equally divided.

**Calculus,** or **Stone,** is the name given to all hard concretions, not bony, formed in the bodies of animals. Calculi may be divided into two classes, according as they are found in the gall-bladder or in the urinary bladder. The first are called **bilhary calculi** of the **urinary calculus**—**Biliary calculi** are of a lamellated structure, and are composed of a substance which is considered, by M. Chevreul, as a peculiar principle, which he has named **cholesterine** (from *vex*, bile, and *organ*, solid). It is described as a white, crystalline substance, with much lustre, insipid and inodorous, much resembling spermaceti, but differing in being less fusible, and in not forming a soap with alkalies. It is also converted, by the action of nitric acid, into a peculiar acid, called **cholesteric acid.** This is slightly soluble in water, and forms soluble salts with the alkalies. Cholesterine consists of carbon 55.095, oxygen 30.025, and hydrogen 11.88. It has lately been detected in the bile itself, both in that of animals and of man. Besides cholesterine, biliary concretions contain a portion of indissoluble bile, and the yellow coloring matter of the bile in a concentrated state, which, from the beauty of its hue, and its permanence, is much valued as a pigment. **Urinary calculi** are of very variable characters and composition. The following substances enter principally into their composition: uric acid, urate of ammonia, phosphate of lime, phosphate of am­monia and magnesia, oxide of lime, silic, sometimes oxide of iron and animal matter—these being more or less pure or mixed, and being often diversified by mechanical structure, so as to render it difficult to constitute well-defined species. The six following species embrace the principal varieties of urinary calculi:—1. that composed chiefly of uric acid; 2. that consisting chiefly of phosphate of ammonia and magnesia; 3. the bope-earth calculus, formed, almost entirely, of phosphate of lime; 4. the fusible calculi, composed of the two preceding intermixed; 5. the mulberry cal­
calcus, consisting of oxalate of lime; and, C, a rare species, the cystic oxyde calculus. Two others, still more rare, are, the xanthic oxyde and fibrous calculi, discovered by doctor Marcet; and, lastly, calculi have been met with formed of carbonate of lime. In all these calculi, besides the saline matter, there is present a portion of animal matter, which is conceived to be the mucus of the bladder. This seems to give them color and induration. It is found even in those which are white and crystalline. In the mulberry calculus it is present in a larger proportion than in the others. The ingredients of calculi are often, also, diversified by intermixture in layers. These must, of course, be various, and, as their arrangement, irregularly arranged. Those which have been the most frequently observed are alternations of uric acid with phosphate of magnesia and ammonia, or phosphate of lime; or of oxalate of lime with uric acid, or with either or both of these phosphates.

CALCUTTA, the capital of Bengal, and of the whole British East Indies, is situated on the west branch of the Hoogly, an arm of the Ganges, on which the largest East Indians may come quite up to the city. The navigation, however, on account of several sandbanks, which are continually changing their size and position, is very dangerous. This place, formerly the insignificant village of Govinda-pour, rose, in the last century, to the size of a great city. The climate, when the English first made a settlement here, in 1690, was as unhealthy as that of Batavia; but it has been gradually becoming less fatal to settlers, partly by the removal of a forest near the city, partly by greater attention, in the settlers themselves, to their mode of living. Notwithstanding the unhealthiness of the place, it continued steadily to increase, quickly recovered from its losses in 1756, and is now one of the most magnificent cities in the world. In 1802, the population was computed at 600,000; a few years after (including the suburbs), at 1,000,000, of which about one half may be given to the city. The population of the surrounding districts, within a space of 20 miles, was estimated, in the same year, at 2,293,600 inhabitants. The houses of the English, who occupy a separate quarter of the city, are of brick, elegantly built, and many of them like palaces. On account of the heat of the climate, they are not joined together, but stand at some distance from each other, have high and airy apartments, flat roofs, and are surrounded with verandahs. With this part of the city, "the black town," so called (the Pietah), which is the quarter occupied by the natives, forms a striking contrast. It has extremely narrow and crooked streets, interspersed with gardens and innumerable tanks. Some of the streets are paved. The houses, which are some of brick, some of mud, but mostly of bamboo or straw mats, present a motley appearance. Fort William, not far from the city, was begun by lord Clive, in 1757, and is a magnificent work, in the form of an octagon, but on too extensive a scale for the purposes of defence. It has bomb-proof barracks, large enough for 10,000 men, and would require 600 pieces of cannon for the works. It commands the river. A trench is drawn round the whole, which may be filled, in case of need, with water from the Hoogly, to the depth of eight feet. Between fort William and the city there is a plain, which forms a favorite promenade of the inhabitants. Hindoos, blacks, Europeans, equipages of all sorts, and palanquins, are here seen mixed together in a motley crowd. On the western side stands the new palace, built by the marquis of Wellesley, at an expense of a million pounds sterling, and reminding one, by its grandeur, of the fabulous palaces of Arabian story. The old fort is now a custom-house, and the infamous "black hole" has been turned into a ware-house. An obelisk, 50 feet high, at the entrance, contains the names of the unfortunate captives, who, in 1756, when the city was taken and plundered by Sujna Dowla, fell victims to the most inhuman cruelty. Amongst the other public buildings are the court-house, an Armenian and an English church. In the middle of the city is a large tank, for the purpose of supplying the inhabitants during the hot season, when the river-water becomes offensive. Here is the residence of the governor-general of India, and the seat of the supreme court of justice, which decides causes according to the English law, without regard to rank, station or country. Smaller offences are tried by the superintendent of police and justices of the peace. Order is maintained by several companies of seapoys, who make regular patrols through the city. C. is the great emporium of Bengal, and the channel through which the treasures of the interior provinces are conveyed to Europe. The port is filled with ships of all nations. Mercantile en
There are some houses which trade, annually, to the amount of 4 or 5 million pounds sterling. The trade in sugar, opium, silk, muslin, &c. is very considerable. Large quantities of salt are exported to Assam, and gold, silver, ivory, musk, and a peculiar kind of silky cotton, are brought back in exchange. Cowries, a kind of small shells, passing as coin, are received in exchange for rice from the Maldives. The trade with Pegu, Siam, and the Malay isles, formerly so profitable, has very much declined. The British merchants are, as might be expected, the most numerous; and many of them have acquired fortunes which enable them to live in a style of great splendor. Next to them, in number and respectability, as well as in outward show, are the Armenians. They are peaceable and industrious merchants. Many of them have large capitals, and carry on an extensive trade to China and the ports to the west, as far as the Persian gulf. The Mongols, however, are the wealthiest; and, as they lend only at an enormous interest, their profits, from this source, are three times as great as any capital commonly gives. The Hindus remain fixed, however rich they may become, in their narrow views, and their accustomed frugality. Their houses and shops are mean, and it is only on occasion of their nuptials and religious festivals, that they indulge in any extraordinary expense. Then they assemble under magnificent, illuminated canopies, distribute rose-water and other perfumes in profusion, and regale themselves with the choicest confectionary from golden vessels, while they are entertained by the voices of singing girls, or the exhibition of a pantomime. At Messina, he executed an oil-painting, which represents Christ bearing the cross, contains a number of beautiful figures, and proves his ability to treat the most elevated subjects. He approached, more than any one, to the style and the manner of the ancients, particularly in imitating their basso-relievo. His figures are correct, well-distributed and arranged; the positions are natural, the heads full of expression and character. It is evident that he would have acquired greater celebrity if he had undertaken greater works. He applied himself to the chiaro-oscuro, particularly to that kind of it which is called sgraffito. He showed, also, much talent in his landscapes. At the sack of Rome, in 1527, he fled to Naples, and, on his return from that place to Rome, in 1543, he was murdered by his domestic.

Caldara, a celebrated composer of the 18th century, was born at Venice, 1714, and died 1763. His church compositions are still in repute.

Caldas de Monroy; a small town in Catalonia, Spain, about 20 miles north
of Barcelona. It contains hot mineral springs, of such a temperature that the inhabitants bring eggs, vegetables, &c., to boil them in the water. When cooled, it is drunk in scrofulous und rheumatic complaints.

Calder, or Cawdor; a village and parish in Nairnshire, Scotland, in which are seen the remains of a castle, once the residence of Macbeth, destroyed by Malcolm; 4 miles south of Nairn.

Calderari (coppersmiths). This name was assumed by one of the many secret societies which have sprung up in Italy, from the political agitation of the times. Of late years, they have been most numerous at Naples, and, indeed, more so in the provinces than in the capital, where they were once united, for a long time, with the Carbonari, but were afterwards opposed to them. All these societies, so far as they have any definite political object, appear to have in view the political union of Italy, and its liberation from foreign dominion, but differ from each other so widely, in regard to the means and the results, that a decided hostility has been the consequence. Of the true character of each of these societies, among which the Calderari and the Carbonari have been the most famous and extensive, it is as difficult to give any certain information, as it is to ascertain their history; for, though they have both, and particularly the Carbonari, published their statutes and proceedings since 1817, yet these sources of information have not all reached us, nor are they entirely to be depended on. Of the Calderari, we are told by count Orloff (Memoires sur le Royaume de Naples, vol. ii. 286), that they sprung from the Carbonari, towards the end of the year 1813. It appears that a change was then made in the form of the society, which had become too large, and a great number of its former members were excluded in consequence. These united themselves into a new society, under the name of the Calderari, and became the most active opponents of their former brethren. After the return of king Ferdinand to Naples, prince Canosa, minister of police, favored the Calderari, by ministering to their necessities, and acted as objects of his suspicion. For this purpose, he organized them anew, divided them into wards, appointed a central ward in each province to oversee the rest, and gave them the name of Calderari of the counterpoise. He distributed 20,000 muskets among them; but, when the king was apprized of this hazardous undertaking, which had been begun without his knowledge, a stop was put to any further proceedings by Canosa's dismissal and banishment; but the association was not then abolished. This account has been contradicted from other sources. Canosa was turned out of his office, which he had held but six months, June 27, 1816; and, three months after his banishment, a royal decree was issued, renewing the prohibitions and penalties against all secret societies, not excepting the Calderari, and commanding their prosecution, although they had lately manifested their attachment to the king and to good order. Canosa himself, in an anonymous work (I Pifferi di Montagna, Dublin, 1820), has contradicted the statements of count Orloff with regard to him and the Calderari. According to his account, they sprung up, not in Naples, but in Palermo, when lord Bentinck abolished the companies of tradesmen. This measure excited great dissatisfaction. The 'coppersmiths' or Calderari, in particular, declared to the queen their readiness to take up arms against the British, and disturbances ensued, in which the Neapolitan fugitives took a conspicuous part. Lord Bentinck had them sent to Naples, where they became active in the secret associations against Murat; and, on this occasion, one of the old societies, which had hitherto borne the name of Trinitario, assumed that of Calderari. When it was proposed, in the ministry of 1816, to take strong measures against them, as the remains of the party of 1793, prince Canosa was for upholding the party, not for any selfish reason, but from the belief that they were a necessary counterpoise to the more numerous and formidable Carbonari. The society, however, has never adopted the name of Calderari of the counterpoise; and the story of the distribution of muskets is contradicted by prince Canosa, in the publication above-mentioned. The Calderari, who, according to the above accounts, appeared to be a continuation of the body got together by cardinal Ruffo, in 1790, are composed, almost entirely, of the lower classes, and, hence, not so much has been published by them, as by the Carbonari. A single very important publication, by the jurist Pasqui, Tonelli (Breve Idea della Carbonaria, sua Origine nel Regno di Napoli, suo Scopo, sua Persecuzione e Causa che fe' nascere la Setta de' Calderari, Naples, 1820), has a notice of them.

Calderon. Don Pedro Calderon de
la Barca Henao y Riano, descended from an ancient family, was born at Madrid, Jan. 1, 1601, received his early education in the Jesuits' college of his native city, and studied at Salamanca, where he devoted himself chiefly to history, philosophy and jurisprudence. His poetical genius early discovered itself. Before his 14th year, he had written his first play, El Carro del Cielo (vol. 9 of his works). His talent for this species of poetry, which has brought his name down to posterity, and, perhaps, his powers of invention, in the preparation of entertainments for festivals, soon gained him friends and patrons. When he left Salamanca, in 1625, to seek employment at the court of Madrid, many noblemen interested themselves in bringing forward the young poet. But, having an inclination for the military profession, he entered the service in 1625, and bore arms with distinction for 10 years in Milan and the Netherlands. In 1636, he was recalled by Philip IV, who gave him the direction of the court entertainments, and, in particular, the preparation of plays for the court theatre. The next year, he was made knight of the order of San Jago, and served in the campaign in Catalonia. The unexpected termination of the war restored him again to his peaceful occupation. The king now confided to him a monthly pension of 30 escudos de oro; but he still employed his talents with uninterrupted industry in composing for the theatre and the church. The king spared no cost in the representation of his theatrical pieces. Ten years after, in 1651, he procured permission from the order of San Jago to enter the clerical profession, and, in 1653, obtained a chaplain's office in the archiepiscopal church at Toledo, without quitting, however, his former occupation. But, as this situation removed him too far from court, he received, in 1658, another at the king's court-chapel (being still allowed to hold the former); and, at the same time, a pension was assigned him from the Sicilian revenue. His fame greatly increased his income, as he was solicited by the principal cities of Spain to compose their autos sacramentales, for which he was liberally paid. He bestowed particular pains on the composition of these pieces, and, in fact, eclipsed all that the Spanish literature, so rich in this department of fancy, had hitherto produced. These subjects were particularly suited to his religious turn of mind; and he set a peculiar value on his performances of this kind, so as even to disparage his other works, which deserve no mean reputation. Religion is the ruling idea, the central point, of his poems. Whatever subject he handles, he exhibits true poetical genius. Even allowing that he is inferior in richness of invention to Lope de Vega, he certainly excels him in fineness of execution, elevation of feeling, and aptness of expression. If we find in him transferences foreign to our modes of thinking and feeling, to our accustomed views and manner of expression, we shall have occasion much oftener to admire his unrivalled genius. The Spanish nation esteemed C. among the greatest poetical geniuses. Many faults in his writings are to be attributed to the age and circumstances of the author. Among his dramatic works are many pieces of intrigue, full of complicated plots, and rich in interesting incidents. There are, besides, heroic comedies and historical plays, some of which merit the name of tragedies. To this class belongs the Constant Prince, which deserves an honorable place among romantic tragedies of the first rank. Besides these, C. has left 35 autos sacramentales, 290 books (preludes) and 100 autos sacramentales (farces). He wrote his last play in the 81st year of his age. The smaller poems of C., his songs, sonnets, ballads, &c., notwithstanding the applause which they received from his contemporaries, are now forgotten; but his plays have maintained their place on the stage even more than those of Lope de Vega. The number of his collected plays amounts to 125. He wrote, however, many more, some of which were never published. The most complete edition of his works is that published by D. Juan de Vera Tassis y Villarroel (Madrid, 1685, 9 vols.). A. W. Schlegel and Gries have given masterly translations of his pieces into German. The former has published 5 plays in 2 vols. (Berlin, 1803-1804); the latter, 10 plays in 5 vols. (Berlin, 1815-1822). These were followed by the translations of baron Maliburg, of which 6 vols. (Leipsic, 1819-1825) have appeared. Goethe and Schlegel have given merit of having opened the German stage to the genius of C., as Schröder, before them, had done to that of Shakespeare. The Constant Prince shows, perhaps, in the highest degree, the skill of C. as a tragic poet. It turns on one of the most popular of all subjects, viz. the idea of destiny, managed in a truly poetical way, in a tragedy terminating happily. The great fertility of C.'s invention has heaped up an abundance of materials from which foreign
400 CALEB.-CALEDONIANS.

theatres might be much enriched. It is to be regretted that his works have not been chronologically arranged. We might then have traced the growth of mysticism in his mind, and seen it striking root more deeply as he advanced in life. At the age of 62, he was admitted into the fraternity of San Pedro. In 1687, he was elected their capitán mayor. He left them all his property, for which they erected a splendid monument to his memory. He died May 25, 1687, aged 87. Among his imitators, Tirso de Molina is worthy of mention, as the author of the Inflexible Stranger, which has been often imitated, and is the groundwork of the celebrated opera of Don Juan.

CALEB, of the tribe of Juda, born B.C. 1530, was sent with Joshua and 10 others to examine the Land of Canaan. When Joshua had conquered the country, C. reminded the Jews of the promise, which had been made by God, that they should enjoy this country. He obtained the city of Hebron for his share of the spoil, besieged and captured it, and drove out three giants, or Anakim. He then marched against Kirjath-Sepher, and offered his daughter Achsah to the first who should enter it. Othniel, his nephew, was the successful aspirant for the fair Jewess. (q. v.)

CALEDONIA; the ancient name of Scotland. (q. v.)

CALEDONIA; a town in New York, on the west side of the Genesee, 20 miles south-west of Rochester, 235 west of Albany. The village is situated on the west side of the Genesee, containing magnesia, silex and iron ore, salt and sulphur springs. Great or Big springs, situated on the north side of the village, are regarded as a curiosity. The waters, which are impregnated with sulphur and lime, boil up in great quantities from the earth, containing magnesia, silex and iron ore, salt and sulphur springs. Great or Big springs, situated on the north side of the village, are regarded as a curiosity. The waters, which are impregnated with sulphur and lime, boil up in great quantities from the earth, in a pond or reservoir of five acres. In this pond, except at the places where the water boils up, grows a singular weed, five or six feet high, and so thick as to be almost impenetrable. The surface of the water is covered with a frothy substance, which, when dried, has a very offensive smell. The temperature of the water is always nearly the same, extremely cold, but never freezes. It is mountainous; abounds in lakes, the largest of which are Stuart's lake and Nattarain lake. The largest rivers are Fraser's and Nattarain rivers. The thermometer sometimes falls 32 degrees below zero; but the seasons are generally milder than in the same parallel east of the Rocky mountains. The summer is never very hot. The natives call themselves Tu- culites. The whites call them Carriers. They are estimated at 5000.

CALEDONIA, New; a large island in the Pacific ocean, from 220 to 230 miles long, and 50 broad. It is rendered dangerous of approach by formidable reefs, extending 270 miles beyond the island. The danger is increased by the current setting directly on the breakers. Lon. 163° to 167° E.; lat. 20° to 22° S.

It was discovered by Cook, in his second voyage (1774), who remained on the coast a week. D'Entrecasteaux was the first who sailed completely round it (1792 and 1793). A chain of mountains, 2500 feet high, extends through the island, from the summits of which the sea is visible on both sides. The island produces the bread-fruit-tree, banana, sugar-cane, arum and coco, although the soil is by no means fertile. The animals are very few. A spider called nookee forms threads so large as to offer a sensible resistance before breaking. They are eaten by the people. Their other articles of food are not more choice. Like the Ottomacs of South America, described by Humboldt, they eat stonite—a soft, friable, greenish earth, containing magnesia, silex and iron. Cook and Forster described them as gentle, simple, kind and honest. D'Entrecasteaux represents them as cruel, perfidious and thievish. The women were hired for a nail. Recent observation has shown them to be cannibals. They are armed with darts and clubs, but do not use the bow. Their huts are small, and filled with smoke, to defend them from insects. Their language is different from that of Polynesia, and is described as harsh and croaking. Their dress is a girdle of fibrous bark. They also wear ornaments of bone or coral, and paint their breasts with wide black streaks. Their hair is nearly woolly, the surface of their bodies shiny and black. Some have the thick lips of the African Negro.

CALEDONIANS; the name of a confederacy of tribes in what is now Scotland (Britannia Barbara). Tacitus supposes them to be Germans; others, with more reason, Celts. They are the ancestors of the modern Highlanders.
CALEMBOURG—CALENDAR.

CALEMBOURG: a kind of pun, in which a word is employed in an unusual sense, or by which, without regard to grammar or orthography, some letters are changed, added or left out, without changing the pronunciation. Thus a calemboyr is distinguished from the proper jeu de mots. A Westphalian count Calemberg, who lived in Paris under Louis XV, is said to have amused the circles there by his blunders in the French language, and occasioned the marquis de Vercro to introduce this new kind of witicism. As an instance, we adduce the following:—A robber demanded from a traveller his purse, putting a pistol to his breast, with the words, “La bourse, ou la vie.” “Pour l'avis (la vie),” the traveller answered, dryly, “le meilleur que je puisse vous donner, est de quitter votre mulet, sans quoi vous n'avez pas, et pour la bourse (hair-knot) je n'en ai pas, parce que je porte un cadogan (hair-knot).” The French language is rich in such puns, because it is poor in words, and hence, consequently, may be taken in different significations. (See Pun.)

CALEMBERG: a principality in the kingdom of Hanover, which derives its name from an ancient castle, now in ruins, situated 12 miles south of Hanover. Its extent is 1050 square miles. It has about 130,222 inhabitants, chiefly Lutherans. (See Hanover.)

CALENDAR: the division of time into years, months, weeks and days; also a register of these divisions. Among the old Romans, for want of such a register, it was the custom for the pontifex maximus, on the first day of the month, to proclaim (calare) the month, with the festivals occurring in it, and the time of new moon. Hence calendar and calendar. The periodical occurrence of certain natural phenomena gave rise to the first division of time. The apparent daily revolution of the starry heavens and the sun about the earth occasioned the division into days. But, as the number of days became too great for convenience, some larger measure of time was found necessary. The changes of the moon, which were observed to recur every 29 or 30 days, suggested the division of time into months. After a considerable period, these also were found to multiply too much, and a still larger measure of time was wanted. Such a one was found in the apparent yearly revolution of the sun round the earth in the ecliptic. The time of this revolution, after several erroneous calculations hereafter to be mentioned, was finally determined to be a little more than 365 days. This was called a solar year, or, simply, a year, which was divided, according to the former measures of time, into months and days. Now, on account of the great influence of the sun's course in the ecliptic, and its consequent variations of distance from us upon the earth, and the affairs of its inhabitants in all countries, the attention of men would naturally be drawn to this phenomenon. Hence it has happened that all nations, in any degree civilized, have adopted the year as the largest measure of time. It is probable that the Phenicians first, then the Egyptians, and after them the Greeks, made use of this mode of reckoning, from whom it was communicated to other nations. The division of the year, however, into months and days, could not have been very accurate at first, because it can be settled only by long and attentive observation. The calendar of the oldest nations was quite imperfect. They were satisfied with one which enabled them to manage the common business of husbandry. The Greeks were the first who attempted to adjust the courses of the sun and the moon to each other. For this purpose, they reckoned 12 solar revolutions of the moon round the earth in a solar year; and, to avoid the fractions of a month, they made the year consist of 13 and 12 months alternately. Solon, perceiving the defects of this arrangement, fixed the number of days in a month at 29$, and made the month consist of 29 and 30 days alternately. Still the length of the month and that of the year were not brought into exact adjustment, and new disorders soon followed. Various plans for the reformation of the calendar were proposed from time to time; but all proved insufficient, till Meton and Euctemon finally succeeded in bringing it to a much greater degree of accuracy, by fixing on the period of 19 years, in which time the new moons return upon the same days of the year as before (as 19 solar years are very nearly equal to 235 lunations). (See Cycle.) This mode of computation, first adopted by the Greeks (433 B.C.), was so much approved of, that it was engraven with golden letters on a tablet at Athens. Hence the number, showing what year of the moon's cycle any given year is, is called the golden number. This period of 19 years was found, however, to be about six hours too long. This defect Calippus, about 102 years later, endeavored to remedy, but still failed to make the beginning of the
seasons return on the same fixed day of the year.—Among the Romans, their first king, Romulus, introduced a year of 10 divisions or months, of which 4 (namely, March, May, July and October) contained 31 days; the rest (April, June, August, September, November and December), only 30. When he discovered that this mode of reckoning was imperfect, he inserted as many days as were necessary to complete the year, and bring it up to the beginning of the following one. His successor, Numa Pompilius, abolished this method, added 50 days more, took 1 day from each of the 6 months containing 30 days, because even numbers were supposed to be unlucky, and out of the whole 56 days formed 2 new months of 29 days each, which he called January and February. Thus the year consisted of 12 months, and 330 days; and, to make it agree with the course of the sun, intercalations were made use of, after the manner of the Greeks. These intercalations, however, were left to the discretion of the priests; and, as they made them very arbitrarily, according to the exigences of the state, or their own private views, complaints and irregularities soon arose. Notwithstanding this defect, the arrangement continued to the end of the republic constitution. The calendar of the Romans had a very peculiar arrangement. They gave particular names to 3 days of the month. The first day was called the calends. In the 4 months of March, May, July and October, the 7th, in the others, the 5th day, was called the nones; and, in the 4 former, the 15th, in the rest, the 13th day, was called the ides. The other days they distinguished in the following manner:—they counted from the above-mentioned days backwards, observing to reckon also the one from which they began. Thus the 3d of March, according to the Roman reckoning, would be the 5th day before the nones, which, in that month, fall upon the 7th. The 8th of January, in which month the names happen on the 5th, and the ides on the 15th, was called the 6th before the ides of January. Finally, to express any of the days after the ides, they reckoned in a similar manner from the calends of the following month. From the inaccuracy of the Roman method of reckoning, it appears that, in Cicero's time, the calendar brought the vernal equinox almost two months later than it ought to be. According to the last letter of the 10th book of Cicero's Epistles to Atticus, this equinox was not yet past, although it was near the end of May, by their calendar. To check this irregularity, Julius Caesar, on being appointed dictator and pontiff (A. U. C. 707), invited the Greek astronomer Sosigenes to Rome, who, with the assistance of Marcus Fabius, invented that mode of reckoning, which, after him who introduced it into use, has been called the Julian calendar. The chief improvement consisted in restoring the equinox to its proper place in March. For this purpose, two months were inserted between November and December, so that the year 707, called, from this circumstance, the year of confusion, contained 14 months. In the number of days, the Greek computation was adopted, which made it 365. The number and names of the months were kept unaltered, with the exception of Quinquies, which was henceforth called, in honor of the author of the improvement, Julius. To dispose of the quarter of a day, it was determined to intercalate a day every fourth year, between the 23d and 24th of February. This was called an intercalary day, and the year in which it took place was called an intercalary year, or, as we term it, a leap year. This calendar continued in use among the Romans until the fall of the empire, and throughout Christendom till 1582. The festivals of the Christian church were determined by it. With regard to Easter, however, it was necessary to have reference to the course of the moon. The Jews celebrated Easter (i.e., the Passover) on the 14th of the month Nisan (or March); the Christians in the same month, but always on a Sunday. Now, as the Easter of the Christians sometimes coincided with the Passover of the Jews, and it was thought unchristian to celebrate so important a festival at the same time as the Jews did, it was resolved, at the council of Nice, 325 A. D., that, from that time, Easter should be solemnized on the Sunday following the first full-moon after the vernal equinox, which was then supposed to take place on the 21st of March. As the course of the moon was thus made the foundation for determining the time of Easter, the lunar cycle of Meton was taken for this purpose; according to which the year contains 365¼ days, and the new moons, after a period of 19 years, return on the same days as before. The inaccuracy of the Julian year, thus combined with the lunar cycle, must have soon discovered itself, on a comparison with the true time of the commencement of the equinoxes, since the received length
of 365\frac{1}{4} days exceeds the true by about 11 minutes; so that, for every such Julian year, the equinox receded about 11 minutes, or a day in about 130 years. In consequence of this, in the 16th century, the vernal equinox had changed its place in the calendar from the 21st to the 10th; i.e., it really took place on the 10th instead of the 21st, on which it was placed in the calendar. Aloysius Lilius, a physician of Verona, projected a plan for amending the calendar, which, after his death, was presented by his brother to Pope Gregory XIII. To carry it into execution, the pope assembled a number of prelates and learned men. In 1577, the proposed change was adopted by all the Catholic princes; and, in 1582, Gregory issued a brief abolishing the Julian calendar in all Catholic countries, and introducing in its stead the one now in use, under the name of the Gregorian or reformed calendar, or the new style, as the other was now called the old style. The amendment consisted in this:—10 days were dropped after the 4th of Oct., 1582, and the 15th was reckoned immediately after the 4th. Every 100th year, which, by the old style, was to have been a leap year, was now to be a common year, the 4th excepted; i.e., 1600 was to remain a leap year, but 1700, 1800, and 1900, to be of the common length, and 2000 a leap year again. In this calendar, the length of the solar year was taken to be 365 days, 5 hours, 49 minutes and 12 seconds. Later observations of Zach, Lalande and Delambre fix the average length of the tropical year at about 27 seconds less; but it is unnecessary to direct the attention of the reader to the error arising from this difference, as it will amount to a day only in the space of 3000 years. Notwithstanding the above improvement, the Protestants retained the Julian calendar till 1700, when they also adopted the new style, with this difference, that they assigned the feast of Easter to the day of the first full moon after the astronomical equinox. But this arrangement produced new variations. In 1724 and 1744, the Easter of the Catholics was 8 days later than that of the Protestants. On this account, the Gregorian calendar was finally adopted, 1777, in Germany, under the name of the general calendar of the empire, or, as it is now called, the reformed calendar, in order that the Catholics and Protestants might celebrate Easter and, consequently, all the movable feasts, at the same time. England introduced the new style in 1752; and Sweden in 1753. Russia only retains the old style, which now differs 12 days from the new.—In France, during the revolution, a new calendar was introduced by a decree of the national convention, Nov. 24, 1793. The time at which the new reckoning was to commence was the autumnal equinox of 1792, which fell upon the 22d of Sept., at 18 minutes and 30 seconds after 9 A.M., Paris time. This day was selected as that on which the first decree of the new republic had been promulgated. The year was made to consist of 12 months of 30 days each, and, to complete the full number of days, 5 jours complemen­taires were added to the end of it, in common years, and 6 in leap years. Each period of 4 years, terminating with a leap year, was called a fructidor. Instead of weeks, each month was divided into 3 parts, called decades, consisting of 10 days each; the other divisions being also accommodated to the decimal system. The names of the months were so chosen as to indicate, by their etymology, the time of year to which they belonged. They were as follows:—Autumn, from the 22d Sept. to the 22d Dec.; Vendémiaire, vintage month (Oct.); Brumaire, the 1st month (Nov.); Frimaire, sleet month (Dec.—Winter, from 23d Dec. to 23d March; Nivôse, snowy month (Jan.); Ventôse, windy month (Feb.); Pluviôse, rainy month (March).—Spring, 24th March to 22d June; Germinal, bud month (April); Floréal, flower month (May); Prairial, meadow month (June).—Summer, from 23d June to 22d Sept.; Messidor, harvest month (July); Thermidor, hot month (Aug.); Fructidor, fruit month (Sept.).—The 10 days of each decade were called, 1. Prima, 2. Duodecim, 3. Titrés, 4. Quatuorès, 5. Quinquiesdecim, 6. Scotès, 7. Septèsdecim, 8. Octèsdecim, 9. Nonèsdecim, 10. Décèsdecim (the Sabbath). Besides this, each day in the year had its particular name, appropriate to the time it occurred; e.g., the 7th of vintage month, Vendémiaire, was named carottes (carrots). This calendar was abolished, at the command of Napoleon, by a decree of the senate, 9th Sept., 1803, and the common Christian or Gregorian calendar introduced throughout the French empire. (For a pretty full historical account of this subject, see Bisch's Handbuch der Einfiihrungen, vol. vii. p. 132 et seq. also Gebelin's Histoire du Calendrier. There are also astronomical calendars, to which the Astronomical Year-Book of professor Bode belongs, and of which 50 vols. had appeared in 1822. It is still continued. Of
the same class are the Paris Connaissance des Temps, and the London Nautical Almanac. See Almanac and Chronology.)

Calendar. Different fabrics, before they leave the hands of the manufacturer, are subjected to certain processes, the object of which is to make them smooth and glossy, to glazed them, to water them, or give them a wavy appearance. This is done, in general, by pressing the fabric between wooden or metallic cylinders, whence the machine is called a calender, and the workman a calender or calenderman.

Calendars; a sect of dervises in Turkey and Persia. They are not very strict in their morals, nor in very high esteem among the Mohammedans. They preach in the market-places, and live upon alms. Their name is derived from their founder. (See Dervise.)

Calends, with the Romans, the first days of the month; so called because the pontifex maximus then proclaimed (calvavit) whether the same would be on the 5th or the 7th. This was the custom until the year 450 U. C., when the fasti calendares, or calendar (q. v.), were affixed to the wall of public places. The Greeks did not make use of calendae; whence the proverbial expression ad Graecas calendas (on the Greek calendae), meaning nearer. The calendae of January were more solemn than the others, and were consecrated to Janus and Juna. On this day, the magistrates entered on their offices, and friends interchanged presents. On the calends, debtors were obliged to pay the interest of their debts; hence tristes calenda (Hor. Serm. 3. v. 87). The book of accounts was called Calendarium.

Calendar, in ecclesiastical history, denotes conferences, annually held by the clergy of each deanery on the first of each month, concerning their duty and conduct. (Du Cange, in toto.)

Calenture; a violent fever, incident to persons in hot climates, especially to such as are natives of cooler climates. It is attended with delirium; and the patient imagines the sea to be a green field, in which he is tempted to walk by the coolness and freshness of its appearance. This is, at least, the poetical explanation of the matter. The fact seems to be, that the intense inflammation of the fever prompts the patient to plunge into cold water to relieve his sufferings.

Calepin (French); a lexicon. The name is derived from Calepino, a famous grammarian and lexicographer of the 15th century, who was the author of a polyglot dictionary, which has passed through numerous editions, and been enlarged by different editors. The most complete edition is that of Bale, 1500, fol., in 11 languages. This work was usually called the Calepin, and such was its celebrity, that the name became a common appellation for a learned lexicon.

Caliber; the interior diameter of the bore of any piece of ordnance, or the diameter of a shot or shell. — Caliber or caliliper compasses are a sort of compasses with arched legs, used in the artillery practice, to take the diameter of any round body, particularly of shot or shells, the bore of ordnance, &c. The instrument consists of two thin pieces of brass, joined by a rivet, so as to move quite round each other. It contains a number of tables, rules, &c., connected with the artillery practice.

Calico; a cotton cloth, which derives its name from Calicut, a city of India, from which it was first brought. In England, white or unprinted cotton cloth is called calico. In the U. States, printed cloth only is called by that name. Calico printing is a combination of the arts of engraving and dyeing, and is used to produce, upon woven fabrics, chiefly of cotton, a variety of ornamental combinations, both of figure and color. In this process, the whole fabric is immersed in the dyeing liquid; but it is previously prepared in such a manner, that the dye adheres only to the parts intended for the figure, while it leaves the remaining parts unaltered.

In calico-printing, adjective colors are most frequently employed. The cloth is prepared by bleaching, and other processes, which dispose it to receive the color. It is then printed with the mordant, in a manner similar to that of copperplate-printing, except that the figure is engraved upon a cylinder instead of a plate. The cylinder, in one part of its revolution, becomes charged with the mordant, mixed to a proper consistence with starch. The superfine part of the mordant is then scraped off by a straight steel edge, in contact with which the cylinder revolves, leaving only that part which remains in the lines of the figure. The cloth then passes inversible contact with the other side of the cylinder, and receives from it a complete impression of the figure in the pale color of the mordant. The cloth is then passed through the coloring-bath, in which the parts previously printed become dyed with the intended color. When it is afterwards exposed and washed, the color disappears...
from those parts which are not impregnated with the mordant, but remains permanently fixed to the rest. When additional colors are required, they are printed over the rest, with different mordants, suited to the color intended to be produced. This secondary printing is generally performed with blocks, engraved in the manner of wood-cuts, and applied by hand to the successive parts of the piece.

CALICUT; a city of Hindostan, formerly capital of the kingdom of C., which was ceded to the British in 1792. From this port the first vessel was freighted with Indian commodities for Europe, by Vasco da Gama, in 1498. The ancient city, however, is now buried beneath the sea; and, at low tides, the tops of temples and minarets are discernible. The present town stands on a low shore, and has considerable trade. It was taken and destroyed by Tippoo Sahib, but was rebuilt when the country fell into the hands of the English. Cardamoms, teak, sandalwood, pepper and wax are the principal exports. It contains 5000 houses. Lat. 11° 15' N.; lon. 75° 50' E. The rajah of the C. district, or the Tamuri rajah, called Zamorin by the Europeans, is a Brahmin, who pretends to be superior to the other Brahmins, and inferior only to the gods. The males of the family are called Tamurans, and the females Tumburetties. These ladies are married at the age of 10, but it would be scandalous for them to have any intercourse with their husbands. The Namburi Brahmins, or the Nairs, are the fathers of their children, who are all, of course, in the dilemma described by Telemachus.

CALIF and CALIFATE. (See Caliph.)

CALIFORNIA, Gulf of; a gulf on the west coast of North America, in Mexico, lying on the east side of the peninsula of California, extending from S. S. E. to N. W., between lat. 22° 40' and 34° N. It is about 800 miles long, and, through most of its length, is less than 100 miles wide. It receives the river Colorado at its northern extremity. It contains numerous islands and shoals, and is of difficult navigation.

CALIFORNIA, New; a province of Mexico, on the coast of the N. Pacific ocean, called, by captain Vancouver, New Albion. It lies north of the peninsula, which is called Old California, and is 600 miles long, and only 30 broad. Square leagues, 2,125. Monterey is the capital. There is not any country in the world which more abounds in fish and game of every description. Hares, rabbits and stags are very common here; seals and otters are also found in prodigious numbers. To the northward, and during the winter, the inhabitants kill a very great number of foxes, bears, wolves and wildcats. The land possesses, also, great fertility; farmaceous roots and seeds of all kinds abundantly here. The crops of maize, barley, corn and peas cannot be equalled but by those of Chili. European cultivators can have no conception of a similar fertility. The mean produce of corn is from 70 to 80 for 1; the extremes, 90 and 100. The population, in 1802, including Indians who had settled and begun to cultivate fields, was 15,562.

CALIFORNIA, Old; a province of Mexico, comprising a peninsula in the Pacific ocean, united, on the north, to the continent of North America, from which the other part is separated by a strait, called the gulf of California, and bounded S. and W. by the Pacific ocean; near 800 miles in length, and, in different places, 30, 60, 80, and 120 miles wide. A chain of mountains extends through the peninsula, of which the greatest height is from 4500 to 4000 feet above the sea. This peninsula is said to have been discovered by sir Francis Drake, and by him called New Albion; and the gulf of California has been sometimes called the Vermilion sea, or Purple sea, or Red sea. In a peninsula of so great an extent, which reaches nearly from 23° to 34° N. lat., the soil and climate must naturally be found to vary. Some parts are continually covered with flowers, but the greater part is wild, rugged and barren, overrun with rocks and sand, and destitute of water. From cape St. Lucas to the Colorado, nearly 300 leagues, only two streams run into the gulf of California. Population, in 1803, 9000. The principal places are Santa Maria, St. Ignacio, St. Isidoro, Loreto, St. Estevan, St. Xavier, St. Yago, Rosalio, St. Juan Guadalupe and St. Joseph.

CALIGULA, Caius Cesar Augustus Germanicus, son of Germanicus and Agrippina, was born, A. D. 12, in the camp, probably in Germany, and brought up among the legions. Here he received, from the soldiers, the surname of C., on account of his wearing the caligs, a kind of little boots in use among them. He understood so well how to insinuate himself into the good graces of Tiberius, that he not only escaped the cruel fate of his parents and brothers and sisters, but was even loaded with honors. Whether, as some writers inform us, he removed Ti-
berius out of the way by slow poison, is uncertain. When the latter was about to die, he appointed, according to Suetonius, C. and the son of Drusus, Tiberius Nero, heirs of the empire. But C., universally beloved for the sake of his father, Germanicus, was able, without difficulty, to obtain sole possession of the throne. Rome received him joyfully, and the distant provinces echoed his welcome. His first actions, also, were just and noble. He interfered, in the most honorable manner, the remains of his mother and of his brother Nero, set free all state-prisoners, recalled the banished, and forbade all prosecutions for treason. He conferred on the magistrates free and independent power. Although the will of Tiberius had been declared, by the senate, to be null and void, he fulfilled every article of it, with the exception only of that above-mentioned. When he was chosen consul, he took his uncle Claudius as his colleague. Thus he distinguished the first eight months of his reign by many magnificent actions, when he fell sick. After his recovery, by a most unexpected alteration, he suddenly showed himself the most cruel and unnatural of tyrants. The most exquisite tortures served him for enjoyments. During his meals, he caused criminals, and even innocent persons, to be stretched on the rack and beheaded: the most respectable persons were daily executed. In the madness of his arrogance, he even considered himself a god, and caused the honors to be paid to him which were paid to Apollo, to Mars, and even to Jupiter. He also showed himself in public with the attributes of Venus and of other goddesses. He built a temple to his own divinity. At one time, he wished that the whole Roman people had but one head, that he might be able to cut it off at one blow. He frequently repeated the words of an old poet, Odeirat dum mutat. One of his greatest follies was the building of a bridge between Baiae and Puteoli (Puzzuoli). He himself consecrated this strange structure with great splendor; and, after he had passed the night following in a revel with his friends, in order to do something extraordinary before his departure, he caused a crowd of persons, without distinction of age, rank and character, to be seized, and thrown into the sea. On his return, he entered Rome in triumph, because, as he said, he had conquered nature herself. After this, he made preparations for an expedition against the Germans, passed, with more than 200,000 men, over the Rhine, but returned after he had travelled a few miles, and that without having seen an enemy. Such was his terror, that, when he came to the river, and found the bridge obstructed by the crowd upon it, he caused himself to be passed over the heads of the soldiers. He then went to Gaul, which he plundered with unexampled rapacity. Not content with the considerable booty thus obtained, he sold all the property of both of his sisters, Agrippina and Livilla, whom he banished. He also sold the furniture of the old court, the clothes of Marcus Antoninus, of Augustus, Agrippina, &c. Before he left Gaul, he declared his intention of going to Britain. He collected his army on the coast, embarked in a magnificent galley, but returned when he had hardly left the land, drew up his forces, ordered the signal for battle to be sounded, and commanded the soldiers to fill their pockects and helmets with shells, while he cried out, “This booty, ravished from the sea, is fit for my palace and the Capitol.” When he returned to Rome, he was desirous of a triumph on account of his achievements, but contented himself with an ovation. Discontented with the senate, he resolved to destroy the greater part of the members, and the most distinguished men of Rome. This is proved by two books, which were found after his death, wherein the names of the prescribed were noted down, and of which one was entitled Gladius (Sword), and the other Pugillus (Dagger). He became reconciled to the senate again when he found it worthy of him. He supported public brothels and gaming-houses, and received himself the entrance-money of the visitors. His horse, named Incitatus, was his favorite. This animal had a house and a servant, and was fed from marble and gold. C. had caused him to be admitted into the college of his priests, and was desirous of making him a consul also. He even had the intention of destroying the poems of Homer, and was on the point of removing the works and images of Virgil and Livy from all libraries: those of the former, because he was desirous of gathering; those of the latter, because he was not to be depended upon as a historian. C’s morals were, from his youth upward, corrupt; he had committed incest with all his sisters. After he had married and repudiated several wives, Creonia retained a permanent hold on his affections. A number of conspirators, at the head of
thither in person to fix the terms of capitulation of it by a capitulation (A.D. 633), faithful to the humane Obeidah, instead of the prophet two years and four months. Of the Hegira 12), the terms of which were taken, under Caled, the siege of Damascus (A.D. 632, Heg. 11), Omar proceeded, and completed, by his means, a strong footing in the country by the capture of Bosra, they untroubled, under Caled, the siege of Damascus (A.D. 632), a council, appointed by him on his death-bed, chose Omar, or Othman, son-in-law of the prophet, passing over Ali. Under him, the empire of the Arabs soon attained a wonderful magnitude. In the East, their arms spread the doctrines of the Koran through Persia. At the same time, they advanced along the northern coast of Africa, as far as Ceuta. Cyprus, too (A.D. 647), and Rhodes (A.D. 654) were conquered; but the former was lost again two years after. Thus Alexandria and all Egypt were a second time, though not without difficulty, torn from the Greeks, who had regained their power there by the aid of the natives. These reverses were occasioned by the measures of Othman, who, far inferior to Omar in wisdom, intrusted the provinces, not to the most capable, but to his favorites. The dissatisfaction thus excited occasioned a general insurrection, which, in the year 654 (Heg. 34), which terminated in his death. Ali, the son-in-law of the prophet by Fatima, became the fourth caliph, by the choice of the people of Medina, and is regarded as the first legitimate possessor of the dignity, by a numerous sect of Mohammedans, which gives him and his son Hassan almost equal honor with the prophet. This belief prevails among the Persians; whence arises the hatred in which they are held by the Turks. Instead of being able to continue the conquests of his predecessors, Ali always had to contend with domestic enemies. Among these was Ayesha, the widow of the prophet, called the mother of the faithful; also Talhah, Zubeir, and especially the powerful Moawiyah, governor of Syria, who all laid claim to the government. These were able to create suspicion, and spread the report that Ali had instigated the murder of Othman. In vain did he endeavor to repress the insurrections of his enemies, by intrusting the government of the provinces to his friends. Nowhere were the new governors received. The discontented
collected an army, and made themselves masters of Bassora. Ali defeated it, and Tellah and Zobeir fell; but he could not prevent Moawiya and his friend Amrou from extending their party, and maintaining themselves in Syria, Egypt, and even in a part of Arabia. Three men of the sect of the Khoregites proposed to restore concord among the faithful, by slaying each one of the three heads of the parties, Ali, Moawiya and Amrou; but Ali only fell (A. D. 660, Heg. 40). He was a man of a cultivated mind. The celebrated moral maxims, and the Giafa, as it was termed, are the most famous of his works. His son, the mild, peaceful Hassan, had no desire to defend the cause of the Khoregites, caliph against the indefatigable Moawiya; but vainly did he hope to obtain security by a solemn abdication of the government. He perished by poison, said to have been administered at the instigation of Moawiya. Moawiya I transferred the seat of the caliphate from the city of the prophet, Medina, where it had hitherto always been, to Damascus, in the province of which he had formerly been governor (A. D. 673, Heg. 54). With him begins the series of the caliphs called Ommiades, which name this family bore which name this family bore from Moawiya’s progenitor, Ommiyyah. Not long after his accession, he was obliged to quell an insurrection of the Khoregites by a campaign, and a rebellion at Bassora by severe punishments. He then seriously meditated the entire subversion of the Byzantine empire. (q. v.) His son Jezid marched through Asia Minor, meeting but little resistance; then crossed the Hellespont, and laid siege to Constantinople, but was obliged to raise it (A. D. 683, Heg. 49). His general Obeida, or Abd Allah Ibn Zobeir, was twice defeated by the starlings of the other Moslem and Hanni, who now, as well as all Iraq, Hegiaz, Yemen and Egypt, acknowledged Abdallah Ebn Zobeir as caliph. In Syria, Debar, regent to Abd Allah, was the chosen caliph; but the people of Damascus appointed Merwan I, of the race of the Ommiades, caliph, who made himself master of all Syria and Egypt. Chorasan separated from the caliphate, and submitted to a prince of its own choosing—the noble Salem. In the following year (A. D. 684, Heg. 65), Salman Ebn Sand excited a great rebellion of the discontented in Syria and Arabia, and pronounced both caliphs deposed, but was defeated by the experienced soldier Obeida. Merwan had been compelled to promise, on oath, to leave the caliphate to Caled, the son of Jezid; yet he nominated his son Abdalmelek as his successor. Under him (A. D. 684, Heg. 65), Mokhtar, a new rebel against both caliphs, was subdued by one of them, Abdallah (A. D. 686, Heg. 67); but this only made Abdallah more formidable to Abdalmelek, who, in order to be able to direct all his forces against him, concluded a peace with the Greek emperor, Justinian II, in which, reversing the order of the Koran, he conceded to the Christians a yearly tribute of 50,000 pieces of gold. He then marched against Abdallah, defeated him twice, and took Mecca by assault. In this last conflict, Abdallah fell. Thus he united under his dominion all the Mussalmans; but the resistance of the governors—the curse of all despots—and the symptom of the future dissolution of the caliphate—kept
him constantly occupied. He was the first caliph that caused money to be coined. He died A.D. 703 (Heg. 86). Under Walid I, his son, the Arabs conquered, in the East, Chorasan and Turkestan (A. D. 707, Heg. 88); in the North, Galatia (A. D. 710); and, in the West, Spain (A. D. 711). He died in 716 (Heg. 97). His brother and successor besieged Constantinople, but his fleet was twice destroyed by tempests and the Greek fire. Under the East, Chardsm and Turkestan (A. D. 713), valid I, his son, the Arabs conquered, in Spain. He died A.D. 705 (Heg. 86). Under the West, Spain (A. D. 711). He died in 718 (Heg. 97). The Alide Zcid, grandson of Houssain, now contested the caliphate with his brother Hescham. He was indeed overpowered, and put to death; but another house, the Abbasides, descendants of Abbas, son of Abulfatich, uncle of the prophet, began to be formidable. Under Hescham, an end was put to the progress of the Saracens in the West, by the energy of Charles-Martel, who annihilated their armies at Tours in 732, and at Narbonne in 736. The voluptuous Walid II was murdered after a reign of one year (A. D. 743, Heg. 134). After the equally brief reigns of Jezal III, and of the Abbaside, Beneh, Hadi, Merwan II followed, with the surname (respectable among the Arabs) of the Aza (al Hennar). Ibrail, being deposed and imprisoned by this prince, appealed his brother Abul Abbas his successor, and was shortly after, murdered in prison. Abdallah, Abul Abbas's uncle, now took up arms against the caliphs, who went at that time, fully occupied by a dangerous rebellion in Persia. Merwan was twice defeated, and fell (A. D. 752, Heg. 133). With him terminates the series of caliphs of the race of Ommiayah. The furious Abdallah treacherously destroyed almost all the Ommiayahs, by a horrible massacre at a meeting where they were all assembled. Two only escaped. Abderranees fled to Spain, where he founded the independent caliphate of Cordova (see Spain); another to a corner of Arabia, where he was acknowledged as caliph, and his posterity reigned till the 16th century. Abul Abbas, although innocent of that action, which secured him the throne, derived from it the name of Saffah (the Bloody). He died very soon, 15 years of age, of the small-pox (A. D. 753, Heg. 134). His brother, Abu Giasar, called al Mansur (The Victorious), was obliged to contend with a rival in his own uncle, Abdallah, whom he, however, overcame. His avance made him many enemies, whom he succeeded in destroying by his perfidious cunning. He acquired his surname by his victories in Armenia, Cilicia and Cappadocia. In the year 764 (Heg. 143), he founded the city of Bagdad on the Tigris, and transferred thither the seat of the caliphate (A. D. 768, Heg. 149). He died on a pilgrimage to Mecca, leaving immense treasures (A. D. 775, Heg. 150). Mouhadi, his son and successor, a man of a noble character, had to contend with the turbulent inhabitants of Chorasan, under the pretended prophet Hakem, and was poisoned by them (A. D. 775, Heg. 150). Hadi, his grandson, met with the same opposition from the Ali party, under Houssain, Ali's great-grandson. Hadi caused the Zendidts to be exterminated—a sect adhering to the doctrine of two principles of nature. According to the usual order of succession, and Mahadi's provision, Hadi was followed, not by his son, but by his brother Harun (A. D. 786, Heg. 167), who was denounced al Razeel, on account of his justice, and is famed for promoting art and sciences. He concluded a truce (an actual peace could never be made with Christians) with the Greek empress Irene (788, Heg. 169), who consented to pay him tribute. Jahir, al Amin's great-grandson, disputed with him the possession of the throne, but subsequently submitted. Harun, however, tarnished his reputation by the murder of Jahir, and still more by the murder of his sister Abba, and the murder of his sister Abbasah, and her favorite, the Barmecide Giasar, and by the expulsion and persecution of the whole family of the Barmecides, whose services to the state and himself had been of very great value. Harun divided the empire among his three sons. Al Amin, as sole caliph, was to reign over Irak, Armenia, Syria, Egypt, and the rest of Africa; under him, Al Munun was to govern Persia, Turkestan, Chorasun, and the whole East; and Moutassem was to rule Asa Minor, Armenia, and all the countries on the Black sea. The younger brothers were to succeed Amin in the caliphate. At Thus, in Chorasun, through which Harun was passing, in order to quell a rebellion that had broken out in Samarcand, he was arrested by death, of which he had been forewarned by wonderful dreams (A. D. 803, Heg. 180). Al Amin the Faithful (his proper name was...
Mohammed], was undeserving of this name. Untrue to his obligations as a ruler, and addicted to all kinds of sensuality, he left the discharge of his duties to his vizier, Fadhel. The vizier, from hatred of Mamun, persuaded the caliph to appoint his son his successor, and deprive Motassem of his portion of territory. A war arose between the brothers. Mamun's general, Thaher, defeated the armies of the caliph, took Bagdad, and caused Amin to be put to death (A.D. 813, Heg. 194). Mamun was recognised as caliph. Nobler in his inclinations than Amin, he cherished the to death (A.D. 842, Heg. 227). Vathek Billah, his son, member of the Motazelite sect, exerted himself to promote the advancement of science; but he was an enervated voluptuary, and died of nervous weakness (A.D. 846, Heg. 222). A contest for the succession, between his brother Motawackel and his son Muthadi, was decided by the arrows of remorse. He moreover evinced a malignant spirit, and a proneness to sensuality and cruelty. His own son, Montassar, educated in the indulgence of both these vices, and often barbarously treated by him, conspired against him with the Turkish body-guard, and effected his murder (A.D. 861, Heg. 247). The Turks, who now arrogated the right of electing the caliphs, called the murderer to the throne of the faithful, and compelled his brothers, who were innocent of the atrocious act, and whose revenge they feared, to renounce the succession which had been designed for them by Motawackel. Montassar, at first, with a fever, caused by the good proceedings of remorse (A.D. 862, Heg. 248). The Turks then elected Mosta Billah, a grandson of the caliph Motassem. Two of the Alides became competitors with him for the caliphate. One of them, at Cufa, was defeated and put to death; but the other founded an independent empire in Tabristan, which subsisted half a century. The discord of the Turkish soldiers completed the dismemberment of the empire. One party raised to the throne Motaz, second son of Motawackel, and compelled Mosta Billah to abdicate. Motaz Billah soon found means to get rid of him, as well as of his own brother, Muthadi. He then meditated the removal of the Turkish soldiers; but, before he found courage to execute his projects, they rebelled on account of their pay being in arrear, and forced him to resign the government. He soon after died (A.D. 869, Heg.
CALIPH. 411

235).—They conferred the caliphate on Ali, son of the caliph Hasan, but deposed this excellent prince, eleven months after, because he attempted to improve their military discipline. Under Mo-tawakkil's third son, the sensual Motamad Billah, who succeeded to the caliphate, his prudent and courageous fourth brother, Munifiek, succeeded in overcoming the dangerous preponderance of these Turks. Motamad transferred the seat of the caliphate from Samarn back to Bagdad, in the year 873 (Heg. 239), where it afterwards continued. In the same year, owing to a revolution in the independent government of Chorasan, the dynasty of the Thaherides gave place to that of the Soffarides, who, eventually, extended their dominion over Tabristan and Segestan. The governor of Egypt and Syria, Achmet Ben Selim, also made himself independent (A. D. 877, Heg. 283), from whom are descended the Tulinides. The brave Munifiek annihilated, indeed, the empire of the Linghihans, in Cuth and Bassorah, 10 years after the formation of the Aqgladides (A. D. 881, Heg. 288); but he was unable to save the caliphate from the ruin to which it was continually hastening. Motamad died soon after him (A. D. 892, Heg. 292), and was succeeded by Motamad's son, Motadud Billah. He contended unsuccessfully with a new sect that had arisen in Iraq—the Carmathians (A. D. 893, Heg. 293)—against whom his son, Moktaphi Billah (A. D. 902, Heg. 298), was more fortunate. He was still more successful in a war against the Tulinides, as he again reduced Egypt and Syria, in 905 (Heg. 292). Under his brother, Moktadar Billah, who succeeded him at the age of 13 years (A. D. 909, Heg. 296), rebellions and bloody quarrels about the sovereignty disturbed the government of the empire. He was several times deposed and reinstated, and finally murdered (A. D. 931, Heg. 319). During his reign, Abu Mohmonned Obedallah rose in Africa, who, pretending to be descended from Fatima, daughter of the prophet (therefore from Ali), overthrew the dynasty of the Aqgladides in Tunis, and founded that of the Fatimites (A. D. 910, Heg. 298). Not satisfied with reigning independent of the caliph, this party, as descendants of the prophet, asserted themselves to be the only lawful caliphs. Shortly afterwards, the dynasty of the Bouides, in Persia, rose to authority and power (A. D. 925, Heg. 315). Chorasan was still independent. The only change was, that the Samarides had taken the place of the Soffarides. In a part of Ara-
There were, consequently, at this time, three caliphs—Bagdad, Cairo and Cordova—each of which declared the others heretics. But the Fatimites, as well as the Abbasesides, fell under the power of their viziers, and, like them, the Ommites in Cordova were deprived of all power by the division of Spain into many small sovereignties, till they were entirely subverted by the Morabites. (See Spain.) Ilkhan, king of Turkestan, having conquered Chorasan, and overthrown the Sasanides, was expelled again by Mahmud, prince of Gama, who founded there the dominion of the Gazznevides, in 908 (Heg. 588), who were soon, however, overthrown in turn by the Seldjook Turks, under Togruz Beg, in 1030 (Heg. 421). This leader conquered also Chorasan, Georgias, and the Persian Iran. Called to the assistance of the caliph Kajem Bemezillah, at Bagdad, against the tyranny of the Boudie emirs, he proceeded to Bagdad, and became emir himself in 1055 (Heg. 448), by which means the dominion of the Turks was firmly established over all the Mussulmans. To his nephew, Alp Arslan (who defeated and took prisoner the Greek emperor Romanus Diogenes), he left this dignity, with so great power, that these Turkish emirs of the emirs were frequently called the sultana of Bagdad. Turkish princes, who aspired to be sovereigns in the other provinces, were, at first, satisfied with the title of atabek (father, teacher), such as the atabeks of Irak and Syria, of Adherbidschan, Persia, and Laristan. It was the atabeks of Syria and Irak, with whom the Seldjook emirs had principally to contend. The first was called Ommaddedin Zenghi; by the Franks, Senguin. They were afterwards termed sultans. The caliph of Bagdad was recognised by all as the spiritual sovereign of all Mussulmans; his temporal authority did not extend beyond the walls of Bagdad. Noureddin, Zenghi’s son, being requested, by the Fatimite caliph Adhel, to protect Bagdad against his vizier, sent to Cairo, in succession, the Curda, Schirkcheh and Saladin at Salladin; but the latter overthrew the Fatimites; (ascetisctatic anti-popes,) and usurped the authority of the sultans of Egypt in 1170 (Heg. 550), with which he united Syria, after Noureddin’s death. This is the great Saladin (Salladin), the formidable enemy of the Christians, the conqueror of Jerusalem. The dynasty which commenced with him was called, from his father, Ayoub, the Ayubites. They reigned over Egypt till expelled by the Mamelukes in 1250. The Seldjook sultans of Irak were overthrown, in 1194 (Heg. 500), by the Chorassans; and, as those of Chorasan were extinct, there remained of the Seldjook dominions nothing but the empire of Iconium or Roun, in Asia Minor, from which the present Turkish empire derives its origin. (See Ottoman Empire.) The Chorassan sultans extended their conquests far into Asia, until their territories were invaded by the Tartars, under Zenghis Khan, in 1220 (Heg. 617). They were finally totally destroyed by his son Ootani. Bagdad, also, the remains of the possessions of the caliph, became the easy prey of a Mongol horde, under Holagou, in 1258 (Heg. 630), by the treachery of the vizier al Kuni, and a slave, Amram, under the 50th caliph, Motazem. The nephew of the cruelly-murdered Motazem fled to Egypt, where he continued to be called caliph, under the protection of the Mamelukes, and bequeathed the Mohammedan pope-dom to his posterity. When the Turks conquered Egypt, in 1353, the last of these nominal caliphs was carried to Constantinople, and died, after returning to Egypt, in 1356. The Turkish sultans subsequently assumed the title of caliph, and the padishah or grand signor at Constantinople retains it to the present day, with the claim of spiritual supremacy over all Mussulmans, though this claim is little regarded out of his own dominions, and strongly disputed by the Persians.

Calixtins, or Utraquists; a sect of the Hussites in Bohemia, who differed from the Catholics principally in giving the cup in the Lord’s supper to laymen. (See Hussites.) Under George of Podiebrad, from 1450 to 1471, who declared himself for them, the C. obtained the ascendency. Under Vladislaw, they maintained their religious liberties, and, from the time of the reformation in the 16th century, shared the doctrines as well as the fate of the Protestants in Bohemia. Their refusal to fight against their own sect in the Smalkaldian war, at first drew upon them severe persecutions; but Ferdinand I, though unfavorable to them in other respects, permitted them to participate in the advantages of the religious peace of 1556 with his other Protestant subjects, and the excellent Maximilian II granted them perfect liberty in the exercise of their religious belief. Their situation became more critical under Ferdinand II, and they found it difficult to prevail on him publicly to acknowledge the Bo-
Successful in his contest with the emperor on the subject of investiture by means of particular with the Saxons; he made great pomp, into Rome itself; took Gregory's entrance into Italy in 1120, and, with his alliance with the rebels in Germany, renewed former decrees respecting simony, also, the anti-pope Gregory VIII, an agreement which he had already made and at Rheims, the latter of which was on this subject, against him a legate, at the council of communication which he had pronounced the emperor Henry V would not confirm the monastery of Clugny, successor of Henry V, and had died in this monastery. His treatises on the authority of the Holy Scriptures, transubstantiation, celibacy, supremacy of the pope, and the Lord's supper, belong, even according to the judgment of learned Catholics, to the most profound and acute
writings against Catholicism. But his genius, and the depth of his exegetical and historical knowledge, exposed him to the persecutions of the zealous of his time. His assertion, that the points of difference between Calvinists and Lutherans were of less importance than the doctrines in which they agreed, and that the doctrine of the Trinity was less distinctly expressed in the Old Testament than in the New, and his recommendation of good works, drew upon him the reproaches of crypto-papism. His heresy was termed Syncretism. (q. v.) The elector John George I of Saxony protected him, in 1655, at the diet of Ratisbon, against the Lutheran theologians. His historical investigations and his philosophical spirit shed new light on dogmatic theology and the exegesis of the Bible, and gave them a more scientific form. He made Christian morality a distinct branch of science, and, by reviving the study of the Christian fathers and of the history of the church, prepared the way for Spener, Thurneexus and Semler. He educated his son Frederic Ulrich Calixtus, and many other enlightened theologians.

Calk: to drive a quantity of oakum into the seams of planks, to prevent the entrance of the water. After the oakum is driven in, it is covered with melted pitch or resin, to preserve it from the action of the water.

Calken, Jan Frederic van Beek, a Dutch scholar and astronomer, born 1772, at Groningen, died in 1811. He was a member of many learned societies, professor at Leyden, and afterwards at Utrecht. His Euryalus, on Beauty, and another work on the Time-Pieces of the Ancients, are deserving of mention. His essay against the work of Dupuis, Origine de tous les Calks, obtained the Taylerian prize.

Calk is the cry of a bird to its young, or to its mate in coupling time, which, in most instances, is a repetition of one note, and is generally common to the cock and hen. Calls are also a sort of pipes used by fowlers to catch birds, by imitating their notes. They are commonly formed of a pipe, reed or quill, and blown by bellows attached to it, or by the mouth. Hares are also sometimes taken by a call.

Callao; a seaport town of Peru, on a river of the same name, near the Pacific ocean. It is the port of the city of Lima, from which it is six miles distant. Lon. 77° 4' W.; lat. 12° 3' S.; population, about 5000. The road is one of the most beautiful, the largest and safest, in the South sea. Two islands, named St. Laurence and Callao, and the peninsula, which nearly reaches them, defend vessels from south winds: towards the west and north is open sea, but the winds from these points are never violent; the water is always tranquil; is deep, and without rocks. C. is the rendezvous of from 16 to 17,000 tons of shipping, 5000 of which are reserved for the navigation of the Pacific ocean. The town was fortified by 10 bastions and some batteries, and defended by a garrison. There are two faubourgs inhabited by Indians. In 1740, this town was destroyed by an earthquake, when, of 4000 inhabitants, only 200 escaped. Since that time, C. has been rebuilt upon the same plan, but a little farther from the sea.

Callimachus, a Greek poet and grammarian, born at Cyrene, in Libya, of a noble family, flourished under the reign of Ptolemy Philadeph, about 250 years before Christ. He opened, in Alexandria, a school of grammar, i. e., of the belles-lettres and liberal sciences, and could boast of several scholars of distinguished attainments, such as Eratosthenes, Apollonius Rhodius, Aristophanes of Byzantium, &c. Ptolemy Philadephus presented him with a place in the museum, and gave him a salary, as he did other men of learning. After the death of Philadephus, he stood in equal favor with Ptolemy Euergetes. Under these circumstances, he wrote most of his works, the number of which was very considerable. With the exception of some fragments, all that we have of these is 72 epigrams and 6 hymns. His poem on the hair of Berenice (coma Berenices) has been preserved in the Latin translation of Catullus. C.'s poems bear the stamp of their age, which sought to supply the want of natural genius by a great ostentation of learning. Instead of noble, simple grandeur, they exhibit an overcharged style, a false pathos, and a straining after the singular, the antiquated, the learned. His elegies are mentioned by the ancients with great praise, and served Propertius as models. The best edition of C. is by J. A. Ernesti (Leyden, 1761, 2 vols.), which, as well as the edition of Gravius (Utrecht, 1697, 2 vols.), contains Spanheim's learned commentary. Valckenaer also published Eligiarum Fragmenta, by this author (Leyden, 1790).

Calliope; one of the muses (q. v.); daughter of Jupiter and Mnemosyne. She presided over eloquence and heroic
poetry. She is said to have been the mother of Orpheus by Apollo. She was represented with an epic poem in one hand, and a lyre in the other, and generally crowned with laurel.

Callisen, Henry, a physician and surgeon, born in 1740, at Pentz, in Holstein, son of a poor clergyman, educated himself by his own exertions, served in the army and in the fleet, afterwards in the hospitals at Copenhagen, was made, in 1771, chief surgeon in the Danish fleet, and, in 1773, professor of surgery at the university in Copenhagen. He wrote, in 1777, his Institut. Chirurgie holterne, which was received with applause by all Europe. In Vienna, and at the Russian universities, lectures are given on them. There are also excellent essays by him in the medical journals. He died at Copenhagen, February 3, 1824, at the age of 84 years.

Callisthenes, a Greek philosopher and historian, a native of Olynthus, was appointed to attend Alexander in his expedition against Persia. His republican sentiments rendered him unfit for a council, added to which he had no small share of vanity. But his unpardonable crime was his opposition to the assumption by that conqueror of divine honors. The conspiracy of Hermolaus affording a pretext for a charge of treason, he was apprehended. Historians disagree as to his fate; but most of them admit that he was only quartered under this treatment. Polybius asserts that he was crucified; Justin, that he was disfigured and confined in a cage, with a dog for his companion, until Lysimachus enabled him to terminate his sufferings by poison. He wrote a History of the Actions of Alexander, and other historical works.

Callisto: a nymph of Diana, daughter of Lycean, king of Arcadia. Jupiter loved her, assumed the shape of Diana, and seduced her. The fruit of her amour, called Arcas, was hid in the woods, but preserved. She was changed, by the jealousy of Juno, into a bear. Jupiter placed her, with her son, among the stars, where she still shines as the Great Bear.

Callot, Jacques, born in 1594, at Nancy, vanquished, by perseverance, every obstacle which obstructed his perfection in his art. He twice ran away from his parents, who intended him for another profession, fled to Italy, and learnt drawing, in Rome, under Giul. Parigi, engraving under Philip Thomassin, and became, afterwards, at Florence, a disciple of Cana-Gallina, and, at Nancy, of Claude Henriet. He soon gave himself up entirely to his love for engraving, and preferred etching probably, because his active and fertile genius could express itself more rapidly. In the space of 20 years, he designed and executed about 1600 pieces. (See the catalogue in the Cabinet de Singularites d'Architecture, Peinture, Sculpture et Gravure, by Le Comte, vol. 2, p. 376 to 382, and Germain’s Catalogue de Lorraine.) In the composition, the disposition of the parts, and in the distribution of light, C. is not particularly eminent; but, in the single parts of his pieces, he is very successful. His drawing is correct; the attitudes mostly pleasing; the groups have considerable variety; harsh contrasts are avoided; the expression is vigorous; and the execution displays the ease of a master. He is particularly distinguished by the drawing of the little figures with which he has filled all his pieces. Most of them, except sacred subjects, are representations of battles, sieges, dances, festive processions. The Miserere et Malheurs de la Guerre, in 18 pieces, are considered the best. He executed works of this kind for Cosimo II of Florence, Louis XIII of France, and the duke of Lorraine. He was so strongly inclined to the comic, that his disposition appears even in his representations of sacred subjects, for instance, in the Temptation of St. Anthony. He not only introduced some burlesque and grotesque figures in his engravings, but executed whole pictures in this style, in which his whole art is displayed. His Fair and his Beggars are called his best pieces. He was the first who used, in his etchings, the hard varnish—the gesso di lignainoli of the Italians. He died at Nancy, in 1635. He was distinguished for piety, magnanimity, and regularity of life. (See the biography of C. by Germain, or that of Husson, Paris, 1768.)

Callus is a preternatural hardness, whether carnosus or ossesus. The new growth of bony substance between the extremities of fractured bones, by which they are united, is an instance of the latter. External friction or pressure produces the former, as in the hands of laborers, and the feet of persons who wear tight shoes. (See Corn.)

Calmar, the principal city of Små
land, in Sweden, on the Baltic sea, is situated opposite to Oland, on the island of Quarnholm, and contains 4500 inhabitants. It has a small but good harbor, and carries on considerable trade in timber, alum and tar. It has also manufactures of woollen cloth, and is the residence of a bishop, and of the governor of the province. The well-fortified castle of C. lies outside of the city, on the strait of Oland. (For the ordinance called the Union of Calmar, see Margaret, queen of Denmark and Norway.)

Calmet, Augustin, distinguished as an exegetical and historical writer, born in 1672, at Messul-la-Horgne, in the diocese of Toul, entered, in 1688, into the Benedictine order at Toul, and studied chiefly in the abbey of Moyen-Montier. Here he became, in 1698, teacher of philosophy and theology; in 1728, abbot of Senones, in Lorraine, and died, in 1757, at Paris. He was a judicious compiler of voluminous works, such as Commençaire sur tous les Livres de l'Anc. et de Nouv. Test. (Paris, 1707-16, 23 vols. 4to.), Dictionnaire Hist. et Crit. de la Bible (4 vols.), Histoire Eccl. et Civile de Lorraine (4 vols.) Acuteness and taste are wanting in his writings, and they have been censured both in France and in other countries.

Calms, Region of. In the Atlantic ocean, between the tropic of Cancer and lat. 20° N., and on the confines of the trade-winds, between 4° and 10° N. lat., calms of long duration prevail; and hence these tracts are called the calms latitudes, or the regions of calms. In the latter tract, particularly, these perpetual calms are accompanied by a suffocating heat, by thunder-storms and floods of rain, so that it is sometimes called the rainy sea. The only winds that occur are sudden squalls of short duration and little extent. In these calms, the provisions are corrupt, the scows open, and the stagnant air breeds disease. When a ship is in this position, if the currents set in towards rocks, and the sea is too deep to cast anchor, her destruction is almost inevitable. In the Mediterranean, where there are no tides, dead calms are more common than in the open ocean; but they are often the presages of approaching storms.

Calmecs (Onlot, Eleudues); the most remarkable branch of the Mongol race. They themselves maintain, that their primitive residence was situated between the Kokho-Noor (the Blue Lake) and Thibet. Long before the time of Genghis Khan, a part of this people is said to have made an expedition to the west, as far as Asia Minor, and to have lost themselves there among the mountains of Caucasus; but the rest, who had remained in Great Tartary, received, from their Tatar neighbors, the name of Khoschot (the separated). In fact, they call themselves, to this day, Khoschot, though Onlot, which signifies the same thing, continues to be their proper appellation. They have been divided, at least since the dismemberment of the Mongol empire, into four principal branches, called Khoescht, Derbet, Soongar, and Torgot. The greater portion of the Khoeschot Calmecs has remained in and around Thibet and on the Koko-Noor, and is said to have been under the protection of the Chinese since the downfall of the Soongar Calmecs. The smaller portion of this tribe lived long before, retired to the Irish, and finally fell under the dominion of the Soongar hordes, with which it took part in the war against China, and was dispersed with them. The hordes of the Khoeschots (warriors), which is still united under the Chinese sovereignty, received its name from the courage which it displayed under Genghis, and is rated at 30,000 souls. For this reason, and also because the family of their princes derives its origin immediately from the brother of the great Genghis, the Khoeschots maintain the first rank among the Calmec tribes. A part of them, about 1800 families, settled on the Volga in 1726, and voluntarily submitted to the Russian sovereignty. At the dismemberment of the Mongol empire, the Soongar Calmecs constituted one tribe, with the Derbets, which was afterwards divided between two brothers of their princely family. In the 17th century, and the beginning of the 18th, this horde subjected a great part of the other Calmec tribes, especially the Khoeschot, Derbet and Khang, and carried on bloody wars both with the Mongols and with the Chinese empire, which terminated in their entire subjugation and dispersion. They were regarded as the bravest, richest and most powerful horde. The Derbet Calmecs, whose pasturegrounds were originally situated in the region of the Koko-Noor, departed from thence on account of the Mongol disturbances towards the Irish, and separated into two parties. One of them became united with the Soongars, and was finally destroyed with them. The other settled on the Urals, Don and Wolga, and the majority of them joined the Torgots, but afterwards separated from them. The Torgot (Wolgaic) Calmecs seem to have
been formed into a distinct horde, later than the other Calmuc branches. In the very beginning, they separated from the restless Soougars, who settled on the Volga; for which reason, the Russians, to whom they submitted in 1616, called them the Holgan Calmuc. But, the oppression of the Russian government having excited dissatisfaction among them, they returned to Soongary in 1770, and put themselves under the Chinese protection. However, strict measures were at first adopted against them. All these different tribes were formerly, or are at present, under the rule of their own khans, who are tributary to the government upon which the horde lives. There is also a colony of baptized Calmucs, to which the Russian government has granted a fertile territory, with the city Stavropol, in the Orenberg district of the government Ufa. This colony has been much augmented of late. In the same district, there is likewise a small colony of Mohammedan Calmucs, formed of proselytes which the Kirghises have made and received among themselves.

Calmes. (See Mercury.)

Calmes, Charles Alexander de, born in 1734, at Donai, where his father was first president of the parliament, studied at Paris, devoted himself to the duties of an advocate at Artois, went as attorney-general (procureur général) to the parliament of Donai, and was, in 1758, appointed intendant of Metz, and afterwards of Lille. This was his situation on the death of Louis XV. The minister Maurice, returning from a long exile, had placed successively in the office of minister of finance, Turgot and Necker, Fleury and Ormesson. In November, 1783, after the death of Maurice, they were succeeded by C., who found the finances already in disorder. Besides the loans and the arrears accumulated under preceding ministers, 176 millions had been raised in advance. C. concealed his embarrassment, and assumed an appearance as if all was well. He devised the expedient of retrenchment, paid the instalments which were due, supported the public paper by secret advances of money, hastened the payment of the interest of the national debt, made great improvements in the farming of the royal monopolies and of the public lands, established the credit of the caisse d'escompte, projected a sinking-fund, and undertook a new coinage of gold money, as if no difficulties existed. At first, he followed the system of loans, which was begun before him. According to his estimate, the government had, from 1770 to 1786, borrowed 1250 millions. The annual deficit amounted, however, to 115 millions. This, nevertheless, was to be reduced, in 1767, to 55 millions. To this end, the revenues of the state, which might then amount to 475 millions, should have been increased to 390 millions. C.'s first operations were calculated only for the moment; the national debt rested on no good security. To provide this, the only means was a new system of taxation, and C. proposed it. His two principal instruments were a general land-tax, payable in kind, and an increase of the stamp-tax. Since, however, it was foreseen, that the execution of a plan which called for sacrifices from the two highest ranks of the nation, till this time unheard of, would meet with much opposition from them, and yet a general assembly of the states seemed too dangerous, C. chose a middle course, which seemed to be favorable to the accomplishment of his design. He proposed an assembly of the notables, chosen from the most respectable members of the two first orders, the magistrates and the heads of the most important municipalities. On the 22d of February, 1787, the notables held their first session at Versailles. The report of the minister of finance was impatiently expected. He delivered it with all the ability of which he was capable; but this could not diminish the ill impression of his explanations. The deficit of 115 millions was greater than had been feared. C. traced the origin of this from the administration of Ternay; asserted that it amounted then to 40 millions; that, from 1776 to 1783, it had increased about as much more; and, at last, confessed that he himself had increased it about 35 millions from that time till 1786. Lafayette appeared at the head of those numerous complainants who now came forward against C.; but the king seemed, at first, to support his minister. The keeper of the great seal, C.'s constant adversary, was dismissed. This triumph was, however, of short duration. Independently of the friends of Lafayette and Necker, a third party came forward against him—that party which brought into the ministry the archbishop of Toulouse, Loménie-Brienne. The court was alarmed at the delays of the assembly of the notables, and the ferment which it excited. C. was deprived of his office, and banished to Lorraine. Thence he went to England, where he received a flattering invitation from the empress.
Catharine II. He now employed himself in refuting the charges which were brought against him. In his petition addressed to the king about the end of 1787, he takes a review of all his ministerial operations, and endeavors to prove that he had always for his object the improvement of the finances. The archbishop of Toulouse, his successor, had informed him of the personal displeasure of the king; the parliaments of Grenoble, Toulouse, Besançon, had made him the object of public animadversion; the parliament of Paris had come forward formally against him. C. defended himself against all these attacks. He besought the king to declare, that he had constantly acted by his express command or with his consent, and offered, in case the king should be silent, to justify himself before the tribunal of peers, before which he had been accused. To all the charges brought against him, his friends opposed this fact, which is certainly true, that he retired from the ministry poor.

In a letter of C. to the king, Feb. 9, 1789, containing political reflections, and principally directed against Necker, he manifested the intention of offering himself a candidate for the states-general. He actually made his appearance in the electoral assembly of the nobility of Balliol, but returned to London without effecting his purpose, where he employed himself in writing on the state of affairs in France. The revolution had, in the mean time, begun. C. took part in it with a zeal which seemed to exceed his powers. His negotiations, his journeys to Germany, Italy and Russia, his perseverance, his attachment to his cause, made him invaluable to the party which he served. In order to assist his unfortunate party with the pen, he wrote his "Célébration de l'Europe en Novembre, 1795," remarkable on account of its warmth, and its faithful delineation of events. From that time he lived in London, principally occupied with the fine arts, which he had always cultivated with taste. In 1802, he returned to Paris, where he died in October of the same year. Such was the career of a minister who gave the first impulse to the French revolution. He possessed, in a high degree, the qualities requisite to a great statesman—an accurate acquaintance with details, together with comprehensive views, and the power of conceiving extensive projects. But, if wisdom which matures the conceptions, if a prophetic glance which foresees all the impediments, if consistency and a spirit of method which provides for the success of the execution, are essential to a statesman, then C. can lay no claim to that title. A knowledge of human nature was wanting in his character. His morals were far from being strict. His works, among which his speeches and memorials to the notables deserve the first place, are valuable contributions to the history of financial administration.

Caloric is the name given, in chemistry, to that agent which produces the phenomena of heat and combustion. It is hypothetically regarded as a subtle fluid, the particles of which repel one another, and are attracted by all other substances. It is imponderable, and, by its distribution, in various proportions, among the particles of matter, gives rise to the three general forms of gas, liquids and solids. The particles of water, by losing caloric, have their cohesion so much increased, that they assume the solid form of ice; by adding caloric, they again become fluid; and by a still further addition, they are converted into vapor.—Caloric exists in two different states—free or uncombined, and in a state of combination. In the former condition, it creates the sensation of heat, and produces expansion in other bodies. The power which any body has of exciting the sensation of heat, and occasioning expansion, is understood by the expression of its temperature. This is supposed to vary with the quantity of free caloric in a given quantity of matter; a high temperature being ascribed to the presence of a large quantity of free caloric, and a low temperature to that of a small quantity.

We are ignorant, however, of the extremes of temperature, and may compare it to a chain, of which a few of the middle links, only, are exposed to observation, while its extremities are concealed from our view.—The expansion of bodies is one of the most universal effects of an increase of temperature. This increase in bulk, however, is not the same in all bodies. The same increase of temperature causes liquids to expand more than solids, and aeriform bodies much more than either. On this principle are constructed the various instruments for measuring temperature; since the degree of expansion produced by caloric bears a sufficient proportion to its quantity to afford us the means of ascertaining it with tolerable accuracy. Our senses, it is obvious, are quite inadequate to afford us this information; for we compare our sensations of heat, not with any fixed or
uniform standard, but with those sensations which we have had immediately previous. Hence, the same portion of water will feel warm to a hand removed from contact with snow, and cold to another hand which has been heated before the fire. To convey precise notions of temperature, therefore, we are obliged to describe the degree of expansion produced in some one body which has been previously agreed upon as a standard of comparison. The standard most generally adopted is quicksilver, which is contained in a glass bulb, terminating a long, narrow tube. This instrument is called a thermometer. If quicksilver, or, indeed, any other substance except the gases, suffered equal expansion by equal increments of the thermic power, then this instrument would be perfect; but the same increase of bulk is not effected in the same liquid or solid, at all temperatures, by adding similar quantities of heat; for bodies expand by equal increments of caloric, more in high than in low temperatures, because the force opposing expansion is diminished by the interposition of caloric between the particles of bodies; and, therefore, when equal quantities of caloric are added in succession, the last portions meet with less resistance to their expansive force than the first. In gases, on the contrary, which are destitute of cohesion, equal increments of heat appear to be attended with equal augmentations of bulk.—The tendency to an equilibrium is a characteristic of free caloric. Any number of different bodies, unequally heated, when exposed, in an apartment, to the same temperature, gradually arrive to an equality of temperature. It is in obedience to this law, that we experience the sensations of heat and cold when we touch bodies which are warmer or colder than ourselves. There exists much diversity in the rapidity with which different substances abstract caloric when in contact with a body in which it is accumulated. Common air and gases obstruct it but tardily, while wood, stones and metals acquire it more rapidly. According to their power of conducting it off under these circumstances, bodies are divided into conductors and non-conductors of caloric; and, in general, the power of conduction varies with the densities of bodies. But this tendency of caloric to an equilibrium is not established solely by the agency of intermediate bodies or communication. A part of it moves through the atmosphere, like light, in right lines, and with immeasurable velocity, and has, therefore, been called radiant caloric. The comparative quantities lost by radiation and by conduction may be approximated by observing what time it takes to cool any body through the same number of degrees in air and in vacuo. Thus doctor Franklin imagined he had ascertained that a body, which requires five minutes to cool in vacuo, will cool in air, through the same number of degrees, in two minutes. Count Rumford's experiments, with a Torricellian vacuum, give the proportions of five to three.—Radiant caloric passes only through transparent media, or free space. When, in its passage, its rays impinge upon the surface of a solid or a liquid substance, they are either reflected from it, and thus altered in direction, or they lose their radiant form altogether, and are absorbed. In the latter case, the temperature of the receiving substance is increased; in the former, it is unchanged.—The nature of the surface of a body has been found to influence powerfully both the radiation and absorption of caloric. The energy of caloric emanation from a cubical tin vessel, coated with different substances, and containing warm water (as determined by the differential thermometer of Leslie), gave, with a covering of

<table>
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<tr>
<th>Substance</th>
<th>Caloric Loss</th>
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<tr>
<td>Lampblack</td>
<td>100</td>
</tr>
<tr>
<td>Isinglass</td>
<td>75</td>
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<tr>
<td>Tarnished lead</td>
<td>45</td>
</tr>
<tr>
<td>Polished iron</td>
<td>15</td>
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<tr>
<td>Tin-plate, gold, silver or copper</td>
<td>12</td>
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Similar results were obtained simply by noting the rates of cooling in vessels of similar shapes and capacities with various surfaces. Useful lessons have been derived from these discoveries. Tea and coffee-pots, which are intended to retain their heat, are made of bright and polished metals; and steam-pipes, intended to convey heat to distant apartments, are kept bright in their course, but darkened where they reach their destination. The power of different surfaces to absorb caloric was found, by coating one of the bulbs of the differential thermometer successively with different substances, and presenting it to an uniformly heated substance, to follow the same order as the radiating or projecting quality.—With regard to combined caloric, it has been shown that solids, during liquefaction, imbibe a quantity of caloric, which ceases to be obvious, both to our senses and to the thermometer. The same is also true of solids and liquids in their conversion...
duced by mingling cold sulphuric acid and water; condensations of water, cooled by boiling; and, since steam and boiling water affect the thermometer in the same manner, this effect can be produced only from the existence of a much greater quantity of caloric in the former than in the latter. —The sources of caloric are six; viz. the sun's rays, combustion, percussion, friction, the mixture of different substances, and electricity.

CALORIMETER; an instrument to measure the capacity of a body for caloric, or its specific caloric. The thermometer (q.v.) measures merely the variations of temperature, or sensible heat. The body in the calorimeter is placed in the innermost of three concentric vessels, the two outer ones containing ice; the quantity of water produced by the cooling of the body a given number of degrees, determines its specific caloric. This instrument was invented by Lavoisier and Laplace. In the C. invented by Rumford, water is used; the capacity of the body is determined by the number of degrees which the temperature of the water is raised, in cooling the body a given number of degrees.

CALORIMOTOR. (See Galvanic Battery.)

CALOTTISTS, or the RÉGIMENT DE LA CALOTTE; a society which sprung up at Paris, in the last years of the reign of Louis XIV, and formed a regiment under the name La Calotte, signifying a flat cap of peculiar shape, which was the symbol of the society. All were admitted whose ridiculous behavior, odd character, foolish opinions, &c., exposed them to public criticism. They had a singular coat of arms, on which was the portrait of Monseigneur, with bells, spears, rackets, &c.; on their principal standard were the words "Pisivit Monsius, Luna influit." Every one who made himself particularly ridiculous received letters-patent, and those who were most angry were most laughed at. On the death of Torsac, the colonel of the Calottists, the éloge (a spirited satire on the academical style), which the Calottists pronounced on this occasion, was suppressed. Aimon, colonel of the guards, hastened to marshal Villars with their complaints, and concluded with the words, "My lord, since the death of Alexander and Caesar, the Calottists have not had any protector besides you," and the order was retracted. They became, however, too bold, attacked the ministers, and even foreign kings; and the regiment was, in consequence, dissolved. Of a similar character is the Academy of Fools, which, for many years, has existed in Duisburg. Some act of folly is necessary to procure a man admission as a member.

CALOTTERS; Greek monks, who chiefly reside on mount Athos, and lead a very solitary and austere life, eating no meat, and observing the fasts of the Greek church very rigidly. They do not even eat bread, unless they have earned it. During their 7 weeks of Lent, they pass the greatest part of the night in weeping and lamentations for their own sins and for those of others. The Turks sometimes call their dervishes by this name.

CALPE. (See Abys and Gibraltar.)

CALPRENEDE, Gauthier de Costes de la, born in Tolgoi, in Gascony, died at Paris in 1653, in the office of royal chamberlain. He was one of the authors who, in the 17th century, brought into fashion a new kind of voluminous and love-sick romances of chivalry. Events from the Greek and Roman history were treated in the spirit and manner of the old romances of chivalry. C. wrote Cassandra, in 10 vols., Cleopatra, in 12 vols., Pharamond, in 7, besides some tragedies. His tragedies obtained little reputation by the side of those of Corneille, but his romances were highly celebrated, and are, certainly, the best of their kind. He was not destitute of poetical imagination, and his characters are often dignified and well drawn, though his Artaban has become a proverbial name for extravagation. He wrote with great rapidity. His plots, however, are constructed with care, and his stories, long as they are, are not deficient in keeping. His lady has surpassed him in boldness of romantic narration in Les Nouvelles de la Princesse Alcidiane.

CALPURNIUS, Titus Julius, a native of
Sicily, lived in the 3d century. We have 7 idyls written by him, which are not without merit, and approach near to those of Virgil, although they are inferior to them in elegance and purity, as well as to those of Theocritus in simplicity and conformity to nature. The best edition is that of Beck (Leipsic, 1803).

Calvados; a dangerous ridge of rocks on the north coast of Normanly, extending (lat. 49° 22' N.) to the west of Orne, for the space of 10 or 12 miles. It is so called from a Spanish vessel once wrecked on it, and gives its name to the department. (q. v.)

Calvados. (See Departments.)

Calvart, Dionysius, a painter, born at Antwerp, in 1555, went, very young, to Italy, as a landscape painter; where, in order to learn how to draw figures, he entered the school of Fontana and Sabbattini, in Bologna, with the latter of whom he visited Rome. After having passed some time in copying the paintings of Raphael, he opened a school at Bologna, from which proceeded 137 masters, and among these Albano, Guido and Domenico. The people of Bologna regarded him as one of the restorers of their school, particularly in respect to coloring. C. understood perspective, anatomy and architecture; but the attitudes of his figures are sometimes mean and exaggerated. He died in 1619, at Bologna, where are his best paintings. Agostin Caracci and Sadeler have engraved some of his works.

Calvary (in Heb., Golgotha, the skull, Luke xxiii. 33, or the place of the skull, Matt. xxvii. 33); a mountain situated without the walls of Jerusalem, on which Jesus Christ was crucified. Matthew relates, that, at the time when our Savior expired, the earth shook, and the rocks split; and some modern travellers assert that the fissures in this mountain do not follow the direction of the strata, but are evidently supernatural. Jewish traditions affirmed, that Adam was buried on mount Calvary (credut Judaeux), and the early Christians believed that Jesus Christ was crucified here, that the blood shed for the redemption of the world might also purify the remains of the first sinner—Calvipes are small chapels, raised on hills in the vicinity of cities, with a crucifix, in allusion to the place and manner of Christ's death. Thus the calvary of mount Valerian, near Paris, is composed of 7 chapels, in each of which some mystery of the passion is represented.

Calvert, George, the first baron of Baltimore, was descended of a Flemish family settled at Kipling, in Yorkshire, where he was born in 1582. He was educated at Oxford, and, after travelling abroad, entered into the service of Robert Cecil, afterwards earl of Salisbury. He was knighted by James I, and made clerk of the privy council, and, in 1619, was appointed one of the secretaries of state.
This post he resigned in 1624, in consequence of having become a Roman Catholic. Notwithstanding this, he retained the confidence of the king, who, in 1625, raised him to the Irish peerage of Baltimore. He had previously obtained a grant of land in the island of Newfoundland, where he was prevented from making a settlement by the invasions of the French. He therefore resigned his claim, receiving, instead of it, a territory on the American continent, now forming the state of Maryland. This country was colonized under the patronage of lord Baltimore, who displayed justice and good faith in his dealings with the Indians, and liberality to religious sects in his legislative arrangements, highly creditable to his principles and character. He died in London, in 1632. He wrote some political tracts, and his speeches in parliament and letters have also been published. Calvin, John (so called from Calvinus, the Latinized form of his family name Chauvin), the second great reformer of the 16th century, was born at Noyon, in Picardy, July 10, 1509. His father, Gerard Chauvin, a cooper, dedicated him early to the church. C. says, in a letter to Claude d'Hangest, abbot of St. Eloi, at Noyon, that he was indebted to the family of his prelate for his first instruction and a liberal education. When hardly 12 years old, he received a benefice in the cathedral of his native city. Six years after, he was appointed to a cure, which he soon exchanged for another. Thus, by the means of his benefactors, he enjoyed, even before his 20th year, several benefices, and even the title and income of a cure, while he was yet pursuing his studies in Paris. Here he became acquainted with the provost of the university, Peter Robert Olivetan, his senior by some years, from whom he received the first germ of the new doctrine, which was then beginning to spread in France. He was induced, by this, to renounce the study of theology, and to devote himself to law, at Orleans, and afterward at Bourges. He made rapid progress therein, and, at the same time, studied the Greek language, under Melchior Volmar, a German, who strengthened the inclination for innovations already awakened in him by Olivetan. In 1532, he returned to Paris, and resigned his benefices. In the same year, he published a Latin commentary upon the two books of Seneca, De Clementia, in which he called himself by his Latinized name, Ioannes Calvinius, and was obliged, in 1533, to flee from Paris, because his friend Michael Cop, rector of the university, was persecuted on account of a discourse in favor of the new doctrine, in which he was suspected of having participated. C. took refuge in the house of Du Tillet, a canon at Angouline, with whom he quietly pursued his studies, and began to collect the materials for his Christian Institution, which appeared two years afterwards. Thence he went to Nereac, to queen Margaret of Navarre, the sister of Francis I, who, not so much from a decided inclination for the new doctrine, as from love for science, afforded refuge to several learned men, who were obliged to leave France on account of their opinions. C. was very well received by her, and here became acquainted with several men, who, at a future time, were useful to his party; returned to Paris, but, in 1534, was again obliged to leave France. He retired to Bale, where he published his Christian Institution, as the confession of faith of those who were persecuted in France, and condemned to the stake; in which it was his design to free them from the calumny, which had been circulated from political motives, that they were rebels and Anabaptists, and had nothing in common with the Lutheran doctrine. It would be difficult briefly to relate how he went farther than Luther in regard to the doctrine of free will, of imputation, and the merit of good works; but it is more easy to display the bold consequences which he drew from his doctrines. He attacked not only the supremacy of the pope, but even the authority of general councils; he does not recognise the character of a bishop or a priest any more than that of a visible head of the church; he permits no vows but those of baptism, and no sacraments but those of baptism and the Lord's supper; even these he does not regard as indispensable to salvation. The mass is to him a profanation, and the honors paid to the saints, idolatry. This work, Institutio Christiana Religionis, appeared afterwards in French, and almost every year was published by him with emendations and additions. The most complete edition was published by Robert Stephens, in 1539. The prefixed Profdato ad Christianissimum regem, qua hic ei liber pro confessione fidelis effeatur, could not, however, put an end to the religious persecutions in France; since Francis I, although far from being actuated by religious fanaticism, was influenced, by political views, to continue them. C. then
went to Italy, to preach his doctrine there, and met with a favorable reception from the duchess Renata of France, the daughter of Louis XII, and wife of Ercole d'Este, who subsequently protected his belief in his doctrines. But he was obliged to save himself by a hasty flight from Aosta, where he was discovered. He returned to Paris about the middle of the year 1533. Since, however, he could not live there in security, he resolved to go to Bale, and took the road through Geneva, where, a year before, the new doctrine had been introduced by a formal decree of the government, and Farel was very active in effecting its establishment. With him C. united himself, and, soon after, undertook a course of theological instruction, to which he devoted himself exclusively, while he left the pulpit to Farel. They attempted to reform the manners of the inhabitants; but this enterprise, in which they had connected themselves with an equally zealous, but less able preacher, drew upon them a crowd of powerful enemies, by whom they were at last overthrown. The cause of this was the following: the Genevan church had made use of leavened bread in the eucharist, and had removed the baptismal font from the church, and, moreover, abolished all holy-days, except the Sabbath. These innovations were not approved by the synod of Lausanne. The magistracy of Geneva required Farel and C. to comply with the decision of the synod, and commanded them, on their refusal, to leave the city in three days. This happened in April, 1538. They went to Berne; and, since the exertions of the magistracy of Berne and of the synod of Zurich could not effect their recall, C. went to Strasburg, where Luther's doctrine had been introduced by Bucer 10 years before. Bucer received him very kindly, and caused him to be appointed professor of theology. At the same time, he obtained permission to erect a French church, which, on account of the great number of fugitives from France, was very important. Notwithstanding the great esteem in which he was held here, his views were still directed to Geneva; the inhabitants of which he exhorted, in two letters, to remain true to the new doctrine, when cardinal Sadoleto invited them to return into the bosom of the church. Here, also, in 1540, C. published his work on the Lord's supper, in which he sought to refute both the opinion of Luther, who took this sacrament in the literal sense, and that of Zuinglius (q. v.), who understood it typically. In a conference held at Zürich in 1541, he first declared himself, unconditionally, in favor of the opinion of the latter. At last, in 1541, his friends in Geneva succeeded in effecting his recall; a particular deputation besought the magistracy of Strasburg to restore him to his former flock. But, as C. was appointed a deputy to the diet at Frankfort, and was afterwards obliged to be present at the conference at Ratisbon, he was not able to return to Geneva till September of the same year. He now laid before the council the draft of his ordinances respecting church-discipline, which were immediately accepted, and published in November. In pursuance of the provisions of these, a consistory was formed, composed half of clergymen, half of laymen, in order to watch over the support of the pure doctrine, and over morals. This tribunal called everybody, without exception, to account for their slightest words and actions, and referred cases where ecclesiastical censure was not sufficient, to the council, with an opinion upon them. Thus C. made himself director of the conduct, as well as of the opinions, of the Genevans. His spirit governed exclusively in the council as in the consistory, and the judges never hesitated to punish every one who set himself in opposition to him. Thus the magistrate was deposed and condemned to two months' imprisonment, "because his life was irregular, and he was connected with the enemies of C." James Gruet was beheaded, "because he had written profane letters and obscene verses, and endeavored to overthrow the ordinances of the church." Opinions were judged with equal severity. It is well known, that Michael Servetus, on his passage through Geneva, in 1553, was arrested, and, on C.'s accusation, was burnt alive, because he had attacked the mystery of the Trinity in a book which was neither written nor printed at Geneva. Numerous other similar examples might be adduced, to prove the blind and fanatical zeal which he had infused into the magistracy of Geneva, for the support of good morals, and of what he esteemed sound doctrine; and, by this means, he succeeded in putting a check upon innovations, and upon the spirit of inquiry, and in introducing a character of austerity among his adherents. He also proposed alterations in the civil legislation of the Genevans, and in the form of their government, in which some French refugees were useful to him. For the advancement of useful studies,
he erected the academy so happily conducted by his friend Theodore Beza. — When we consider all that C. did during his continuance in Geneva, we can hardly conceive how he could have accomplished so much. He preached almost daily, delivered theological lectures three times a week, attended all deliberations of the consistory, all sittings of the association of ministers, and was the soul of all the councils. He was consulted, too, upon points of law as well as of theology. Besides this, he found time to attend to political affairs in the name of the republic; to publish a multitude of writings in defence of his opinions, of which his commentaries on the Bible are the most important; and to maintain a correspondence through all Europe, but principally in France, where he labored incessantly to extend the new doctrine. Besides his printed sermons, the library of Geneva contains 2023 in manuscript, and, like that of Bern, several theological treatises not printed. Although C. differed from Luther in essential points, yet his adherents were not distinguished from the Lutherans in the edicts of Francis I and Henry II, nor even in the edict of Rouen in 1559. They themselves, indeed, regarded C. as their head, but without considering themselves as different, on this account, from the adherents of Luther. A formal separation first took place after the colloquium (conference) of Poissy, in 1561, where they expressly rejected the 10th article of the confession of Augsburg, besides some others, and took the name of Calvinists. C. died May 27, in the 55th year of his age. He was of a weak constitution, and suffered from frequent sickness. In Strasbourg, he had married a widow, Idelette, de Burie, in 1538; in 1543, the fruit of their union, died early. In 1549, he lost his wife, after which he never married again. He was temperate and austere, gloomy and inflexible. He knew nothing of friendship, and had no other passion than to establish the opinions which he believed to be correct. His disinterestedness was rare. He had a yearly stipend of 135 francs, 15 measures of corn, and 2 cases of wine; he never received a larger one. The value of the whole property which he left, in books, furniture, money, &c., did not exceed 125 crowns. His character was impetuous, and impatient of contradiction. "I have," he writes to Bucer, "no harder battles against my sins, which are great and numerous, than those in which I seek to conquer my impatience."

I have not yet gained the mastery over this raging beast." The tone of his controversies is always harsh, bitter and contemptuous. He does not always succeed in concealing the feeling of his own superiority. As a theologian, C. was equal to any of his contemporaries in profound knowledge, acuteness of mind, and, as he himself boasts, in the art of making good a point in question. As an author, he merits great praise. His Latin works are written with much method, dignity and correctness. He was also a great jurist and an able politician. But all these qualities would not have been sufficient to make him the head of a distinct religious sect, had he not boldly rejected all religious ceremonies. By this means, he gained, on the one side, the highly cultivated, who were induced to look upon visible forms in religion as something derogatory, and also gave the uneducated their own defense through all Europe, but principally to extend the new doctrine. Besides his printed sermons, the library of Geneva contains 2023 in manuscript, and, like that of Berne, several theological treatises not printed. Although C. differed from Luther in essential points, yet his adherence was not distinguished from the Lutherans in the persecution of Francis I and Henry II, nor even in the conflict of Rouen in 1559. They themselves, indeed, regarded C. as their head, but without considering themselves as different from the opposite party, without the necessity of examining the grounds of their faith, for which they were neither inclined nor qualified. — The chief doctrines of C.'s system are those which were discussed at the famous synod of Dort, under the following heads: predestination, particular redemption, total depravity, irresistible grace, and the certain perseverance of the saints. In succeeding controversies, these were denominated the five points. The doctrine of original sin, often set forth as peculiar to C.'s system, is common to those of many Protestant sects. The followers of C., in Germany, are called the Reformed, but the doctrine of predestination, it may be safely said, is every day losing ground in that country. In France, it is well known, most Protestants are Calvinists. Calvinism is the profession of the greatest part of the Presbyterians both of Europe and America; the Particular Baptists, in England and India, and the Associated Baptists in America; the Independents of every class in England and Scotland, and the Congregationalists of New England.

**Calvinism.** (See the conclusion of the preceding article; also Protestants.)

**Calvisius, Seth**; a musician and choral master of the 16th century. He was the son of a Thuringian peasant, Jacob Kalvis; was born in 1556, and, after a liberal musical and scientific education, became master at the Schulpforta and at the Thomas school at Leipzig. He died in 1617. His valuable works on the theory of music, written in good Latin, are mentioned in Gerber's Biographical...
Lexicon of Musicians. He composed, also, many important chronological and other scientific works. Such calls him an exact and zealous investigator of chronology, possessed of as much learning as penetration.

Calc.; properly lime or chalk (hence calcareous earth); but the term is more generally applied to the residuum of a metal or mineral which has been subjected to violent heat, burning or calcination (q. v.), solution by acids, or detonation by nitre, and which is or may be reduced to a fine powder. Metallic calces are now called oxides. (q. v.) They weigh more than the metal from which they are produced, on account of the oxygen which they have absorbed.

Calypso; an ancient city of Aetolia, celebrated in the stories of king Eneas, the Calydonian boar, and Dejanira and Hercules. Eneas, as theable runs, had forgotten Dana in a solemn sacrifice offered to all the gods; that goddess, in revenge, sent a terrible boar, which laid waste the fields and gardens. In order to slay this monster, Meleager, the son of Edon, received the aid of the goddess. In the bottom of the Calydonian boar, and Dæianira and Hercules. Meleager finally pierced him in the belly with his javelin, and the others speedily despatched him. (See Meleager.)

Calypso; a daughter of Atlas (some say of Nereus and Doris, or of Oceanus and Thetis). She inhabited the woody island Ogygia, situated deep in the ocean, and lived remote from all intercourse with gods and men. Ulysses having suffered shipwreck on her island, she received him kindly, and promised him immortality if he would consent to marry her. But his desire of beholding his country and his wife overcame the charms of the goddess. Seven years he had to remain with her. Mercury finally brought C. the command of Jupiter, that Ulysses should be permitted to return to his home. This command she dared not oppose. Ulysses departed, but C., who had borne him two children, Nausinous and Nausithous, died of grief. This subject has been wrought up in many different ways.

Camais; or Camay. (See Cameo.) Cameo is also used for a painting wherein there is only one color, and where the lights and shades are of gold, wrought on a golden or azure ground. When the ground is yellow, the French call it ivoire, when gray, grisaille. This kind of work is chiefly used to represent basso-relievo. The Greeks call pieces of this sort μοσχοχάλκη.

Camaldolites, Camaldulians, or Camaldulans; hermits and monks of the order established, in 1012, by St. Romuald, a Benedictine of Ravenna, in the valley of Camaldoli, near Arezzo, in the Apennines, and confirmed afterwards by pope Alexander III. They were originally hermits, living in separate cells; but, as their wealth increased, the greater part of them associated in convents. They existed in Italy, France, Germany and Poland. In the 18th century, there were five independent fraternities of them:—

1. at Camaldoli; 2. at Cronenberg, near Perugia; 3. at Turn; 4. at Grandbois, near Paris; 5. at Munno, in the Venetian territory; besides 12 monasteries of Camaldulian nuns. White garments and the austere rules of the Benedictines they all had in common. The hermits wore beards, and had still more severe rules in regard to fasting, silence and penances. Their life was devoted to contemplation rather than to usefulness. Joseph II and the French revolution put an end to the order.—There is, in the vicinity of Naples, a mountain which takes its name from a convent of the Camaldoli, situated on its top, from which the traveller enjoys a prospect of remarkable grandeur and beauty. It seemed to us the most charming of all the beautiful views around Naples; yet the spot is not much visited by travellers.

Camargue, or Camarque, la; a piece of land, insulated by the two principal mouths of the Rhone, sometimes called the Delta de France. It is a cluster of islands extending over nearly 200 square miles.

Cambaceres, Jean Jacques Regis; ex-duke of Parma, prince and archchancellor of the French empire, member of the institute; born in 1753, at Montpellier, of an ancient famille de robe (family of lawyers). His zeal and talents soon obtained him distinction and the office of a counsellor at the cour des comptes at Montpellier. At the beginning of the revolution, he received several public offices, became, in September, 1792, a member of the convention, and labored in the committee, particularly in the committee of legislation. Dec. 12, 1792, he was commissioned to inquire of Louis XVI whom he desired for his counsel, and on his motion that the counsel was allowed to communicate freely with the king. In January, 1793, he declared Louis guilty, but disputed the right of the convention to judge him, and voted for his provisional
arrest, and, in case of a hostile invasion, death. The 24th of January, he was chosen secretary of the convention. As a member of the committee of public safety, he reported, in the session of March 26, the treason of Dounoumierz. In August and October, 1793, he presented his first plan for a civil code, in which his democratical notions were displayed. In an appeal letter to the electors of Paris; and, after of the five hundred, where he presented his first plan for a code civil. This Projet de Code civil, 1796, became, subsequently, the foundation of the Code Napoleon. May 26, 1797, he left his seat in the convention. A year afterwards, he appeared among the electors of Paris; and, after the revolution of the 30th Pririral, VII (19th of June, 1799), he was made minister of justice. On the 13th of June, 1809, he was elected second counsel, and entered on the office in December. He made the administration of justice the chief object of his attention. After Napoleon had ascended the throne, C. was appointed archchancellor of the empire, and afterward, grand officer of the legion of honor, obtained, successively, almost all the distinguished foreign orders, and, in 1808, was made duke of Parma. He always showed a remarkable attachment to Napoleon. The numerous edicts which appeared during his government were drawn up by C. During the campaign of Napoleon in Bavaria, C. was made president of the council of regency. At the approach of the allies in 1814, he followed the government to Blaes, and, from that place, sent his consent to the abdication of the emperor. When Napoleon returned, in 1815, C. was again made archchancellor and minister of justice, and, subsequently, president of the chamber of peers. After the second fall of Napoleon, he was banished. He went to Brussels. In December, 1818, the king permitted him to return to Paris, where he lived afterwards as a private individual, and died March 8, 1824.

CAMBODIA, or CAMBIA, of CAMBRIA; a country in Asia, between 15° and 15° N. lat., bounded N. by Laos, E. by Cochin-China and Champa, S. by the sea, and W. by Siam; about 400 miles in length and 150 in breadth. Population, in length and 150 in breadth. Population, vaguely estimated at 1,000,000. The air is exceedingly hot, which compels the inhabitants to reside chiefly by the sides of rivers or lakes, where they are tormented by mosquitoes. The soil is very fertile. Gold of great purity, amethysts, hyacinths, rubies, tozper and other precious stones are found. Cattle are extensively raised. Elephants, lions, tigers, and almost all the animals of the deserts of Africa, are found here. The capital is also called Cambodia, or Leveek. Lon. 104° 32’ E. lat. 13° N.

CAMBODIA, or DONNAI; a river in Asia, called, also, in different parts of its course, Kiew Lang, May Kang, Mecon or Micon, which rises in Thibet, passes through Yunnan, a province of China, the countries of Laos and Cambodia, and runs into the Chinese sea; lon. 104° 10’ E.; lat. 10° N. It is navigable for the largest vessels 40 leagues, and is generally two miles wide, and very deep. (See Mecon.)

CAMBRAY, or CAMBRIC, a large and strongly fortified city (having 3000 houses and 15,000 inhabitants), lies on the Scheldt, in the French Netherlands, department of the North, and contains a number of manufactories. From this place comes the linen cloth known by the name of cambric. C. has been the seat of an archbishop since the 10th century. In the cathedral church is Fenelon’s monument. In 1568, the league (q.v.) against Venice was concluded at C.; in 1529, the peace with Charles V (see Francis I); and, in 1724, negotiations for peace with the emperor Charles VI and Philip V, which were terminated at Vienna, in 1725.

CAMBRIDGE; a post-town in Middlesex county, Massachusetts, on the north side of Charles river, the ditched walls W. N. W. of Boston. Population, in 1820, 3235. C. consists of three principal parts or divisions, namely, Old Cambridge, which contains the university, a state arsenal, a Congregational meeting-house, an Episcopal church, &c.; Cambridge-Port, which is a considerable trading village, containing four houses of public worship, and is connected with Boston by West Boston bridge; East Cambridge, a flourishing manufacturing village, which is situated on Lechmere point, is connected with Boston by Crain’s or Canal bridge, and contains a court-house, a jail, a large glass manufactory, and three houses of public worship. The university in C. was incorporated in 1638, and called Harvard college, from its prin-
cipal founder. Its endowments have been since greatly increased by donations from the state, as well as by numerous acts of private bounty; and, with regard to funds, library, professorships, and literary advantages in general, it is the first institution of the kind in America. It comprises a department for under-graduates, and one for students preparing for each of the learned professions, theology, law and medicine. The principal college buildings are, University hall, an elegant edifice of granite, containing a chapel, lecture rooms, dining halls, &c.; Harvard hall, a brick edifice, containing the library, philosophical apparatus and mineralogical cabinet; four other brick edifices, called Massachusetts, Hollis, Stoughton and Holworthy halls, each four stories high, containing rooms for the accommodation of under-graduates; Divinity hall, a large brick edifice for the accommodation of the theological students; and Holden chapel, containing the anatomical museum, chemical laboratory and lecture rooms. The library is the largest in the union, philosophical apparatus is probably not surpassed by any in the country. The chemical laboratory, anatomical museum, and cabinet of minerals, are all valuable. The botanic garden comprises seven acres, laid out in an ornamental style, and is furnished with an interesting collection of trees, shrubs and plants, both native and foreign. The legislative government is intrusted to a corporation, consisting of the president of the university and six fellows, and to a board of overseers, composed of the president, the governor of the state, lieutenant-governor, members of the council and senate, and the speaker of the house of representatives, together with thirty others, fifteen clergy-men and fifteen laymen, elected for the purpose. The officers of the university, to whom the business of instruction is confided, are a president, twenty-one professors, two tutors, and several instructors. The president, a part of the professors and the tutors constitute the immediate government of the institution. The course of education requisite to obtain the first degree in arts in this university, as in American colleges generally, is completed in four years. In the theological school, the course of education is completed in three years, and the students are divided into three classes, junior, middle and senior. Tuition is afforded free of expense to all pupils in this school, and further assistance is given to such as are indigent. Graduates of any college, of good moral character, may be admitted to share in all the benefits of this institution. The law school was established in 1817. Candidates for admission must be graduates of some college, or qualified, according to the rules of court, to become students at law. Students in this department, who are graduates of a college, complete their education in three years. Those who are not graduates complete it in five years. The lectures for the medical students are delivered in Boston, at the Massachusetts medical college, which is a spacious edifice of brick, and contains a medical library of about 4000 volumes. They commence annually on the third Wednesday in November, and continue three months. In order to obtain a degree of M. D., it is necessary for a student to attend two courses of lectures, and to pass three years, including the time occupied in attending the lectures, under the direction of some regular practitioner. In 1829, the number of under-graduates was 252, theological students 63, law students 24, medical students 83; total, 401. Commencement is on the last Wednesday in August. The academical year is divided into three terms and three vacations. The first vacation is of two weeks, from the first Wednesday preceding the 25th day of December, the second of two weeks, from the first Wednesday in April, and the third, the six weeks next preceding commencement.

CAMBRIDGE; a town of England, situated on the river Cam, 51 miles north of London. It is an ancient place, and was a Roman station. It has a population of 11,122 inhabitants, and returns two members to parliament. This town is celebrated for its university, which, according to some writers, was founded as early as 630; but an ancient authentic document relative to it bears date 1223. The university consists of 17 colleges, 4 of which are called halls, the schools, the public library, and the senate-house. The following list contains the name of each of these institutions, and the time when it was founded.

1. Peter house .......................... 1227
2. Clare hall .......................... 1325
3. Pembroke hall ....................... 1343
4. Great and Caius college .......... 1349
5. Corpus Christi ....................... 1344
6. Trinity hall .......................... 1350
7. King's college .......................... 1341
8. Queen's college ....................... 1343
9. Carthusian hall ....................... 1413
10. Jesus college .......................... 1438
11. Christ college .......................... 1439
12. St. John's college .......................... 1511
There are also 23 professors (See Colleges.)—Previous to the erection of colleges, the students resided in hostels or inns, which were provided by the townsmen for their reception, of which there were 34. The charges of education and maintenance were paid by the students themselves. The university is composed of a chancellor, vice-chancellor, the masters or heads, fellows of colleges, and students, amounting in all (in 1823) to 4277 members, and is incorporated as a society for the study of all the liberal arts and sciences. Although each college or hall is a body of itself, and bound by its own statutes, it is controlled by the paramount law of the university (chiefly contained in the statutes given by Elizabeth), each furnishing members for the government of the whole. The government is administered by the senate, a vice-chancellor, who is usually the head of some college or hall, two proctors, who attend to the discipline of the under-masters of arts, read the graces, &c.; taxors, moderators, scrutators, a commissary, a public orator; the caput, consisting of the vice-chancellor and several doctors, which determines what graces shall be brought before the university. There are also 23 professors in the various departments of literature and science. The senate is composed of all the doctors and masters, and is divided into two houses, the regent-house and the senate-house. The two members of parliament, returned by the university, are chosen by the whole body collectively. The election of officers, the admission to degrees, &c., take place in the senate-house. The fellows, scholars, and certain inferior officers, are maintained on the foundation. Besides which there are other orders of students: the greater pensioners are the young nobility and gentlemen of fortune, who dine with the fellows, and are therefore called fellow-commoners; the less pensioners dine with the scholars; the sizaris are scholars who receive benefactions, called exhibitions. Three years’ study at the university are necessary for taking the degree of bachelor of arts (q. v.), and four years more for that of master. In divinity, a student may commence bachelor seven years after receiving the degree of bachelor of arts; in law, six years after; and, in physic, five years after. The time for conferring these degrees is called the commencement. The nobility are entitled to degrees without waiting the statutable time. The whole number of students in 1823 was 1800. (See Universities.)—The public library occupies the four sides of a quadrangle over the schools, and contains 140,000 vols. (See Libraries.) The Fitzwilliam museum comprehends the collection of books, paintings, drawings, engravings, &c. There are also the public observatory and the Fitzwilliam monument. The latter was erected by Lord Fitzwilliam in 1815, and is left by the viscount Fitzwilliam in 1813. The observatory is placed under the Plumian professor of astronomy and two assistant observers. (See Fuller’s History of Cambridge University; Palmer’s History of the Fitzwilliam Museum.)

CAMBRIDGE (Adolphus Frederic of England), duke of, earl of Tippawry, baron of Callodon, governor-general of Hanover, chancellor of the university of St. Andrews, and field-marshal, was born Feb. 24, 1774. He entered the military service as an ensign when 16 years old, and soon afterwards went to the university of Göttingen. After he had passed one winter at the court of Frederic William II, he returned to London; was present, in 1793, in the campaign in the Netherlands, and was taken prisoner in the battle at Hondschoote (8th of September, 1793), but immediately released. In 1794, having attained his majority, he was appointed colonel, and duke of C., and was called into the house of lords. Here he enlisted on the side of the opposition, under Fox, and adhered to this party until it was almost dissolved. He now joined the other party, opposed to Pitt—that of Grenville. In 1803, he was sent without an army to the defence of Hanover. But he soon transferred the chief command to Wallmoden, and returned to England. Being always violent against Napoleon, he fluctuated between the parties of lord Sidmouth, Grenville, and the opposition; and, after the re-acquisition of Hanover, was raised to the office of governor-general of this kingdom (Oct. 24, 1814). The city of Hanover was much benefited by his residence, and by the protection and patronage which he bestowed on many arts, particularly the dramatic. He was married, May 5, 1812, to Augusta, the daughter of the landgrave Frederic of Hesse-Cassel, who, in March, 1819, bore him a son, and, in 1822, a daughter.

CAMBRIDGE MANUSCRIPT, or BEZA’S MANUSCRIPT; a copy of the Gospels and Acts of the Apostles in Greek and Latin, Beza found it in the monastery of Irene-
us at Lyons, in 1562, and gave it to the university of Cambridge in 1582. It is a quarto, and written on vellum. 66 leaves of it are much torn and mutilated, and 10 of these are supplied by a later transcriber. The age of this MS. is differently estimated by different writers, but all agree that it is of great antiquity. The most competent judges consider it one of the most ancient. In the Greek, it is defective from the beginning to Matthew i. 20; in the Latin, to Matthew i. 12; besides which it has some other chasms. Westein, Grierson, Michaelis, and several others, have written upon this MS.

CAMBRONNE, Pierre Jacques Etienne, baron, general, commander of the legion of honor, and field-marshal, born Dec. 25, 1779, at St. Sebastian, near Nantes, was descended from an opulent family, and enjoyed a good education. Under the republic, and under Napoleon, he served in every campaign, and became so celebrated, on account of his personal bravery, that the soldiers wished to give him the title of first grenadier of France, after the death of Latour d'Auvergne, but he declined the honor. He was made commander of the chasseurs of the imperial guard, and was at Fontainebleau when Napoleon abdicated. He went with him to the island of Elba as chief of the division of the old guard, which accompanied Napoleon's standard. On the field of battle at Waterloo, he was taken prisoner by the British, among those who were severely wounded. His celebrated answer to the British proposal of capitulation is well known—"La garde meurt, elle ne se rend pas." He was one of the 19 generals of Napoleon who, by the royal decree of July 24, 1815, were to be tried by a court-martial. He returned from his captivity as a prisoner of war, and appeared in person before this tribunal. As he had taken no oath of fidelity to the Bourbons, he was acquitted. The sentence was revised, and the acquittal confirmed.

CAMBYSES, 1. the son of Cyrus the Great and of Cassandana, became, after the death of his father, king of the Persians and Medes, A. C. 530. Soon after his accession to the throne, he made an attack upon Egypt, killed the king of this country, Psammemitus, plundered the chief city, Memphis, and conquered the whole kingdom within six months. He now wished to send a fleet against Carthage, to conquer Ethiopia, and to obtain possession of the temple of Jupiter Ammon. The first of these expeditions, however, did not take place, because the fleet, which was manned with Phenicians, refused obedience to him. The army which was sent against the Ammonites perished in the desert; and the troops, at whose head he himself had set out against the Ethiopians, were compelled by hunger to retreat. From this time, he gave himself up to the greatest cruelties. On his entrance into Memphis, seeing the Egyptians engaged in the celebration of a feast in honor of their god Apis, whom they had found, he believed that they were rejoicing at his misfortunes. He caused the holy bull to be brought before him, slew him with his own sword, and caused the priest to be scourged with rods. To drown his vexation, he indulged himself in the most insupportable enjoyment of wine. No relation was held sacred by him when intoxicated. He caused his brother Smerdis, a dream concerning whom had disturbed him, to be murdered. His sister and wife Atossa, who lamented the death of Smerdis, he killed with a blow of his foot. These and other actions of the most insane rage had irritated his subjects. A Magian availed himself of this discontent, and obtained possession of the throne under the name of Smerdis, whose death had been concealed.

CAMDEN ; a post-town, and capital of Kershaw district, South Carolina, on the E. side of the Wateree, 35 miles N. E. Columbia, 130 N. N. W. Charleston; lon. 80° 33' W.; lat. 34° 17' N.; population, about 1000. It is a pleasant town, regularly laid out, and contains a court-house, a jail, an academy, and four places of public worship. The surrounding country is
Camel (Camelus, L.), a genus of numerous quadrupeds, of the ruminant order, characterized by their size; the possession of incisive, canine and molar teeth; the upper lip divided; the neck long and arched; by the absence of horns, and a skin which exhibits two humps or protuberances upon the back, and naked callosities at the joints of the leg, the inferior part of the breast, &c. The inferior extremities terminate in two toes, which are not wholly covered by hoof, as they have only a small one at the extremity, and a sort of very hard, callous sole, common to both. There are six incisive and two canine teeth in the lower jaw; and, in the upper, there are two incisors in the maxillary bone, with one or two canine teeth on each side, which increase to a considerable size with the increasing age of the animal. The camel is the only ruminant animal which has cutting teeth in the upper jaw.—The native country of this genus is said to extend from Mauritania to China, within a zone of 500 or 1000 miles in breadth. The common camel, having two humps, is only found in the northern part of this region, and exclusively from the ancient Bactria, now Turkestan, to China. The dromedary, or single-hump camel, is found throughout the entire length of this zone, on its southern side, as far as Africa and India. Notwithstanding this, the dromedary cannot sustain the burning heat of the torrid, or the mild climate of the temperate zone, while the camel supports all the vicissitudes of climate with but little injury. It is highly probable that the camel has long ceased to exist in its wild or natural state, as it has been enslaved by man from the earliest times of which we have record. Among the stock composing the wealth of the patriarch Job, we find 600 camels enumerated. Unlike the elephant, and other animals which cease to breed in a state of captivity, the camel is as prolific as if at liberty; and vast numbers are raised and employed throughout the Oriental countries, especially in the commerce carried on between the people residing in the vicinity of the great deserts. To these people the camel serves in the place of ships, and other modes of conveyance, being especially adapted by nature for the service in which it is employed. In regions where water is exceedingly scarce, and wells or springs are several days' journey distant from each other, it would be impossible to traverse the country with the usual beasts of burden. But the camel can abstain from drinking for seven or eight days together without injury—an important advantage, which is owing to the possession of a fifth pouch, or appendix to the stomach, destined to receive water, whenever it can be procured, and capable of retaining it unchanged for a long time. From this receptacle a portion of water can be thrown into the other stomachs or gullet when necessary, and thus avert the evils of thirst. Possessing strength and activity surpassing that of most beasts of burden, docile, patient of hunger and thirst, and contented with small quantities of the coarsest provender, the camel is one of the most valuable gifts of Providence. There is, however, in the external appearance of the animal to indicate the existence of any of its excellent qualities. In form and proportions, it is very opposite to our usual ideas of perfection and beauty. A stout body, having the back disfigured with one or two humps; limbs long, slender, and seemingly too weak to support the trunk; a long, slim, crooked neck, surmounted by a heavily-proportioned head, are all ill-suited to produce favorable impressions. Nevertheless, there is no creature more excellently adapted to its situation, nor is there one in which more of creative wisdom is displayed in the peculiarities of its organization. To the Arabs, and other wanderers of the desert, the camel is at once wealth, subsistence and protection. Their strength and fleetness render their masters the terror of enemies, and secure them from pursuit—a few hours being sufficient to place leagues of trackless desert between them and their foes. The milk of the females furnishes the Arab with a large part of his nutriment. The flesh of the young animal is one of his greatest luxuries: of the skins, he forms tents; the various sorts of hair, or wool, shed by the camel, are wrought into different fabrics; and its dried dung constitutes excellent fuel, the only kind, indeed, to be obtained throughout vast extents of country. In order to qualify camels for great exertions, and the endurance of fatigue, the Arabs begin to educate them.
at an early age. They are first taught to bear burdens, by having their limbs secured under the belly, and then a weight proportioned to their strength is put on: this is not changed for a heavier load till the animal is thought to have gained sufficient power to sustain it. Food and drink are not allowed at will, but given in small quantity, at long intervals. They are then gradually accustomed to long journeys, and an accelerated pace, until their qualities of fleetness and strength are fully brought into action. They are taught to kneel, for the purpose of receiving or removing their load. When too heavily laden, they refuse to rise; and, by loud cries, complain of the injustice. Small camels carry from 600 to 800 lbs.; the largest and strongest bear 1000 or 1200 lbs., from 30 to 35 miles a day. Those which are used for speed alone are capable of travelling from 60 to 80 miles a day. Instead of employing blows or ill-treatment to increase their speed, the camel-drivers sing cheerful songs, and thus urge the animals to their best efforts. When a caravan of camels arrives at a resting or halting-place, they kneel, and, the cords sustaining the load being untied, the bales slip down on each side. They generally sleep on their bellies, crouching between the limbs, and they are contented with the coarsest and most nutritious harâb vegetables are eaten by them with avidity, and are even preferred to more delicate plants.—Camels, designed exclusively for labor, are usually gelded, and females are also treated in a similar manner. They are, it is true, not so strong, but are much more manageable. During their sexual season, the males become furious and ungentle: they refuse food, are violent, biting and kicking even their keepers, to whom they are, at other times, very obedient. At this time, also, a fetid secretion is effused from a glandular apparatus on the neck; the animal foams at the mouth, and a red, membranous vesicle, similar to a bladder, is extended on each side of the mouth. One male is reserved perfect for every eight females. The female receives the male in the same crouching attitude, in which she places herself to receive a load, or for the purpose of sleeping. She goes with young 12 months, and brings forth one at a birth. Her milk is very thick, abundant and rich, but of rather a strong taste. Mingled with water, it forms a very nutritious article of diet. Breeding and milk-giving camels are exempted from service, and fed as well as possible, the value of their milk being greater than that of their labor. The young camel usually sucks for 12 months; but such as are intended for speed are allowed to suck, and exempted from restraint, for two or three years. The camel attains the full exercise of its functions within 4 or 5, and the duration of its life is from 40 to 50 years.—The humps or bunches on the back of camel are mere accumulations of cellular substance and fat, covered by skin, and a longer hair than that of the general surface. During long journeys, in which the animals suffer severely from want of food, and become greatly emaciated, these protuberances are gradually absorbed, and no trace of them left, except that the skin is loose and flabby where they were situated. In preparing for a journey, it is necessary to guard the humps from pressure or friction by appropriate saddles, as the slightest ulceration of these parts is followed by the worst consequences: insects deposit their larvae in the sores, and sometimes extensive and destructive morbid processes ensue.—The Bactrian or common camel is larger than the dromedary; the humps are not so long in proportion to the body; the muzzle is larger and more tumid; the hair of a darker brown, and the usual gait slower. A still more striking distinction is afforded by the two humps—the dromedary having but one. This single hump of the latter occupies the middle of the back, rising gradually on all sides towards its apex, and never inclining to one side. Both species are occasionally found in collections of animals. The dromedary is more frequently seen than the camel.—During that season of the year when these gentle creatures become violent, the Turks take advantage of this change in their disposition to set on foot camel-fights disgraceful exhibitions, indicative of the same spirit as the lion-fights of Rome, the bull-fights of Spain, the bull and buldog-baitings and cock-fights of England. These fights are common at Smyrna and Aleppo. The camels of Smyrna are led out to a large plain, filled with eager crowds. The animals are muzzled, to prevent their doing each other serious injury, for their bite is tremendous, always bringing the piece
out. A couple, being let loose, run at each other with extreme fury. Their mode of combat is curious: they knock their heads together laterally, twist their long necks, wrestle with their fore-legs, almost like bipeds, and seem to be principally bent on throwing down their adversary.

Camel, in mechanics; a machine used in Holland and St. Petersburg for lifting ships over shallow bars. De Witt invented these machines, and Peter the Great introduced them into Russia. A camel is composed of two separate parts, the inside of which are slanted so as to embrace the hull of a ship on both sides. Each part has a cabin, with many pumps and plugs. They are fastened to the vessel and entirely enclose its sides and bottom. They are then towed to the bar, and are sunk with the vessel, by taking out the plugs. The water being now pumped out, the camel lifts the vessel, and the whole is towed over the bar.

Cameleon. (See Chameleon.)

Camelopard; also called giraffe (camelopardalis giraffa, L.); a very remarkable genus of mammiferous quadrupeds, belonging to the order of ruminants; characterized by having 8 incisive teeth in the lower jaw; a bony prominence on the frontal bone; horns somewhat inclined, covered by the skin of the head, and having a bristly fringe round their tips; callosities upon the sternum and knee joints; a tuft at the end of the tail; a reddish mane, extending from the occiput along the whole of the neck and shoulders, as far as the root of the tail. The body of the giraffe having considerable resemblance to that of the camel, and the color of its skin being an impure or yellowish white, spotted with rhomboidal patches of tawny color, something like that of the leopard, led to its bearing the names of these animals conjointly. In its manner of kneeling for the purpose of sleeping, in the length of its neck, and the presence of callosities on the lower part of the breast and over the joints, it has a further similarity to the camel. Its horns, which, in the male, are about a foot long, permanent, and covered by the skin of the head to their very tips, give the giraffe some analogy to the genus cerca or deer, under which it was classed by Linnaeus. Its most striking peculiarity is the great apparent height, or its foreparts, which rise very suddenly from the fore-shoulders. Measured from the ground to the top of the head, the animal is from 15 to 17 feet high. The posterior extremities are not higher than 9 feet; but the difference in length between the anterior and posterior extremities is by no means so great as would be inferred from the appearance of the animal. The great difference is owing to the length of the neck, which tapers upwards, and at its base is rendered exceedingly thick, by the long dorsal and cervical spurious processes, that give attachment to its powerful muscles and ligaments. The trunk of the body is short in proportion to the neck, and the fore limbs are more robust than the posterior. The hoofs are rounded and right, like those of the ox. The tail is slender, cylindrical, and terminated by a tuft 3 or 4 inches long. The head of the giraffe is not unlike that of the horse; the eyes are large, fine and brilliant; the ears both as length and figure, more resemble those of the ox. It is a mild, timid and harmless animal, choosing dense forests for its residence, and feeding on the leaves and shoots of trees. When it knows the herbage on the ground, it is not, as it has been supposed, under the necessity of kneeling, though its natural mode of feeding, for which it seems to be especially constructed, is by browsing upon trees or shrubs of considerable elevation.—The giraffe is a native of the country lying between Egypt and Ethiopia. It is rare in Abyssinia, and still more so in Southern Africa. It is hunted and killed by the natives for the sake of its large and beautiful skin, as well as for the narrow of its bones, considered by them to be an exquisite dainty. The flesh of the young camelopard is said, by travellers, to be an acceptable article of diet. Little is known of the gestation of this animal, though it is said, like that of the camel, to endure for 12 months.—The giraffe has long been known to naturalists, though opportunities of examining living specimens have always been rare. They were brought living to Rome, to adorn the public games and festivals, as Proteus states, during the dictatorship of Caesar. Figures of the animal are still preserved in the Pre-estine pavement, wrought under the orders of Sylla. The figure of the giraffe also occurs among the hieroglyphic monumental drawings of the Egyptians. The giraffe moves with great celerity, and it requires a swift horse to equal its speed, when only in a trot. It has not been tamed, or applied to any useful purpose, as far as we know, though a few specimens have, at different times, been sent to Europe, as presents to sovereigns, or for exhibition. The pacha of Egypt, not
long since, sent one to the king of France, which is still living in the menagerie of
Paris.
Camena; a village in the Prussian govern-ment of Reichenbach, circle of Frank-enstein, on the Neiss; remarkable for the
rich Cistercian abbey of the same name, now abolished, which was built in 1094, and numbered, from 1249 to 1810, 53 ab­bots. The most celebrated abbot was Thaddeus Stusche, who acquired the favor of
Frederic the Great in a way till lately in­explicable. According to a manuscript
history in the Latin language, left by
a friar of C., during the war of 1741, the
abbot suddenly summoned the monks, one
evening, to the chapel, at an unusual
hour, by the sound of the bell. With him
came a stranger in a clerical dress. Scarcely
had the monks begun to pray, when a
great tumult was heard. Austrian troops
had arrived from Vartha, and were seen
in the monastery, and even in the church.
They searched the building for king Fred­eric, but found and seized his aids only.
The address of the abbot saved the king
of Prussia and the monarchy. Frederic
refers to this adventure in the Histoire de
son Temps, i. chap. 3. The monastery
was dissolved by the edict of Oct. 30,
1811. The beautiful castle was burnt in
1817.
Camel, or Camææ; in the proper
sense, a gem engraved in relievo. The ancients generally used the onyx for this
purpose. At first, such onyxes, and, af­terward, all gems carved in relief, were
called cameo. They were carved ac­cording to the layers of the stones, so that
the ground should be of a different color
from the figure in relief. One of the most
famous cameos is the onyx at present in
Paris, called the Apotheosis of Augustus,
1 foot high and 10 inches wide; its
history is also singular. (See Gem Sculp­ture.)
Cameraæolæ; a contrivance for
blowing the fire, for the fusion of ores, by
means of water falling through a funnel
into a vessel, which emits a quantity of
air or vapor continually, sufficient to
keep up a strong fire.
Camera clara (light chamber); an
optical instrument invented by Reinhader,
which supplies the deficiencies of the
camera obscura, and has this advantage
over that instrument, that the object to be
represented need not be illuminated by
the sun. All objects appear in it with
great distinctness. It can be used equally
well in bright and dark weather, in the
light of the sun or that of the moon.—

CAMELOPARD.—CAMERARIUS.

Camera lucida is the somewhat awkward
name of an instrument invented in Eng­
land, which only so far resembles the cam­era obscura, that it presents a complete
image of objects on a very diminished
scale. The chief part is a prism. If this
is placed in a proper position, and the
spectator approaches his eye to it, he per­ceives the image of the object before it
represented with the greatest clearness,
and perfect precision of outline, on a sheet
of paper fixed underneath, and can easily
trace it, whilst the persons around him
see only the drawing made on the paper.
—Camera obscura (dark chamber) is either
a closed room, in which the light can fall
only through a small aperture, or an opti­cal box, in which exterior objects are
represented on a smaller scale. It is used
for amusement or for drawing landscapes
and scenery, though what is gained in
rapidity and ease of execution is lost in the
dimness of the coloring. (For the theory
of this instrument, see treatises on natu­ral philosophy and optics.)
—Camera lucida. (See Camera clara.)
Camera obscura. (See Camera clara.)
Cameralius (Joachim I); born in
1508, at Bamberg; one of the most dis­tinguished scholars of Germany, who con­tributed to the progress of knowledge, in
the 16th century, by his own works as
well as by editions of Greek and Latin
authors with commentaries, and by a bet­ter organization of the universities at
Leipsic and Tubingen, and of the gymna­sium at Nuremberg. He also took an
important part in the political and reli­gious affairs of his time. He was a friend
of Melancthon, and was held in great
esteem by the emperors Charles V, Ferdi­nand I, and Maximilian II. In 1555, he
was deputy of the university of Leipsic
to the diet of Augsburg, and died in 1574.
He was naturally grave and serious, and
had such a detestation of falsehood, that
he could never endure it, even in jest.
His works are estimated at 180, mostly
translations from Greek and Latin writers,
besides many poems, and a great number
of familiar letters.
Cameralius (Joachim II); son of the
preceding; born in 1534, at Nuremberg;
one of the most learned physicians and
greatest botanists of his time. After bar­ring studied in the German and Italian
universities, he practised with great suc­cess in Nuremberg, where he instituted a
medical academy, laid out a botanical
garden, and published many botanical
works. He died in 1598. Several of his
CAMERARIUS—CAMILLUS.

sions and grandsons have distinguished themselves in medicine and botany.

CAMERLINGO (Italian) denotes the highest officer in the Ecclesiastical States. The cardinale comendigno stands, in fact, at the head of affairs in this government. He has the control of the treasury, administers justice, and exercises almost sovereign power when the papal chair is vacant.

CAMERONIANS; a sect in Scotland, who separated from the Presbyterians in 1660, and continued long to hold their religious assemblies in the fields. Their name is derived from Richard Cameron, a preacher, the founder of the sect. They adhered rigidly to the form of government established in 1648.—Cargillites was another name for the same sect, derived from another preacher among them. It is said, that not above 14 or 15 congregations of them exist.

CAMES are slender rods of cast lead, of which glaziers make their turned or milled lead, for joining the panes or quarrels of glass.

CAMILUS, Marcus Furius. This Roman hero was chosen tribune of the people in the year B.C. 401, and took part in the siege of Veii. Three years after, he was invested with the same dignity, and went against the Falisci. After he had become censor, he proposed a law to oblige unmarried men to marry the widows of those slain in battle. After the defeat of the military tribes of the Tuscans, advanced to Veii, before Veii, by the Gauls, who were carelessly encamped before it. The Romans, who had fled to Veii, while, at the same time, they besieged Falerii, the inhabitants of which city to resistance, and defeated the Gauls, who were carelessly encamped before it. The Gauls were defeated, and left there the priests end grandsons have distinguished themselves in medicine and botany.

The Gauls were defeated, and left their camp by night. C. overtook them on the next day, and obtained a complete victory. He now made a triumphal entry into Rome, amidst the acclamations of the people and the army, who greeted him with the name of Romulus, father of his country, and second founder of the city. But the city was a heap of ruins, and the tribunes renewed the proposal of removing to Veii, while, at the same time, they sought to excite in the people apprehen-
stons of the power of C. The senate, however, frustrated their designs, and C. retained the dictatorship. Rome was rebuilt. The \textit{Aequi}, Volsci, the Etruscans, and even the Latins, united against Rome. C., for the third time dictator, armed the whole people, came to the assistance of the military tribunes, who were surrounded, fired the enemy’s camp, and gave the plunder to his soldiers. He then took Bolsena, the chief city of the \textit{Aequi}, defeated the Volsci, and compelled the Etruscans to retreat.

He now triumphed for the third time, restored, from the booty, the military tribuneship, obtained from his colleagues the chief command, and took severe vengeance on the enemy. His glory excited the jealousy of Manlius. The senate, alarmed, once more raised C. to the military tribunships. Manlius was overcome; but the people, who had at first rejoiced at his condemnation, soon felt repentance. It was resolved to attack the \textit{Aequi}, allies of the Volsci. C. was obliged, notwithstanding his age, to take the chief command. It appeared to him hazardous to venture a battle; but Lucius Furius, his colleague, pressed him to attack the enemy. C. allowed him to direct the engagement, and confined himself to the command of the reserve. The troops under the command of Furius being thrown into disorder, C. came up, and prevented a total defeat. On the day following, he obtained a complete victory, being nobly supported by his colleague. The inhabitants of Tusculum, against whom he then advanced, surrendered without resistance, and obtained the friendship of Rome, which they had lost by their own fault. C. was appointed dictator, for the fourth time, on account of the disturbances excited by Licinius and Sextus, the tribunes of the people; but he soon resigned the power which he was obliged to employ against Romans, and not against enemies. He was already 80 years old, when the appearance of a new army of Gauls terrified Rome. He once more assumed the dictatorship, attacked the Gauls, dispersed them entirely, and obtained again the honor of a triumph. As new disturbances had broken out, C. did not lay down his office till the ferment was quelled. After this, he caused a temple to Concord to be built near the capitol, retired from public life, and died soon after, B. C. 365, of the plague, greatly lamented by the Romans.

\textbf{Camisards; Calvinists in France (in the \textit{Cevennes}), who, in the beginning of the 18th century, opposed the oppressive proceedings of the royal deputies. The collectors of taxes were attacked by night by the malcontents (who disguised themselves, appeared only in their shirts—whence their name), dragged out of bed, and hung, with the tax-rolls about their necks. The government sent troops to punish the authors of these acts. A certain John Cavalier, a peasant, whom a fortune-teller had pointed out as the deliverer of Israel, placed himself at the head of the Camisards. His unlimited authority with his adherents, and his talents and courage, enabled him to oppose the measures of experienced generals with so much success, that negotiation was substituted for force. The marshal Villars made a treaty with Cavalier, which conceded to the party all their demands, and by virtue of which Cavalier himself was received into the royal service as a colonel.}
CAIIOENS.

probably in 1354; for it appears, from a catalogue of persons embarking for the East Indies in 1550, that C., whose age is there given at 25 years, offered himself as a volunteer for the campaign. His father, Simon Vaz de C., was a ship-captain, and perished, by shipwreck, on the coast of Goa, in 1555. C. studied at Coimbra. At the time, writers were esteemed in proportion as they imitated the ancients. C. was inspired by the history of his country, and by the manners of his age. His lyric poems, like the works of Dante, Petrarch, Ariosto and Tasso, belong to the literature formed under the influence of Christianity. After the completion of his studies, he returned to Lisbon, where he fell deeply in love with a lady of the palace, Catharine d'Attayde. Violent passions are often united with great talents; C. had both. He was exiled to Santarem, on account of disputes in which his love for Catharine involved him. From despair, he became a soldier, and served in the fleet which the Portuguese sent against Morocco. He composed poetry in the midst of battles; and, as danger kindled his genius, so genius animated his courage. An arrow deprived him of his right eye before Ceuta. He hoped that his wounds would receive a recompense, though his talents were not appreciated; but envy opposed his claims. Full of indignation at seeing himself neglected, he embarked, in 1553, for India. He landed at Goa. His powerful imagination was excited by the heroic deeds of his countrymen in this quarter; and, although he had much reason to complain of them, he could not resist the desire of celebrating their glory in an epic. But this vivacity of mind, essential to the poet, is not easily united with the moderation which a dependent condition demands. C. was displeased with the abuses of the government in India, and wrote a satire, which caused his banishment to Macao. Here he lived several years in no other society than that of nature, which showered round him in abundance all the charms of the East. Here, too, he composed his Lusiad. Vasco da Gama's expedition to India is the subject of the poem. The parts of it which are best known are the episode of Ines de Castro, and the appearance of Alcator, who, by means of his power over the storms, aims to stop Gama's voyage, when he is about to double the Cape. In conformity to the taste of the time, C. united, in this poem, a narrative of the Portuguese history with the splendor of poetic description, and Christianity with mythological fables. He pleased himself with tracing the descent of the Portuguese from the Romans, of whom Mars and Venus are considered the progenitors and protectors. Some critics pronounce the Lusiad a more powerful and pure historical painting than Tasso's Jerusalem Delivered. C. was at last recalled from his banishment. At the mouth of the river Mecon, in Cochin-China, he was shipwrecked, and saved himself by swimming; holding in one hand, above the water, the manuscript of his poem, the only treasure which he rescued from the waves, and which was dearer to him than life. In Goa, he encountered new persecutions; he was confined in prison for debt, and was not allowed, until his friends became responsible for him, to embark and return to Lisbon in 1560. King Sebastian, yet hardly past the age of childhood, took an interest in C. He accepted the dedication of his epic (which appeared in 1572), and, being on the point of embarking on his expedition against the Moors in Africa, he felt, more sensibly than others, the genius of the poet, who, like him, loved dangers if they led to glory. But Sebastian was killed in a battle before Alcaçar, in 1578. With him the royal family became extinct, and Portugal lost her independence. Every source of assistance, as well as every hope of C., was destroyed by this event. So great was his poverty, that, at night, a slave, whom he had brought with him from India, begged in the streets, in order to support the life of his master. In this misery, he
yet wrote lyric poems, some of which contain the most moving complaints. This hero of Portuguese literature, the ornament of his country and of Europe, died, at last, in 1579, in the hospital at Lisbon, in the 62d year of his age. 15 years afterwards, a splendid monument was erected to his memory.—The best edition of the Lusiad (De Lusiacis, etc.) was published by Jose Maria de Souza Botelho (Paris, 1807, by Didot, small folio). The best French translation, with notes, is Les Lusiades, ou les Portugais, etc, by J. B. P. Millié (Paris, 1825, 2 vols.)

The works of C., besides the Lusiad, consist of sonnets, songs, odes, elegies, eclogues, redondillas, epigrams, satires, letters, and two comedies (Arminghon, after Plautus, and the Love of Philodemus).—(See the article Portuguese Language and Literature.) John Adamson's Memoirs of the Life and Writings of L. de Camoens (London, 1820, 2 vols.), of which the 2d volume contains a criticism on his works, are valuable. See, also, madame de Staël's article respecting him in the Biographie Universelle (6th vol.).

CAMPAGNA DI ROMA is a well-known plant, the dried, daisy-like flowers of which are frequently used in medicine. The principal use, for which camomile flowers are applied, is to excite vomiting, and promote the operation of emetics. They have likewise been substituted for Peruvian bark, in the case of intermittent fevers or agues, particularly on the continent of Europe, but not with much success. Both the leaves and flowers are employed in fomentations and poultices. They each, but particularly the flowers, have a powerful, though not unpleasant smell, and a bitter taste. They are administered as a substance, as a powder or electuary; in infusion, as tea; in decoction or extract, or in the form of an essential oil, obtained by distillation. So fragrant is the camomile plant, that the places where it grows wild, on open, gravelly commons, may easily be discovered by the somewhat strawberry-like perfume which is emitted by treading on them. This quality has sometimes induced the cultivation of camomile for a green walk in gardens.

Camp means generally, the place and order of tents or huts for soldiers in the field. In modern times, a difference is made between camp and bivouac, the former signifying the residence of an army resting in tents; the latter, the situation of one which dispenses with them, and remains either entirely in the open air, or, where time allows it, in huts built of branches, &c. (See Bivouac.) On the continent of Europe, tents are abolished, and the name of camp, therefore, is seldom used there at present—Camps, of course, are of very ancient origin, since almost all nations, in their infancy, lived as nomades, dwelling in tents; as is the case with many tribes in Asia and Africa at the present day, e. g., the Arabas. The Romans, probably, first carried the art of encampment to a high degree of perfection, on account of their many wars in distant and thinly settled regions, where their large armies found no cities to quarter in. Caesar and several other Roman authors give us much information on their way of constructing a camp, which they improved in strength and convenience, according to the time that they were stationed in it, and which, at the same time, the want of fortresses obliged them to make, in some cases, the points of their military operations. From such camps, it is well known, many cities originated, as Cologne on the Rhine, Treves, Cambridge, Bristol, and many others. It is a fact of much interest, that the military art, after so many changes in tactics, and in the principles of strategy, again resorts to something similar to these fortified camps of the ancients, as, in very recent times, it has been thought advisable, besides providing fortresses, properly so called, to strengthen certain large cities on the chief roads, partly in order to defend them against the first attack of the enemy, and to prevent his possessing himself easily of the important resources which they afford, but chiefly to give to retreating armies rallying points, able to furnish support to numerous soldiers. They are also points of assembly for the militia. Thus the Prussians fortified the large city of Cologne. Of all the European armies, the English are the only ones, we believe, who make use of tents, and therefore have camps, in the narrower sense of the word. It is to be observed, that camps have become lighter and simpler with the progress of the military art. The camps of the Turks, or other Asiatic nations, are extremely cumbersome, in comparison with the light bivouac of the Europeans, from which, at any moment, the whole army can rise in arms, prepared for battle.

CAMPAGNA DI ROMA; a territory in Italy, which comprehends the greater part of old Latium, about 70 miles wide and 230 long. We usually understand by it the desert plain which commences
near Ronciglione or Viterbo, and, including the Pontine marshes (q. v.), extends to Terracina. In the middle of this region lies, half deserted, the ancient capital of the world. The lakes of the C. are evidently craters of extinct volcanoes. Thus the lake Regillus, above Frascati, lies at the bottom of an inverted cone of masses from 40 to 100 feet high. The craters containing the lakes of Albano and Nemi, which lie from 400 to 500 feet higher than the lake Regillus, have a very regular conical form. The lake of Albano is also remarkable for its aqueduct, or emissarium, one of the most ancient and excellent works of the Romans, which discharges the waters of the lake through the mountains. It was cut through the lava, in a year, by the command of an oracle, during the siege of Veii, when the lake threatened to inundate even Rome. (See Albano.) It answers its original purpose even at the present day. There are, also, many sulphur springs here, particularly between Rome and Tivoli, where the water issues almost boiling from the earth, and forms the lake of Solfatara, which contains floating islands, consisting of a calcareous deposit, which collects round substances thrown into the water. The water of the river, which issues from this lake, has the same qualities, and was considered, by the ancients, as particularly salutary. Near the lake were the baths of Agrippa. The soil of the C. is, in general, dry, but very fertile in the lower parts, though its cultivation is much neglected. From Monterosi to the hills of Albano, a tree is seldom to be seen. All the efforts of the French to diminish the malignity of the malaria in these regions, by plantations, have been unsuccessful. There are no villages and towns in the C. Here and there you find single huts leaning against the ruins of old towers or temples, and patched up from their fragments. In the middle of the summer, when malignant fevers render a residence in the C. very dangerous, the unhappy inhabitants are obliged to take refuge in the neighboring towns, or in Rome, where they seek shelter under the porticoes of the churches and palaces. The great number of sick persons who fill the Roman hospitals during the months of July, August and September, are chiefly inhabitants of the country. Besides their huts, innumerable ruins of temples, circuses and monuments are scattered about C., particularly near the Via Appia; and long rows of aqueducts, some in ruins, some in a state of preservation, are overgrown with ivy and other plants. In the winter, flocks of sheep pasture in these solitudes; during the summer, they are driven up the Apennines. Herds of half-wild cattle remain during the whole year in the C. Their keepers, however, soon become a prey to the pestilence, or fall into a gradual decline. They are mostly natives of the mountains, and serve the proprietors of the herds for trifling wages. Bonastretten saw at Torre Paterno, very near Rome, a herd of several hundred cows, the proprietors of which did not consider it worth while to milk them, though milk is as dear in Rome as in other large cities. The herdsmen are mounted, and armed with long lances, with which they manage the cattle very skilfully. Scarcely a ninth part of the C. is cultivated; the rest is used for pasture. In the times of the ancient Romans, this dreary solitude exhibited a smiling picture of abundance and fertility. Cornfields, groves, villas, monuments, alternated with each other, and, according to the accounts of Strabo, Varro and Pliny, the air was remarkably healthy, with the exception of a few marshy tracts along the coasts. The corruption of the climate originated as early as the 6th century, according to tradition, after some great inundations of the Tiber; which, however, still take place, without increasing the evil. The unhealthy air, the famous aria cattiva, is most injurious in the dry and hot seasons. The most probable supposition is, that it originated after the devastations of the barbarians, when the waters became stagnant from the want of human industry. The greatest obstacle to the removal of the evil is the prejudices and indolence of the people. Thus the corruption is continually spreading, and has even attacked some quarters of Rome. Campaign generally denotes the season during which armies keep the field. It also means an extensive level country. Formerly, when war was not carried on with so much impetuosity as at present, campaigns lasted only during the warmer months; and, towards winter, the troops went into winter-quarters, when the officers of the opposing armies often met very amicably at balls and other entertainments; but, of late, armies have kept the field through the winter, till a decisive victory has been gained. Thus the allies, in the winter of 1813—14, followed the French over the Rhine; some batails
were fought in January and February, and the armies remained, for several months, without roof or tent, in the open air of a cold winter.

Campas, Jeanne Louise Henriette (originally Genet), born at Paris, Oct. 6, 1752, became reader to the daughters of Louis XV; gained the favor of the wife of the dauphin, afterwards the queen Marie Antoinette, who gave her in marriage to the son of her private secretary, M. Campan, and appointed her the first lady of the bed-chamber. Madame Campan, and appointed her the first lady of the bed-chamber. Madame C. gave her patroness many proofs of fidelity and attachment, and wished to follow her into the Temple after the 16th of Aug., 1794, which, however, Petion did not allow. After the fall of Robespierre, Madame C. established a boarding-school for the education of young ladies at St. Germain, which soon acquired a wide reputation. On this account, Napoleon appointed her the principal of an institution founded by him for the daughters of the officers of the legions of honor, at Ecouen, which was abolished in 1821, in consequence of ill treatment suffered by her in her situation. Her only son died in 1822. Of her Memoirs respecting the Private Life of the Queen Marie Antoinette, with Recollections of the Times of Louis XIV, XV, and XVI, in 4 vols. (translated into English, 1823), the fifth edition appeared at Paris, 1823. They contain interesting contributions to the history of the French revolution. Her Journal anecdota, also (Paris, 1821), is rich in piquant anecdotes of Napoleon, Alexander I, and others.

Campanella, Thomas, a native of Calabria, in Italy, famous for his talents and misfortunes. He displayed great quickness of parts when quite young, and, at the age of 15, entered into the order of the Dominicans. He studied theology and other branches of knowledge with assiduity, but was principally attracted by philosophy. The opinions of Aristotle, then generally taught in the schools, appeared to him unsatisfactory; and, in 1591, he published, at Naples, a work, entitled Philosophia Sensibilis demonstrata, intended to show the fallacy of the prevailing doctrines. This book procured him some admirers, and more enemies. He then went to Rome, and afterwards to Florence, where he was well received by the grand-duke Ferdinand; but, not obtaining some preface which he expected, he proceeded to Bologna, and then to Padua, where he gave lectures on philosophy. In 1598, he returned to Naples, and revisited, shortly after, Calabria, where, in the following year, he was arrested on a charge of conspiracy against the Spanish government, to which Naples was then subject. A scheme was imputed to him of having engaged the Turks to assist him in making himself master of Calabria. On this improbable and apparently unfounded accusation, he was imprisoned, and, after being repeatedly tortured, condemned to perpetual confinement. In this situation, he wrote many learned works, afterwards published. At length, in 1626, pope Urban VIII procured his removal to Rome, and, in 1629, gave him his liberty, and bestowed on him a pension. Dreading some further persecution from the Spaniards, he withdrew, in 1634, to France, where he was honorably received, and much esteemed by the learned men of that country. He died at Paris in 1639. C. was a man of more imagination than judgment, displaying his talents rather by undermining the systems of others than by establishing his own. He was a believer in astrology, one of the follies of the age; and some of his opinions were very eccentric. His works are extremely numerous.

Campania; the ancient name of a province of Italy, in the present kingdom of Naples, which, partly on account of its natural curiosities, including Vesuvius, the Pilegrian fields, the lake of Avernus, and partly for its remarkable fertility, was a favorite resort of the distinguished Romans, who built there magnificent country-houses. Cumæ, Puteoli, Naples, Herculaneum, Pompeii, Capreae, Saliernum and Capua, the principal cities of C., are names rich in classical associations. The Appian and Latin ways led into the interior of this charming province. Even now, C., or Terra di Lavoro, is the most beautiful and fruitful part of Italy; and no traveller can wish for a more delightful country than the fields of C., filled, in the month of April, with barley four feet high, and adorned with lofty poplars, which are connected by luxuriant vines, forming a canopy over the fields. "There," says Goethe, "it is worth while to till the ground."

Campanile; a detached tower, in some parts of Italy, erected for the purpose of containing bells. Several of them have deviated considerably from the perpen-
dicular, in consequence of their great height and narrowness of base. The campanile of Pisa, called Torre Pendente, or Hanging Tower, is the most remarkable of these. Its height is 150 feet, and it inclines nearly 13 feet from the perpendicular. The tower consists of eight stories, each of which is surrounded by columns. (See Bologna.)

Campbell, George, a distinguished Scotch divine, was born at Aberdeen, in 1709. He was educated at Marischal college, and afterwards articled to a writer of the signet at Edinburgh. In 1741, he relinquished the law, and studied divinity. In 1738, he was appointed principal of Marischal college. In 1783, he published his celebrated Dissertation on Miracles, in answer to the Essay on Miracles of Mr. Hume. This Dissertation was translated into the French and Dutch languages. In 1771, C. was chosen professor of divinity, and, in 1776, gave to the world his Philosophy of Rhetoric, which established his reputation as an accurate grammarian, a sound critic and a tasteful scholar. He also published occasional sermons. The last work which he lived to publish, was his Translation of the Gospels, with Preliminary Dissertations and Notes (2 vols. 4to.) He died in 1796. Besides the works already mentioned, his Lectures on Systematic Theology and the Pastoral Character (folio) have been printed since his death; as also his Lectures on the Ecclesiastical Character (2 vols. 8vo.), with his life prefixed.

Campbell, John, a native of Edinburgh, was, when very young, brought to England. His earliest productions are not certainly known; but, in 1738, he published the Military History of Prince Eugene and the Duke of Marlborough (2 vols. folio), which gained him so much reputation, that he was engaged, soon after, to assist in writing the ancient part of the Universal History, in 60 vols. Svo. In 1742, he published the first two volumes of the Lives of the Admirals and other British Seamen, the two last volumes of which appeared in 1744. In 1745 commenced the publication of the Biographia Britannica, one of the most important undertakings in which C. was engaged. The articles written by him, extending through four volumes of the work, are, both in point of style and matter, much superior to those of his coadjutors. They are liable, however, to one general censure, arising from the almost unvarying strain of panegyric, in which the writer indulges, and which has repeatedly subjected him to critical animadversion. In 1750, he published the Present State of Europe, containing much historical and political information. He was then employed on the modern part of the Universal History. His last and favorite work was a Political Survey of Great Britain (1774, 2 vols. 4to.) C. died Dec. 28, 1775.

Campbell, Thomas, was born at Glasgow, Scotland, Sept. 7, 1777, and early displayed a remarkable vivacity of imagination and vigor of mind. He entered the university of Glasgow at the early age of 12, and immediately distinguished himself by carrying off the academical prizes, particularly for translations from the Greek poets. Moral philosophy was one of his favorite pursuits; but he never applied himself to any professional studies. After passing 7 years at the university, he went to Edinburgh, and produced, at the age of 20, his principal poem, the Pleasures of Hope, which established his reputation in England. Harmony of versification, a polished and graceful diction, and an accurate finish, are united with an ardent poetical sensibility, in this youthful production. The passage concerning the partition and subjugation of Poland is full of the lyric fire, which afterwards burst forth so brilliantly in the Mariner's of England, the Battle of the Baltic, and Hohenlinden. In 1800, he visited the continent, and passed a year in Germany, where he became acquainted with the principal poets and literati. Here he witnessed the bloody fight of Hohenlinden, which inspired one of his finest lyric effusions. On leaving the continent, he visited London for the first time, and resided there till his marriage, in 1803, when he removed to Sydenham, where he resided about 20 years, receiving a pension of £290 from the crown. He has lately lived in London. In 1808 appeared his Annals of Great Britain, from the Accession of George III to the Peace of Amiens (3 vols. 8vo.) In 1809, he published a volume of poems containing Gertrude of Wyoming, a Pennsylvanian tale. It is full of pathos and beautiful simplicity. In O'Connor's Child he has touched a wilder string of passion and despair. His Theodric (1824) disappointed every body; and C. has, of late, done nothing worthy of his earlier productions. He is remarkable for his severe criticism of his own works, and this may account for his having written so little for the last 25 years. His poems have all been republished in America, where they
are very popular. His Specimens of British Poets, with biographical and critical Notices, and an Essay on English Poetry (1819, 7 vols. 8vo.), contain short extracts from the poets, from the time of Chaucer to that of Anstey. His Lectures on Poetry were written, originally, for the London Institution, and afterwards delivered in different cities of the kingdom, to his own profit and honor. They were printed, or at least a part of them, in the New Monthly Magazine. This magazine was originally projected by C. It appeared in 1821, and was edited by C. about four years, with much reputation. He was one of the early promoters of the London university, and, by his letter to Mr. Brougham, which first appeared in the Times, Feb. 9, 1825, and by his suggestions, which appeared in the New Monthly soon afterwards, materially furthered that great project. In 1827, he was elected rector of the university of Glasgow—an office without labor or emolument. His rival was Sir Walter Scott, and the election was made entirely on political grounds, C. representing the whig interest, to which he has always been attached.—C. is a very amiable and interesting man, of lively manners, and devoted entirely to literary pursuits. Besides his pension and the profits of his literary labors, he has a small inheritance, received from an uncle.

Campbell.—Campbell.

CAMPBELL, Joachim Heinrich, born in 1746, at Deensen, in the territory of Brunswick, studied theology at Helmstadt, in Hesse. In 1773, he was a chaplain in the Prussian service. He founded a private institution for education near Hamburg, but left it, on account of his health, in 1783, to professor Trapp. He died, Oct. 22, 1818, at the age of 72 years. His philosophical treaties, as well as the works which he composed for the instruction of youth, display a noble and philanthropic spirit. The services which he has rendered to the cause of education have been universally acknowledged. His style is pure and flowing, artless and unanimated. He possessed a rare faculty of accommodating himself to the youthful capacity. His endeavors to purify and enrich the German language were carried to excess. His writings for the instruction of childhood and youth were published together, at Brunswick, 1806–9, in 30 vols. 12mo., with copperplates. His Robinson the Younger has been translated into almost all the European languages, even into modern Greek. His Theophrast has also had a wide circulation. His Wörterbuch der Deutschen Sprache (Brunswick, 1807–11, 5 vols. 4to), is a production of much merit. His letters written (1759) from Paris, containing warm encomiums on the French revolution, are bold and eloquent, but marked with the enthusiastic exaggeration of the time, and drew upon him many serious and satirical attacks.

Campeachy, or Campeche; a seaport town of Mexico, in Yucatan, in a bay to which it gives name, on the west coast of the peninsula of Yucatan; 90 miles W. S. W. Merida; lon. 90° 31' W.; lat. 19° 51' N.; population, 6000. It is defended by a castle furnished with cannon, and has several times been taken from the Spaniards, and plundered. Its port is large, but shallow. The houses are well built of stone. The exportation of the wax of Yucatan constitutes one of the most lucrative branches of its trade. It has a manufacture of cotton cloth. It was, for a long time, the chief mart for logwood, of which great quantities grew in the neighborhood, before the English landed here, and cut it at the isthmus. At the time when it was taken by the Spaniards, it was said to have contained 6000 houses, and considerable monuments of Indian art. The bay of Campeachy lies on the south-west of the peninsula of Yucatan, and on the north of the province of Tabasco.

Campbell, Peter, born at Leyden, 1722, died at the Hague, April 7, 1789, was one of the most learned and acute physicians and anatomists of the 18th century. He distinguished himself in anatomy, surgery, obstetrics and medical jurisprudence, and also as a writer on the beautiful. He drew with great skill with the pen, painted in oil, modelled in wax, and knew how to handle the chisel of the sculptor. C. was the first who proved that the ape, of which the ancients have left anatomical descriptions, was a species of orang outang. His essays on lithotomy, &c., have spread light on these subjects. He was much devoted to comparative osteology, and believed, what the discoveries of Cuvier have confirmed, that there have really existed animals of which the species are at present extinct. His Dissertation on the natural Varieties, &c., is the first work which has thrown much light on the varieties of the human species, which the author distinguishes by the shape of the skull. His Treatise on the natural Differences of Features in Persons of various Countries and Ages, and on Beauty as exhibited in ancient Paintings and Engravings, followed by a
method of delineating various sorts of heads with accuracy, is intended to prove that the rules laid down by the most celebrated limners and painters are very defective. His general doctrine is, that the difference in form and cast of countenance proceeds from the facial angle. (q. v.) In his essay on the organs of speech, he perceived that nature has rendered the pronunciation of articulate sounds impossible, even to those which approach nearest to man, by lateral pouches connected with the windpipe. C. wrote in four languages, and received ten prizes from different academies. He received his education at Leyden, and travelled, and obtained the acquaintance of many of the most distinguished men of Europe, after which he was made professor of philosophy, medicine and surgery in Frankfort. He taught the same sciences, afterwards, in Amsterdam and Groningen.

Campe; an Italian, born at Gargnano, on Lake Garda, who has attracted much attention, in our time, by pretending to be capable of ascertaining, by his feelings, the places where metals and water exist under the ground. Many expectations were chiefly made with pendulums of sulphurous pyrites, which are said to vibrate if brought near to metals. Information on this subject is contained in Aretin's Neuer Literarischer Anzeiger (1807), beginning with No. 22. Gilbert also published, in 1808, interesting elucidations of these experiments. (See Rhabdomancy.)

Camphor is a white, resinous production of peculiar and powerful smell, not unlike that of rosemary, and is extracted from two or three kinds of trees of the bay tribe, that grow in the islands of the East Indies and China. Of these, the principal is the laurus camphora of Linnaeus. It is of considerable height, much branched, and has spear-shaped leaves, with nerves, of a pale-yellowish-green color on the upper side, and bluish-green beneath. The flowers are small, white, and stand on stalks which issue from the junction of the leaves and branches. Camphor is found in every part of the trees; in the interstices of the perpendicular fibers, and in the veins of the wood, in the crevices and knots, in the pith, and in the roots, which afford by far the greatest abundance. The method of extracting it consists in distilling with water in large iron pots, which serve as the body of the still, with earthen heads fitted to them, stuffed with straw, and provided with receivers. Most of the camphor becomes condensed in the solid form among the straw, and part comes over with the water. Its sublimation is performed in low, flat-bottomed glass vessels, placed in sand, and the camphor is obtained in a pure state, against the upper part, whence it is afterwards separated with a knife, after breaking the glass. Numerous other vegetables are found to yield camphor by distillation. They are thyme, rosemary, sage, elecampane, anemone and pusatilla. A smell of camphor is disengaged when the volatile oil of fennel is treated with acids; and a small quantity of camphor may be obtained from oil of turpentine by simple distillation, at a very gentle heat. Camphor has a bitterish, aromatic taste, is unctuous to the touch, and possesses a degree of toughness which prevents it from being pulverized with facility, unless a few drops of alcohol be added, when it is easily reduced to a powder. It floats on water, and is exceedingly volatile, being gradually dissipated in vapor if kept in open vessels. At 288° Fahr., it enters into fusion, and boils at 400° Fahr. It is insoluble in water, but is dissolved freely by alcohol, from which it is immediately precipitated, in milky clouds, on the addition of water. It is likewise soluble in the fixed and volatile oils, and in strong acetic acid. Sulphuric acid decomposes camphor, converting it into a substance like artificial tannin. With nitric acid, it yields a peculiar acid, called camphoric acid. This acid combines with alkalies, and forms peculiar salts, called camphorates. They have not hitherto been applied to any useful purpose. As an internal medicine, camphor has been frequently employed, in doses of from 5 to 20 grains, with much advantage, to procure sleep in mania, and to counteract gangrene. In large doses, it acts as a poison. Dissolved in acetic acid, with some essential oils, it forms the aromatic vinegar. It promotes the solution of copal; and, from the circumstance that its effluvia are very noxious to insects, it is much used to defend subjects of natural history from their ravages. In a crude state, camphor is formed into irregular lumps, of a yellowish-gray color, somewhat resembling nitre or bay-salt. It is imported into Europe in canisters, and the refining of it was long kept a secret by the Venetians. The Dutch have since
performed this work; and large quantities of camphor are now refined by some of the English and American chemists.—For carpenters' work the wood of the camphor-tree is much used. It is light and durable, and, in consequence of long retaining its aromatic smell, is not liable to be injured by insects.—Plants of the camphor and cinnamon trees were captured by admiral Rodney, in 1782, and afterwards carried to Jamaica, and propagated there. The camphor-tree which grows very abundantly in the western parts of Japan, is a different species from that found in the islands of Sumatra and Borneo, with which we are principally acquainted.—Camphor was formerly in great repute as a medicine, but at present its virtues are less highly rated. It is a cordial and stimulant of a decidedly heatable character, and is, therefore, improper in all fevers, unless the system is very low and weak. In such cases, if combined with nitre and other cooling articles, it is sometimes an excellent diaphoretic. But, in fevers in general, it is an article rather to be avoided. It was once, however, and is now, in some parts of Europe, thought to be among the best medicines in fever of almost all sorts; but it is an article that could well be dispensed with in common practice. As a domestic cordial and medicine, it is, perhaps, more used than any other, being still, in families, a panacea for all ailments of the smaller sort.

**Camphyron, Jean Galbert de;** a dramatist, poet, contemporary with Racine; born 1656, at Toulouse, died 1723, at the same place. His tragedies, at the time of their appearance, met with extraordinary applause. At present, however, they are so, but they are feeble in conception and execution.
find his explanation of this subject in his 'Mémories' (4th vol.) dicté au Compte de Montholon (London, 1824, p. 242). The directory was discontented with the treaty. Later occurrences gave occasion to a second coalition against France, in 1798; upon which France declared war against the king of Hungary and Bohemia, and the grand-duke of Tuscany, March 12, 1799. Daniel was removed from the council, and retired.

CAMPOMANES (don Pedro Rodriguez) was a celebrated Spanish minister, whose learning, and profound and elevated views in political economy, place him among the first writers of his country, was born early in the 18th century. He was chosen a member of the academy of belles-lettres at Paris, and, on the proposal of Franklin, of the philosophical society of Philadelphia. C. raised himself solely by his own merits. His reputation as the most learned lawyer in Spain obtained him, in 1763, the appointment of fiscal to the royal council of Castile, by whose order he published, 1768, an Analysis of the Letters of the Bishop of Cuenca, in which that prelate asserted that the immunities and revenues of the Spanish church were attacked. He had already published a Treatise on Ecclesiastical Mortmain and revenues of the Spanish church were attacked. He had already published a Treatise on Ecclesiastical Mortmain (1755), which was translated into Italian, by order of the senate of Venice. He assisted Aranda in the expulsion of the Jesuits from Spain, and labored to introduce a more equal distribution of the taxes, to diminish the number of mendicants, &c. In 1788, on the accession of Charles IV, C. was appointed president of the council of Castile and minister of state. With the rise of the count Floridablanca, the favor of C. began to decline. He was removed from the council, and retired in disgrace. His death took place early in the 19th century. Among his numerous works are, Dissertation on the Templars (1747); Commercial Antiquity of Carthage (1756), in which he controverts the opinions of Diodor, on the Periplus of Hanno; Discurso sobre el Fomento de la Industria popular (8vo., 1774); and Discurso Sobre el Fomento de la Industria popular (8vo., 1775); and a Sequel to the latter work (4 vols., 8vo., 1775—77), which treat of the decline of the decline of the industry. As a statesman and a publicist, the true principles of commerce. He was chosen a member of the academy of belles-lettres at Paris, and, on the proposal of Franklin, of the philosophical society of Philadelphia. C. raised himself solely by his own merits.

CAMPUS MARTIUS (called also, by way of eminence, Campus, merely) was a large place in the suburbs of ancient Rome, and is bounded by the mons Capitolinus and Picinus, surrounded, in a great measure, by the Tiber. Its name was derived from a temple of Mars, situated in it. The first meetings of the people (comitia centuriae) were held here, and the first triumvirate was celebrated in this place. (Liv. i. 24.) Tarquin the Proud moved it with grain, but Brutus and Collatini restored it to the people, who destroyed the grain, appropriated it anew to its former destination, and made it, at the same time, a place of exercise and gymnastic sports for the Roman youth. The bodies of the most distinguished men were burned there. Situated so near the city, it soon became covered with splendid buildings, of which the finest was the circus Flaminius. It is now filled with memorable ruins, all of which is one of the most interesting parts of Rome.

CAMUCINI, Vicenzo, is considered the best among the living historical painters of Italy. He was born at Rome, and is a follower of the French school, from the hardness and exaggeration of which the feeling of the beautiful, natural to an Italian, has secured him. A. W. Schlegel says of him, "He is correct, in a better sense of the word, to a very high degree. His drawing is accurate, his coloring vigorous and bright without harshness, his drapery well studied, the arrangement of his groups happy, as is his composition in general; yet he seems wanting in invention." He is a member of the academy of San Luca, and painted for St. Peter's his Christ with the subduing Thomas. He possesses a large collection of pictures and casts, and is celebrated for his success in restoring old pictures.

CANAA. (See Palestine.)

Canada; a country in North America, belonging to Great Britain; divided, in 1701, into the provinces of Upper and Lower Canada.

Lower Canada is bounded N. by New Brunswick, E. by New Britain, S. by St. Lawrence, S. E. and S. by New Hampshire, Vermont and New York, and the states of Maine, New Hampshire, Vermont and New York, and S. W. and W. by Upper Canada. The Ottawa river forms a great part of the boundary between Upper and Lower Canada. Above its source, the line runs due north to Hudson's bay, about lon. 81° W., lat. 55°—52° N. The inhabitants, in 1763, were 70,000; in 1814, 335,000, of whom 275,000 were native or
Canadian population was 427,4
It is divided
devoted to amusement, of which the most
a mixture of English, Scotch, Irish, and
French Canadians, the remainder being
emigrants from the U. States. In 1823,
Rivers, Quebec, Gaspe and St. Francis,
subdivided, in 1792, into 21
counties. The minor divisions are, 1.

rievs are the Ottawa or Ottawas, Richelieu
or Sorel, St. Francis, Chandiere, Saguenay,
Sainte Maure, Black, Busted, Betsina-
mires, Huron and Rupert. The prin-
cipal lakes are St. John's, St. Peter's, Abbi-
tuibe, Mistassin and Manicouagan. Lower
Canada is intersected by ridges of moun-
tains, which generally extend from the
cost into the interior, with intervening
valleys of a fertile and pleasant appearance.
The valley through which the St. Law-
rence flows is enclosed on each side by
mountains. It is mostly level, of a very rich
soil, and is thinly settled. The country
lying upwards of 50 miles north of the
St. Lawrence has been but little explored,
and is only known to be covered with
immense forests. The productions are
grazing, wheat, peas, rye, Indian corn, bar-
ley, and culinary vegetables. The commerce
has been progressively increasing,
since the country came into the posses-
sion of Great Britain. The exports, in
1793, amounted to only £162,000; in
1805, to £1,150,000. These consist chiefly
of lumber, furs, grain, and pot and
pearl ashes; the imports, of wines, rum,
sugar, molasses, coffee, tobacco, salt, coals,
and British manufactures, amounting, in
1805, to £610,000.

Upper Canada is bounded E. and S. E.
by Lower Canada, S. by the
States. It is divided into
districts, viz., Eastern, Johnstown, Midland,
Newcastle, Home, Niagara, Leoden, Western,
Gore, Bathurst and Ottawa. These are
subdivided into counties and townships.
The townships contain, on an average,
about 61,600 acres each; total, 9,631,400
acres. Of these, about 3,000,000 acres
are granted in free and common soccage,
2,768,828 reserved for the crown and cler-
gy, and 3,924,572 still remain to be grant-
ed. The country which, in 1815, had
been laid out and surveyed, extends about
570 miles along the north shore of the
river St. Lawrence, lakes Ontario and
Erie, up to lake St. Clair, varying from
40 to 50 miles in breadth. The soil con-
sists, generally, of a fine dark loam, mixed
with a rich vegetable mould. The whole

vol. ii. 38
country presents a great degree of sameness, an almost uniform level, rising only a few feet above the banks of the St. Lawrence, and finely intersected, in every direction, by numerous streams, some of which are navigable. The productions are grass, wheat, Indian corn, flax, hops, &c. The climate is healthy, and considerably milder than in Lower Canada. "Farther north, the country is covered with immense forests, but is little known, except to the Indians. The principal rivers are the St. Lawrence, Ottawa, Niagara, Trent, Ouse, Redstone and Thames. One half of the lakes Ontario, Erie, St. Clair, Huron, Superior, and lake of the Woods, is included in Upper Canada. There are, besides, lakes Nipissing, Simcoe, St. Joseph's, &c. The principal towns are York, the capital, Kingston, Niagara, Brockville, Queenstown and Chippeway. The Methodists are the most numerous religious denomination. There are also Episcopalians, Presbyterians, Baptists, Quakers and Mennonists. The executive power is vested in a lieutenant-governor and a council of 7 members, all appointed by the king. The legislative power is vested in a council, the members of which are appointed, by the king, and a house of assembly, or provincial parliament, consisting of upwards of 40 members, returned from the counties.

The French appear to have availed themselves of the information derived from Cabot's voyage to North America, before any other nation. We hear of their fishing for cod on the banks of Newfoundland very early in the 16th century. About 1568, and Heney, a Frenchman, is said to have drawn a map of the gulf of St. Lawrence, and, two years afterwards, Aubert, a master of a vessel belonging to Dieppe, carried over to France some of the natives of C. Several years, however, passed away before public attention was again turned to it. In 1524, Francis I sent four ships, under Verazani, a Florentine, to prosecute discoveries in this country. The particulars of his first expedition are not known. He returned to France, and, the next year, undertook a second, which appears to have produced no beneficial result. On a third voyage, he, and all his company perished. In April, 1534, James Cartier, of St. Maloies, sailed, by commission from the king, with two small ships and 122 men, and, May 10, came in sight of Newfoundland; but the earth was covered with snow, and great quantities of ice were about the shore. Having sailed to the 51st degree of latitude, in the vain hope of passing to China, he returned to France without making a settlement. In the following year, he sailed a second time from France, with three ships, proceeded up the St. Lawrence 300 leagues, to a great and swift fall; built a fort, and wintered in the country. The French were well received by the natives, but were soon infected with the scurvy, of which 25 of their number died. The next spring, Cartier returned, with the remains of his crew, to France. Between 1540 and 1541, a nobleman of Picardy, de la Roque, lord of Roherval, made an attempt to found a colony in C., but perished on his second voyage, with a great number of adventurers. At last, Henry IV appointed the marquis de la Roche lieutenant-general of C. and the neighboring countries. In 1588, he landed on the isle of Sable, which he absurdly imagined to be a suitable place for the establishment of a colony, though it was without any port, and produced no other crop than briers. Here he left about 40 malefactors, the gleanings of the French jails. After cruising, for some time, on the coast of Nova Scotia, without being able to relieve these unfortunate settlers, he returned to France. His colony must have perished, had not a French ship been wrecked on the island, from which a few sheep were driven ashore. With the boards of the ship they erected huts, and, while the sheep lasted, they lived upon them, feeding afterwards upon fish. Their clothes wearing out, they made garments of seal-skins, and, in this miserable condition, spent seven years. In 1598, Henry IV ordered them to be brought home to France, and, on seeing their miserable appearance, was so much moved, that he forgave them their offences, and presented each with 50 crowns. In 1600, one Chauvin, a commander in the French navy, made a voyage to C., from which he returned with a profitable cargo of furs. The public now began to turn more attention to this country. An armament was equipped, and the command given to Pontgrain. He sailed in 1603. In 1608, the city of Quebec was founded, and from this period the establishment of a permanent French colony commenced. The settlement was, for many years, in a feeble condition, and was often in danger of being totally exterminated by the Indians. The French, however, concluded a treaty of peace with them, and, finally, by their address, obtained entire control over them, to the great inconven-
the treaty of 1763. In 1775, C. was invaded by a body of provincial troops, under general Montgomery. Montreal was taken, and a gallant but unsuccessful attempt was made on Quebec, in which the brave Montgomery was killed. No other attempt was made on this province during the revolutionary war. We have few records of Canadian history from this period until the late war between the U. States and England. Upper C. then became the theatre of a sanguinary contest.

The American troops were unable, however, to make any permanent conquests, and the province has since remained subject to Great Britain. In 1825, the restrictions upon its commerce, under which it had labored, with the other colonies of Great Britain, were principally removed, and its trade has since greatly increased.

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Canande. A canal, in navigation, is an artificial channel for transportation by water. The first inquiry in the project of such a work, accordingly, relates to the amount of transportation that will be accommodated by the route proposed, at some given rate of tolls (for the quantity will be in some degree influenced by that rate). If the project be a mere speculation, or investment of capital by individuals for the sake of income, its expediency will be determined by the net amount of annual tolls it will probably yield; which ought, in this view of the matter, to be equal to the ordinary rate of interest. But the general utility or public expediency of a project of this sort is not determined wholly by this mode of calculation; for, in this view, we must look at the indirect advantages, such as the increased value of lands on the borders of the canal, the increased profits of other works connected with or affected by the one proposed; as in the case of the smaller branches of internal navigation in England, many of which, as will be seen by referring to the subjoined list, are not very productive investments, but doubtless contribute to the large income of the great lines of transportation between the principal towns, as London and Liverpool, by in-

The next year, an English expedition, under sir David Keith, took possession of Quebec; but it was surrendered again to the French, by the treaty of St. Germain's. In 1663, the charter of the company of merchants was taken away, and new privileges granted, for 40 years, to the West India Company. From this period, C. appears to have remained in a state of tranquillity, until 1660, when a bold attempt was made by the people of New England to reconquer it for the crown of England. An armament was equipped for this service, and the command given to sir William Phips. The effective men, to the number of between 12 and 1300, landed a little below the town of Quebec, and were fired on from the woods by the French and Indians. Having found the place too strong for them, they reembarked with precipitation, and returned to Boston. The attempt was renewed, in 1711, by a powerful force of British veteran troops, assisted by about 4000 provincials and Indians. Such were the difficulties and losses, however, experienced in passing up the river, that the plan was abandoned by the British officers, to the great mortification of the provincial troops. C. continued in the occupation of the French, without any further molestation, until the breaking out of the war between France and England, in 1756. Great preparations were then made, on both sides, for attack and defence. In 1759, the British government formed the project of attempting the conquest of C., by three different but simultaneous attacks. One division of the army was to ascend the St. Lawrence, and lay siege to Quebec. The central and main body was to be conducted against Ticonderoga and Crown Point. The third was to proceed against Niagara, and, after the reduction of that place, to descend the St. Lawrence to Montreal. The division which ascended the St. Lawrence was commanded by general Wolfe, and was defeated in its first operations by the French. The English, however, finally obtained possession of Quebec, after a gallant resistance on the part of the French, whose brave commander, Montcalm, had been killed in the action. The English general Wolfe was also killed. Soon afterwards, the whole province of C. was subdued by the English forces, and was confirmed to Great Britain by
CanaLs of Egypt.

Egypt has been celebrated for its canals from the earliest periods of history. The principal are, the canal of Alexandria, between that city and Rosetta and the Nile; that of Jessuf, on the western bank of the Nile, and parallel to it; and that of the Red sea and Nile, across the isthmus of Suez. The existence of this last, though a subject heretofore of some discussion, is now established beyond doubt. It was begun by Nedim, son of Psmametis, about 616 B.C., and the work was continued by Darius Hystaspes, but was afterwards abandoned, from fear of inundating a great part of Egypt, which is supposed to be lower than the surface of the Red sea. The work was, however, resumed, and completed near a century afterwards, about 521 years before the Christian era, by Ptolemy II; but a current from the Red sea upon Egypt was prevented; it seems, by a barrier or bank across the canal; or a part of the route may have been left not excavated. This dam, if narrow, might have been passed by boats on inclined planes, after the Chinese method, or otherwise; but it seems to be more probable, that boats did not pass between the canal and the Red sea, but that the cargoes were carried by land across the intervening barrier, or portion of ground not excavated, and reshipped. Herodotus says this canal was of 4 days' navigation, and wide enough to admit of 4 vessels to pass abreast. Strabo says it was 100 cubits wide, and of sufficient depth for large vessels. The breadth would probably vary very much, as does that of the canal of Alexandria; for if it was made, for any considerable part of the distance, by embanking, instead of excavating, additional breadth might be given without increasing the expense of construction; and, if navigated by sailing-vessels, like the canal of Alexandria, the additional breadth would be convenient, though not maintained through the whole route. — The canal of Jessuf leaves the Rosetta outlet of the Nile, near Rena­mench, passes a little south of Demanhour (the ancient Hermopolis parva), and thence by the north-east shore of the lake Maret­tis, to Alexandria. Two branches pass off in a north-west direction, and one in a southwardly, which communicates with the lake Mareotis. This canal is navigated by sailing-vessels, being, in most parts, of a convenient breadth for this purpose, though, at its entrance from the Nile by its new channel, it is only 13/2 feet wide. The old entrance, a little north of the new, is not used, on account of the height of the banks, which intercept the
wind. Afterwards, at the village of Leme­

dias, it spreads to the breadth of about 55

yards, and keeps this breadth for 2 leagues, where the banks are 13 feet

above the bottom of the canal, and 10 above the surface of the ground. Passing

over 2 leagues more towards Alexandria to Gabel, the breadth is contracted to 22½

yards. It continues about this breadth for 4 leagues, and is very regular. Be­

yond Toloba, it widens, varying in the

first half-leagues from 109 to 273 yards in

breadth. Near Beda, it is 55 yards wide,

and the banks 23 feet high. Passing on

towards Alexandria, the country sinks by

degrees, until the bottom of the canal is

on a level with the adjacent territory, and

then rises above it, the canal being here

formed by embankments; but, for a league

before arriving at Alexandria, the ground

rises so much so that the canal is here formed

by an excavation in the ground. It passes

very near the lake Aboukir, on the left, in

the course we have been following, and is

separated from it by a distance of about 20

feet in thickness.—The water must

rise 13 feet above the lowest state of the

Nile to enter the Alexandria canal; and,
at high water in the Nile, the water in

the canal is about 2 feet deep on an

average. The distance, in a straight line,

from Rhamench to Alexandria, is about

15 leagues, but by the course of the canal,

20. The navigation of this canal con­
tinues only about 20 or 25 days in the

year, during the highest water of the Nile.
The French, when in Egypt, were enabled

to navigate this canal for six weeks by

clearing away about 18 inches of mud

near Rhamench, at the eastern extremity.

This canal, which now passes through

ruins and deserts, and is navigable for

only a few days of the year, was, as late as

the 14th century, bordered by a wealthy

and populous territory, and, in the time

of the Roman and Greek empires, was

the channel of an extensive transportation.

Canals of China. The Chinese seem

to have a more extensive inland canal

navigation than any other nation, if not

greater than that of all other nations.

The general course of the rivers is from

west to east, the principal of which are

the Yang-tsé, or Kiang-keo, to the south,

the course of which is said to be 2000

miles, and its breadth 24 miles at a dis­

tance of 100 miles from its mouth; and

the Yellow river, to the northward, which

is represented to be still longer. These

two rivers empty into the sea, within 100

miles of each other, though they are more

than 1000 miles apart in the interior of the
country. The artificial channels of naviga­
tion pass in a northerly and southerly direc­
tion across the territory lying between

the natural streams, thus making lines of

communication between these principal

rivers and their various branches, which

form the natural channels of transportation

in the easterly and westerly direction.

As these canals pass over the summits of

the intermediate territories between the
great streams, the different parts of the

canals must be upon different levels, and

there must, accordingly, be some means

for boats to pass from one level to anoth­
er, which they do mainly by means of

inclined planes and rollers, over which

they are drawn by men. The ascent and
descent, at some of these planes, is 15 feet.
The banks of the canals are, in many

instances, lined with freestone, and con­
tain sluices to let the water off for irrigat­
ing the country and supplying the towns;

and in many parts, also, they are beautifully

ornamented with trees. The barque in

which Le Compte passed from Nampo on

a canal, was 70 feet long and 10 feet

bread. The management, repairs and

extension of the canals is a very impor­
tant branch of the internal economy of

the empire, and the description and his­
tory of these works is said to occupy 40

volumes; which does not, however, give

us a very definite idea of the extent of

these records, as we are not told the size

of these volumes. Some of the most ex­
tensive of these works have been in op­
eration about 2000 years, having been

completed 80 years before the Christian

cal; and, about A. D. 665, it is said there

were completed in the empire 1000

leagues of canal.—The Imperial

canal, and the continuation of the line of trans­

portation between Pekin and Canton, of

which that forms a part, is most frequent­
ly spoken of, though the distance of the whole

route is variously stated. Maitre­

Brum, in his Geography, states it at 1620

miles, but it is stated by others at 920.

The navigation over this route occupies

about 3 months. The part of this line

called the Imperial canal is said to be

about 500 miles in length from the vicinity

of Pekin to the Yellow river, which it

meets about 25 leagues from the sea, where

the river is about a mile wide and 9 or 10

feet deep. This canal is called the Imperial,

from its being navigated only by the em­
peror's boats, which Le Compte estimates

at 1000, of 100 tons burthen each. Be­
tween the Yellow river and Canton, the

navigation is interrupted, for about 30
miles, by a mountainous district, causing a
portage of that distance.

**Canals of Italy.** In ancient Italy, besides the **canal of the Pontine marshes**, intended as a drain, and used also for navigation, the region about the mouths of the Po was intersected by the **fossa Augusti, fossa Philistina**, and numerous other canals. It was in Italy that the great improvement, in modern canals, over the fossa Philistina, was first introduced, in 1481, by the construction of locks and sluices to pass boats from one level to another. It was the invention of locks and sluices, by Leonardo da Vinci, the famous painter, who was also celebrated as an engineer. Inland navigation became so important, that the Italian governments paid great attention to it, and enacted many regulations on the subject, and numerous treatises were published on the construction of locks and the art of making and managing canals. The following are some of the principal canals of modern Italy. The **Naviglio Grande**, between Milan and the river Tesino, 15 miles in length, 130 French feet broad at the surface, and 46 at the bottom. It was extended to Milan in 1537, and enlarged, in 1283, with a branch of about 11 miles in length, from Albate southward. The **Morgana canal** branches off from the right bank of the Adda, near Concesa (ancient Tricza); is 24 miles in length and 33 feet in breadth, and is raised, in some places, by walls and embankments, 110 feet above the level of the river. In 1497, 5 locks were introduced into this canal. The **great canal of Tesino** terminates at Milan. The **Morgana canal** is drawn also from the river Adige, near Cassano, and re-enters the river at Castiglione, 40 miles distant.—In **Piedmont** are the **Naviglio d'Idea**, 35 miles in length, uniting the Dora Baltea and the Sesia, with a branch of 13 miles, to the Gardena river; and a canal of 27 miles from Dora Baltea, a little above the falls of the Po, which, passing Trino, unites with the Po 4 miles below Casal. These 2 canals are parallel to the Po, and substitute for it. There are 3 other short canals in this territory.—In the **duchy of Mantua** is the **fossa Pizzotta**, 15 miles in length, from the Mincio to the Tartaro, and the **canal of St. George**, 7 miles long, branching to the lake of Mantua; also the **Montauro**, 8 miles from the same lake to the Po, at Borgo Fute; the **fosa Montauro**, 5 miles from Ozema to the canal Montanaro; and the **fossa Fossero**, from the Mincio, 7 miles.—In the **duchy of Modena** is a canal 16 miles in length, from Secchia by the canal Augusti, fossa Philistina, and numerous other canals. It was in Italy that the great improvement, in modern canals, over the fossa Philistina, was first introduced, in 1481, by the construction of locks and sluices to pass boats from one level to another. It was the invention of locks and sluices, by Leonardo da Vinci, the famous painter, who was also celebrated as an engineer. Inland navigation became so important, that the Italian governments paid great attention to it, and enacted many regulations on the subject, and numerous treatises were published on the construction of locks and the art of making and managing canals. The following are some of the principal canals of modern Italy. The **Naviglio Grande**, between Milan and the river Tesino, 15 miles in length, 130 French feet broad at the surface, and 46 at the bottom. It was extended to Milan in 1537, and enlarged, in 1283, with a branch of about 11 miles in length, from Albate southward. The **Morgana canal** branches off from the right bank of the Adda, near Concesa (ancient Tricza); is 24 miles in length and 33 feet in breadth, and is raised, in some places, by walls and embankments, 110 feet above the level of the river. In 1497, 5 locks were introduced into this canal. The **great canal of Tesino** terminates at Milan. 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long, the descent 336 feet, the number of locks 25, breadth 18 feet, and depth 4 feet 4 inches.—The *Kinderd canal and the Gotha canal*, intended to open a communication between the lake Wener and the Baltic, have been commenced under the superintendence of the English engineer Mr. Telford.—The project of constructing works, by which to pass these rapids, was long contemplated, and finally accomplished in 1800. These rapids interrupted the navigation of the Gotha for about two miles; and the difficulty of making a canal past them was owing to the banks being bold and rocky, as is usual at falls of such extent. They are now passed by nine locks, mostly excavated out of solid rock. This is considered a gigantic work, and was executed by a private company, to their own emolument, as well as the public benefit.

**Canals of Denmark.** The principal canal in this country is that of Keil, which commences about 3 miles north of Keil, and passes 20½ miles across the duchy of Holstein, on the river Eydel, which, running by Rendsburg, falls into the German ocean at Janningen. The Keil canal thus opens a communication between the two seas. It was begun in 1777, and completed in 1785; is 100 feet broad at the top, 57 at the bottom, and the least depth of water is 10 feet. The descent from the summit towards the Baltic is 25½ feet, and towards the German ocean 23 feet. It has 6 locks.

**Canal of Holland.** This country, it is well known, is intersected, in all directions, by canals, which serve for navigation in summer, and roads of ice in winter. The water, in many of these canals, is above that of the surrounding country; the lands of which are drained by pumping the water up into the canals; for which purpose numerous windmills are erected about the country, and kept in operation. (For the great ship canal from Amsterdam to Nieuwe Diep, see Amsterdam.)

**Canals of Germany.** The improvement of inland navigation in Germany has been obstructed by the division of the territory into numerous small jurisdictions, which are, in many respects, independent of each other. The canal between Vienna and Neustadt is 40 miles in length; and that of Francis, completed in 1802, between the Damme and Jeysee, is of the same length, and has 3 locks.—In Prussia are the canals of Stecknitz, Planer, Potsdam, Finow, Muhlrose, Frederic William, and the Bromberg. This last was constructed under Frederic the Great, by the engineer Brekenhaufl. It is 16 miles in length, has a descent of 67 feet, and 9 locks. (See *Possa Carolina*.)

**Canals of Spain.** Spain has done almost nothing towards improving its internal navigation. Some canals have been projected, but only a part of the *Arragon canal* has been completed, consisting of two pieces of canal, both commencing at Navarre. Though this partial execution of the projected navigation has had a sensible effect in promoting the populousness, fertility and wealth of the neighboring territory, the work stands still; and there seems to be little prospect of the completion of the project.

**Canals of France.** The canals of France, next to those of Great Britain, are the most important in Europe, in respect to their extent and the difficulties overcome in their construction. The whole length of canal navigation in France is about 500 miles, or about one third part of that of Great Britain.—*Canal of Briare.* The first important work of this kind, constructed in France, was the canal of Briare, called, also, that of the Loire and Seine, because its object was to connect these two rivers. It was 37 years in execution, being begun in 1605, during the reign of Henry IV, and completed in 1642. It is 34½ miles in length. From the Loire, about a mile from Briare, it ascends along the river Frezee, by Ouzoys and Rogny, where are 7 locks; then by Chailis and Montargis, and, near Ceppy, meets the river Loing, which falls into the Seine. The locks of this canal, 40 or 42 in number, were the first executed in France. They vary from 124 to 164 feet in length, and from 5 feet 4 inches to more than 33 feet in breadth, and are, according to some authorities, 14 feet 5 inches, or, according to others, 15½ feet, in breadth. The bottom of the canal is 25½ feet wide. It is supplied with water principally by lakes; one of the feeders, that of Privé, is 12 miles in length. The cost of this canal is estimated at 20,000,000 francs, or about $3,700,000, which, considering the difference in the value of money, is nearly equal to that of the Erie canal of New York. It is important for the supply of provisions to Paris.—The *canal du Midi, or Languedoc canal* makes

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**Canals of Sweden, Denmark, Holland, Germany, Spain.**

- **Canals of Sweden**: The canal of Stecknitz, Planer, Potsdam, Finow, Muhlrose, Frederic William, and the Bromberg are notable canals in Sweden. The Bromberg canal, constructed under Frederic the Great, is 16 miles long, with a 67-foot descent and 9 locks.

- **Canals of Denmark**: The principal canal is the Keil canal, beginning about 3 miles north of Keil and completing 20½ miles across the duchy of Holstein on the Eydel river, falling into the German ocean at Janningen. It is 100 feet wide with a minimum depth of 10 feet and has 6 locks.

- **Canals of Holland**: The Kinderd canal and Gotha canal are examples of canals in Holland. The Gotha canal was long contemplated and finally completed in 1800, passing 20½ miles across Holstein.

- **Canals of Germany**: The canals in Germany have been obstructed by the division of territory into small jurisdictions. Examples include the canal between Vienna and Neustadt and the Francis canal between Damme and Jeysee.

- **Canals of Spain**: Spain has done little towards improving its internal navigation. A significant canal is the Arragon canal, though its partial execution has had a positive effect.

- **Canals of France**: France's canals are extensive, with a total length of about 500 miles. The Briare canal, connecting the Loire and Seine rivers, is notable for being one of the first canals constructed in France. It varies in length from 124 to 164 feet and has locks that are 14 feet 5 inches wide.
a communication between the Mediterranean at the city of Céte, and the Atlantic ocean at the mouth of the Garonne, passing through the province of Languedoc, and is supplied by the rivers Garonne and Gironde, and their tributaries. It was undertaken in 1684, 22 years after that of Briare was completed, and finished in 1689; being 148 English miles in length, from the coast of the Mediterranean to Toulouse, where it meets the Garonne; 104 feet wide at the surface of the water, and 34 or 35 feet at the bottom; rising, at the summit, 200 metres, or about 650 feet, above tide-water, and having 114 locks, varying in lift from 4 to 12 feet, and navigated by boats 55 feet long, and from 17 to 19 broad, drawing 5 feet 4 inches of water, and of 100 tons burden. The reservoir of St. Ferol is situated at the summit-level, where a body of water more than five French leagues in length is accumulated, for the supply of the canal, from the streams falling from the neighboring mountains. This reservoir and the basins at Castetsaurda cover 305 acres. The canal passes under a mountain at Beziers, by a tunnel of 720 feet in length, lined throughout with freestone—a kind of construction novel at the time when the canal was made, though now common. The canal is crossed by 92 road-bridges, and has 55 aqueduct bridges. It was completed under Louis XIV, under the direction of François Andreossi, as engineer. It is estimated to have cost 33,000,000 francs, or about $6,160,000; in comparing which with the cost of similar works in Great Britain and the U.S.A., an allowance must, as above suggested, be made for the difference in the value of money, the same nominal cost, in France, being a much greater actual cost, in this comparison.—The canal of Orleans was the next in order of time, having been begun in 1675, and completed in 1692, 12 years after that of Languedoc. It branches from the Loire, near to Orleans, 36 miles below the place where the canal of Briare meets that river, and joins the canal of Briare at Moutargis, being 45 miles long. One object of its construction was to save the difficult navigation on the Loire, between Orleans and the junction of the canal of Briare with that river, and to open a shorter route of communication between the Lower Loire and Paris. It has 28 locks, varying from 135 to 177½ feet in length, and of lifts from 5 feet 4 inches to 13 feet 7 inches. From the Loire to the summit, the ascent is 98 feet 2 inches. The breadth is from 25 feet 7 inches to 32 feet, at the surface of the water, and the depth from 41 feet, when full, to 2 feet, when lowest. The boats are from 90 to 102 feet long, and 13 feet 10 inches broad. The expense of its construction is stated at 8,000,000 francs, or about $1,300,000.—The canal of Loing is a continuation of the navigation of that of Orleans, and the northern part of that of Briare, commencing from the northern extremity of that of Briare, and extending to the river Seine, terminating in the neighborhood of Fontainebleau. It was completed in 1723, is 33 miles long, 44 feet broad at the surface, 34 at the bottom, and from 4 to 5 feet deep. The towing path, on each side, is 6 feet 5 inches broad, outside of which, on each side, is an embankment, like the breiz on the Mississippi, or the dykes of Holland, 3 feet high, 19 feet broad at the base, and 12 feet 9 inches at the top, to prevent the waters from overflowing during floods. The whole descent is 133 feet 3 inches, divided among 21 locks, which vary in lift from 4 to 7 feet, and in breadth from 15½ to 16. The cost is stated at 2,500,000 francs, or about $460,000. It was constructed about the same time with the canal of Orleans.—The canal of the centre, called, also, that of Charente, and likewise a branch of the "Grand Navigations," completed in 1791, leaves the Loire at Dijon, follows the banks of the Aube, then the left bank of the Bourbounne, and passes by Parco, Genelard, Art and Blauzez, to the lakes of Montschan and Long-jeudi, which form the summit-level, the rise being 240 feet, by 30 locks, in 6300 metres. The summit-level is a distance of 3040 metres, whence the canal descends, by the river Dheune, to St. Julian, where it crosses that river, and passes along the right bank by St. Benat, St. Leger and St. Gilles, to Chagny, leaves the valley of the Dheune, and crosses towards the river Haute, which it follows to its junction with the Saone at Chalais, the descent from the summit being 400 feet by 50 locks, in a distance of 47,000 metres; the whole length of the canal being about 71 miles, the breadth, at the surface of the water, 45 feet, at the bottom 30 feet, the depth of the water 5½ feet, the length of each lock 100 feet, and its breadth 10. The cost of this canal is stated at 11,000,000 francs, or about $2,000,000.—The canal of St. Omer unites the Scheldt with the canal of Flanders. It was projected, in 1727, by the military engineer Devies, but not
453 CANALS OF FRANCE AND GREAT BRITAIN.

constructed until 1810. The original plan, which has been very nearly followed, was to proceed from Maquincourt, near the Scheldt, to mount St. Martin, where pass through a tunnel 3410 toises, or a little more than 28 miles, long; then follow the valley of Bellinglise and Haut Court to the heights of Tronquoy; there pass through a tunnel 700 toises, a little more than 4½ miles, in length, coming out at Ledin; making the distance of the summit-level 7000 toises, or a little over 8 miles, of which 2550 are open, and 4140, or more than 4½ miles, subterraneous. The length of this canal is 28 miles; in the rise from St. Quintin to the summit-level, there are 5 locks, and in the descent to Cambrai, 17. The cost is stated at 12,000,000 francs, or about $2,250,000.

CANALS OF GREAT BRITAIN. The English were a century after the French in commencing the construction of canals upon a large scale. The first considerable work of this description was the Sankey canal, for which an act of parliament was passed in 1755; the object of the act being the improvement of the navigation of Sankey brook; which plan was afterwards changed to that of a separate canal of 12 miles in length. While the work on this canal was in progress, in 1758, the duke of Bridgewater obtained an act of parliament for making Worsley brook navigable from Worsley mill to the river Irwell, for the purpose of facilitating the transportation of coals from his estate to Manchester; but, seeing the advantages of still-water navigation over that of a river, he conceived the project of a canal over dry land, passing the river Irwell by an aqueduct, and thus making a communication between his coal-mines and the town of Manchester on one level. The plan was subsequently extended, and the duke, who lived 14 years after the commencement of the execution of his project (he died in 1772, at the age of 59), devoted his time and his fortune to the execution of his great work, with the assistance of an engineer distinguished for his genius. He diverted all his resources into this channel, and, to enlarge his means for the undertaking, he limited his personal expenses to £400 a year, and is even supposed to have shortened his life in consequence of the toils and anxiety attendant upon so arduous an enterprise. It was a grand project, worthy of the sacrifices he made to it. And it is a stupendous monument, whereby his memory is associated with the wealth and prosperity of England. The works were projected by the celebrated engineer John Brindley, and executed under his direction, and constitute a lasting memorial of his genius and skill.

The following are the principal canals in Great Britain. (Originally denotes the first assumed cost per share, where the actual cost is not ascertained.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Act</th>
<th>Original Cost</th>
<th>Length &amp; Diam.</th>
<th>Shares</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdare,</td>
<td>1793</td>
<td>£40</td>
<td>8</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Aberdeenshire,</td>
<td>1805</td>
<td>£170</td>
<td>170</td>
<td>8.8</td>
<td>20</td>
</tr>
<tr>
<td>Andover,</td>
<td>1790</td>
<td>£177</td>
<td>224</td>
<td>7.8</td>
<td>34</td>
</tr>
<tr>
<td>Ashley-de-la-Zouch,</td>
<td>1805</td>
<td>£221</td>
<td>404</td>
<td>5.6</td>
<td></td>
</tr>
</tbody>
</table>

of 73 miles, without including the branches. It has tunnels at Ashley-de-la-Zouch and Snarston (the length of the two is 700 yards), and an iron railway, 6 miles in length, to the Cloudhill mines. It has 2 aqueduct bridges. At Boothorpe, a steam-engine is erected, to convey the water to a feeder for the summit-level. Number of shares, 1452; cost, £113; price in 1824, £20.
## Canals of Great Britain

<table>
<thead>
<tr>
<th>Name</th>
<th>Mileage</th>
<th>Bridges</th>
<th>Locks</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashton-under-lyne, or Manchester and Oddimi, and branches</td>
<td>1797</td>
<td>18</td>
<td>152</td>
<td>8.4 33, -15 5</td>
</tr>
<tr>
<td>Barnesley and branches</td>
<td>1790</td>
<td>18</td>
<td>120</td>
<td>8.7</td>
</tr>
<tr>
<td>Basingstoke</td>
<td>1790</td>
<td>37</td>
<td>105</td>
<td>5.3</td>
</tr>
<tr>
<td>Birmingham</td>
<td>1772</td>
<td>224</td>
<td>204</td>
<td>0.07 40 44</td>
</tr>
<tr>
<td>Birmingham and Fazeley</td>
<td>1790</td>
<td>164</td>
<td>248</td>
<td>15 30 43</td>
</tr>
<tr>
<td>Brecknock and Abergavenny</td>
<td>1776</td>
<td>33</td>
<td>68</td>
<td>2</td>
</tr>
<tr>
<td>Bridgewater</td>
<td>1758</td>
<td>40</td>
<td>83</td>
<td>2 52 5</td>
</tr>
</tbody>
</table>

From Rochdale canal, at Manchester, to Huddersfield, at Duckenfield; has 3 aqueduct bridges; boats of 25 tons burthen. Number of shares, 1700; average cost, £27 18s.; price in 1824, £150.

From river Calder, below Wakefield, to Barnby bridge; has 1 aqueduct bridge and 20 locks. Number of shares, 720; cost, £100; price in 1824, £215.

From Wye to Basingstoke; has 72 bridges and 20 locks. Number of shares, 1600; cost, £100; price in 1824, £65. The Tungis branch is 3½ miles in length. The boats are of 45 tons burthen. It has a tunnel of 3 mile.

Commences in the Birmingham and Staffordshire canal, and terminates in the Birmingham and Fazeley canal. The boats are 70 feet long and 7 wide, and of 22 tons burthen. Number of shares, 4000; originally £140; price in 1824, £315. The tonnage is not to exceed 1½d. per mile.

From the Coventry canal, at Whittington brook, to Birmingham canal, at Farmer's bridge; has 44 locks; boats 22 tons burthen.

From the Monmouthshire canal to Brecon. There is, at Abergavenny, an iron railway a mile in length; at Wain Dew another 4½ miles, and at Langroiney another 11 mile. It has a tunnel of 200 yards, and 3 aqueduct bridges. Number of shares, 958; originally £150; price in 1824, £100.

From the tide-way of the Mersey, at Runcorn Gap; and at Longford bridge divides into 2 branches, one terminating at Manchester, the other at Pennington, near the town of Leigh. The whole lockage is the 83 feet at the Mersey, in rising from tide-water, by 10 locks. This canal, with a part of the Trent and Mersey canal connected with it, makes a level of 70 miles, 30 of which are on this canal. Mr. Cary states that there are about 16 miles of canal under ground within the mountains at Worsley. It has 3 principal aqueduct bridges, and several smaller ones. Arched branches pass off from it at considerable distances, under the town of Manchester, from one of which coals are hoisted up to supply the inhabitants, which the proprietors, successors to the duke of Bridgewater, are bound to furnish them at 4d. for 140 lbs.—an advantage to which much of the prosperity of that town has been attributed. The embankment over Stratford meadows is 900 yards long, 17 feet high, and 112 feet wide at the base; that at Barton bridge is 200 yards long and 40 feet high. The tonnage is 2s. 6d.
by making 211 miles of canal, and deepening the beds of the rivers Lochy and Oich, and dredging to deepen a part of Loch Ness (in the whole a distance of 43 miles, making the total length of excavation 25 miles, with a lockage, up and down, of 190 feet), an interior navigation of 250 miles is opened across the central part of Scotland, from the Moray Firth, on the eastern coast, to Cantyre, on the western, and about opposite to the northern coast of Ireland; being one half of the distance of the navigation between the same extreme points, round the northern coast by the Orkneys.

It has 27 locks, including the tide-locks, one of them 170, but most, if not all, the others 150 feet long, and all 40 feet wide; thus opening a ship-navigation through the midst of the country, rising, at the summit-level, 94 feet above the tide-water of the eastern coast, and 90½ feet above that of the western, showing the ocean to be 2½ feet higher on the eastern. At Fort Augustus, where it leaves Loch Ness in a north-westerly direction, this canal is cut through the glacial of the fortification, thus adding to the military defences as well as to the appearance of the fort, which, with the five locks of masonry rising behind, presents a grand combination of civil and military engineering amid romantic mountain scenery. From Loch Ness, passing in the westwardly direction of the canal to Loch Oich, 11 mile, the land is 20 feet above the water line, which, with the depth of water in the canal, makes an excavation, in this distance, of 40 feet in depth, with a bottom of 40 feet in breadth. To save rock-cutting, in descending, in the westwardly direction, as before, from Loch Oich to Loch Lochy, the natural difference of the surfaces of the two lakes being 22 feet, the whole area of Loch Lochy, which is 10 miles in length and 1 in breadth, is raised 12 feet. In the last 2 miles, before the canal, in its westerly direction, enters Loch Eil, there is a descent of 64 feet, which is passed by 8 connected locks, each 150 feet long by 40 in breadth. These locks are founded on inverted arches, exhibiting a solid and continuous mass of masonry 500 yards in length and 20 yards wide, in which, as late as 1824, and 5 years after its construction, no flaw had been discovered. The gates are of cast-iron. This system of locks has received the fanciful appellation of Neptune's Staircase; and the appearance of large vessels, with their masts and rigging,descending these stupendous locks, from the hill towards Loch Eil, is most majestic and imposing, exhibiting a striking instance of the triumph of art. In the distance of 8 miles, from Loch Lochy to tide-water in Loch Eil, the canal, in passing along the north-westerly bank of the river Lochy, crosses, by aqueduct bridges, 3 large streams and 23 smaller ones. Since the construction of this canal, upwards of a million of forest-trees have been planted along its borders. The cost of this great national work was, for

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and travelling expenses</td>
<td>£29,000</td>
<td>Horse labor</td>
<td>£3,000</td>
</tr>
<tr>
<td>Timber</td>
<td>£68,000</td>
<td>Road-making</td>
<td>£4,000</td>
</tr>
<tr>
<td>Machinery, cast-iron work, &amp;c.</td>
<td>£121,400</td>
<td>Incidental expenses</td>
<td>£2,000</td>
</tr>
<tr>
<td>Quarries and masonry</td>
<td>£195,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipping</td>
<td>£11,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor and workmanship</td>
<td>£418,000</td>
<td>Add, to complete the dredging</td>
<td>£7,200</td>
</tr>
<tr>
<td>Houses and buildings</td>
<td>£4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>£912,500</td>
<td>Total</td>
<td>£905,300</td>
</tr>
</tbody>
</table>

Assuming the number of miles operated upon to be 25, the canal cost £36,500 per mile. It was constructed under the direction of Thomas Telford, Esq.
| Name                      | Year | Shares | Lchs | Feet | Price
|---------------------------|------|--------|------|------|-------|
| Cardif, or Glamorgan,     | 1775 | 25     | 600  | 24   | £173 13s. 4d.; price in 1824, £295.
| Chester                   | 1775 | 172    | 170  | 9.7  | From the Dee, at Chester, to Nantwich, where it communicates with the Whitchurch branch of the Ellesmere canal.
| Chesterfield              | 1776 | 46     | 380  | 8.2  | From the Trent, at Stockwith, to Chesterfield; has 65 locks and 2 tunnels, together 2650 yards long, and 94 feet wide. The lower part of the canal is navigable for boats of from 50 to 60 tons burthen, and the higher, being but 25 or 28 feet broad, is navigable for boats of only 20 or 22 tons burthen. These boats are 70 feet long and 7 feet broad. Number of shares, 1500; cost, £100; price in 1824, £130.
| Coventry                  | 1790 | 27     | 96   | 3.6  | A part of the line of canal between London and Liverpool.
| Crinan                    | 1805 | 9      | 117  | 13   | From lake Gilp to lake Crinan. Number of shares, 1851; cost, £30; price in 1824, £2 10s.
| Cromford                  | 1794 | 13     | 80   | 4.4  | From the Erewash canal, at Langley, to Cromford. It has several tunnels, and passes the river Derwent by an aqueduct 200 yards long and 30 feet high. The arch over the channel of the river is 80 feet broad. Another aqueduct over a branch of the Derwent is 200 yards long and 50 feet high. Each aqueduct cost about £3000.
| Croydon                   | 1801 | 94     | 150  | 15.8 | Number of shares, 460; cost, £21 2s. 10d.; price in 1824, £270.
| Dearne and Dove           | 1804 | 94     | 125  | 6.6  | From Grand Sury canal to Croydon. It has 23 locks. Number of shares, 4546; originally, £100; price in 1824, £4 10s.
| Derby                     | 1794 | 9      | 78   | 8.6  | From the river Trent to Derby. Number of shares, 600; cost, £110; price in 1824, £140.
| Dorset and Somerset       | 1803 | 42     |      |      | From the Kennet and Avon canal to the river Stour; but not completed in 1824; has a branch 9 miles long.

From a sea-basin on the Severn, near Cardiff, to Merthyr; is connected with various railways, one of which is 263 miles long. Number of shares, 600; cost, £173 13s. 4d.; price in 1824, £295.
### CANALS OF GREAT BRITAIN

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Length (miles)</th>
<th>Locks</th>
<th>Tunnels</th>
<th>Adit &amp; Drain, etc.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dublin and Shannon</td>
<td>1776</td>
<td>65½</td>
<td>21</td>
<td>7</td>
<td></td>
<td>From Dublin, at the mouth of the Liffey, to the river Shannon, near the town of Moy. It passes 54 miles across a marsh, in which the absorbing nature of the soil rendered the work enormously expensive.</td>
</tr>
<tr>
<td>Lawton branch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milton branch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bog of Allen br.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edenderry br.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kildare br...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dudley, ...</td>
<td>1776</td>
<td>10½</td>
<td>35</td>
<td>3.3</td>
<td></td>
<td>5 From the Worcester and Birmingham canal. It has 61 locks; 3 tunnels, one 3776 yards in length, another 62½ yards, and the other 2935 yards, all 13½ feet wide; and near one of them, the Laplat tunnel, it passes 9 locks, nearly contiguous. Number of shares, 2000; originally, £100; price in 1824, £63.</td>
</tr>
<tr>
<td>Stourbridge br.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dudley br...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edinburgh &amp; Glasgow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This canal is proposed to commence at Leith, in the Forth, and terminate in the Clyde, at Glasgow. The enterprise was suspended on account of a supposed insufficiency of water, and is not known (1829) to have been resumed.</td>
</tr>
<tr>
<td>Ellesmere and Chester, and branches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This canal is said to be the first constructed in England for agricultural purposes, as well as trade. It has 1302 yards of tunnelling. Number of shares, 3575; cost, £123; price in 1824, £68.</td>
</tr>
<tr>
<td>Erewash, ...</td>
<td>1790</td>
<td>11</td>
<td>181</td>
<td>15.4</td>
<td></td>
<td>From the Trent to Cromford canal. Is a part of the Liverpool line, joining the Grand Trunk with the Coventry canal. It is entirely level. The Fazeley and Birmingham, and the Birmingham, are continuations of this.</td>
</tr>
<tr>
<td>Fazeley, ...</td>
<td>1790</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td>From the tide-water, at the junction of the river Carron with the Forth, to Glasgow. It was the first considerable work of the kind undertaken in Scotland, having been commenced in 1777 and completed in 1790. It ascends, from the Forth to the summit, by 20 locks, 156 feet, in 10½ miles, and keeps this level 18 miles, to Glasgow, and, one mile beyond that city, terminates in the Monkland canal basin. About 24 miles north of the port of Dundas, near Glasgow, a branch of the canal passes 8½ miles, crossing the Kelvin by a magnificent stone aqueduct, to the tide-water at Bowling bay, to which it descends by 19 locks, 74 feet in length and 20 in breadth. When full, it has 8 feet of water.</td>
</tr>
<tr>
<td>Forth and Clyde,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glasgow branch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## CANALS OF GREAT BRITAIN

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Length</th>
<th>Width</th>
<th>Tunnels</th>
<th>Price in 1824</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foss Dyke, ...</td>
<td>1812</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>£100</td>
</tr>
<tr>
<td>Glasgow and Saltcoats,</td>
<td>1802</td>
<td>27</td>
<td>0</td>
<td>0</td>
<td>£100</td>
</tr>
<tr>
<td>Glenkens, ...</td>
<td>1793</td>
<td>18</td>
<td>2</td>
<td>0</td>
<td>£100</td>
</tr>
<tr>
<td>Gloucester, Hockcrib branch,</td>
<td>1805</td>
<td>304</td>
<td>587</td>
<td>5</td>
<td>£100</td>
</tr>
<tr>
<td>Grand Junction, Paddington br.,</td>
<td>1801</td>
<td>35</td>
<td>7</td>
<td>0</td>
<td>£100</td>
</tr>
<tr>
<td>6 other branches,</td>
<td>134</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>£100</td>
</tr>
<tr>
<td>Grand Surrey,</td>
<td>1796</td>
<td>35</td>
<td>7</td>
<td>0</td>
<td>£100</td>
</tr>
<tr>
<td>Grand Western, Tiverton br., ...</td>
<td>1777</td>
<td>93</td>
<td>642</td>
<td>6</td>
<td>£100</td>
</tr>
<tr>
<td>Grand Trunk, Its branch, ...</td>
<td>234</td>
<td>130</td>
<td>5.5</td>
<td>0</td>
<td>£100</td>
</tr>
</tbody>
</table>

From the Trent, at Torksey, to the Witham. It is a level.

From the Dee, at Kirkcudbright, to Dalry.

A channel for ship navigation, to avoid the windings of the Severn from Berkeley Pill, where it leaves that river, to Gloucester, where it joins the river again. Number of shares, 1960; price in 1824, £100, and a loan of £230 per share, making the investment £100 per share.

A part of the line between London and Liverpool, from Brentford to the Oxford canal at Braunston. It has 101 locks; passes the river Ouse and its valley by an embankment about half a mile in length and 30 feet high. It has a tunnel at Blisworth, 3080 yards in length, 18 feet high, and 164 wide; and another at Braunston, 2045 yards long, the other dimensions being the same as those of the Blisworth tunnel. Number of shares, 11,654; originally, £100; price in 1824, £270.

From the Thames, at Rotherhithe, to Mitcham. It is of large dimensions, being navigable by the Thames boats. The company pays to London, annually, £60, for the junction of the canal with the Thames.

From the mouth of the Ex, at Topsham, to Taunton bridge; in 1824, was but partially finished. Number of shares, 3006; cost, £73; price in 1824, £6.

A part of the line between London and Liverpool. It has 4 tunnels, in length 3040 yards, and 9 feet wide. Number of shares, 13094; price in 1824, £2130. The tonnage is from 3d. to 4d. per mile.

From the Leicester and Northampton Union canal, near Foxton, to the Grand Junction, east of Braunston tunnel. Number of shares, 1521; cost, £100; price in 1824, £50. The canal has, besides, a loan, at 5 per cent. interest, of £19,327.
459 CANALS OF GREAT BRITAIN.

<table>
<thead>
<tr>
<th>Name</th>
<th>Mileage</th>
<th>Depth &amp; Breadth</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grantham</td>
<td>1799</td>
<td>13</td>
<td>From the Trent, near Holme Pierpoint, to Grantham. It has divided 8 per cent., and left a clear surplus of £3000 to meet unforeseen accidents. Number of shares, 749; cost, £150; price in 1824, £163. It is supplied with water wholly from reservoirs.</td>
</tr>
<tr>
<td>Haslingden</td>
<td>1793</td>
<td>13</td>
<td>From the Manchester, Bolton and Bury canal, at Bury, to the Leeds and Liverpool, at Church.</td>
</tr>
<tr>
<td>Hereford &amp; Gloucester</td>
<td>1790</td>
<td>36</td>
<td>From the Severn, at Gloucester, to the Wye, at Hereford. It has 3 tunnels, of 2192, 1320 and 440, making, in all, 3952 yards. In consequence of the opening of this canal, the price of coals at Leedbury was reduced from 24s. to 6s. per ton. Shares, originally, £100; price in 1824, £60.</td>
</tr>
<tr>
<td>Huddersfield</td>
<td>1798</td>
<td>194</td>
<td>From Ramsden’s canal, at Huddersfield, to the Manchester, Ashton and Oldham canal, at Duckenfield bridge, near Marsden. It has a tunnel of 3280 yards in length. Number of shares, 3312; cost, £57 14s.; price in 1824, £29.</td>
</tr>
<tr>
<td>Kennet &amp; Avon</td>
<td>1801</td>
<td>57</td>
<td>From the Avon, at Dolemead, near Bath, to the Kennet and Newbury. It has an aqueduct bridge over the Avon. The boats are of 25 or 26 tons burthen. Number of shares, 25,328; cost, £35 5s.; price in 1824, £24.</td>
</tr>
<tr>
<td>Kingston &amp; Leominster</td>
<td>1797</td>
<td>454</td>
<td>From the Severn, at Areley, to Kingston. It has two tunnels of 3830 and 1930, making 5100 yards.</td>
</tr>
<tr>
<td>Lancaster</td>
<td>1799</td>
<td>76</td>
<td>From Kirby Kendall to Houghton. It has tunnels at Hincaster and Chorley, 600 yards long in the whole. It passes the Lomne by a stone aqueduct, 60 feet high, on 5 arches, each of 70 feet span. It has also a road aqueduct, near Blackmill, 60 feet high. The boats are 50 feet long and 14 broad. Number of shares, 11,699½; cost, £47 6s. 8d.; price in 1824, £29.</td>
</tr>
<tr>
<td>Leeds &amp; Liverpool</td>
<td>1771</td>
<td>130</td>
<td>From Liverpool to Leeds. The boats navigating between Leeds and Wigan are of 42 tons burthen; those below Wigan, and on this side Leeds, of 30 tons. The tunnels at Foulbridge and Finnly are, in the whole, 1600 yards long. It has a beautiful aqueduct bridge over the Ayr. The locks are 70 feet long and 13½ wide. The number of shares is 22971; originally, £100 each; price in 1824, £380. Tonnage on merchandise, 1½d. per mile; on coals and lime, 1d.; on stone, 4d.</td>
</tr>
<tr>
<td>Name</td>
<td>From</td>
<td>To</td>
<td>Total Length</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------</td>
<td>---------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Leicester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loughborough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manchester and Bolton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Weighton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monmouthshire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomeryshire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neath</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Wilts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nottingham</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oakham</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxford</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the Loughborough basin to the Soar, which has been rendered navigable as far as Leicester. Number of shares, 545; cost, £140; price in 1824, £330.

From Leicester to Market Harborough. It has 4 tunnels, 1056, 390, 680 and 286, in the whole 3212 yards in length. Number of shares, 1856; cost, £289 10s.; price in 1824, £22.

From the Trent, near Sawley, to Loughborough. No. shares, 70; cost, £142 17s. 8d.; price in 1824, £4000.

From the Mersey and Irwell navigation to Bolton. The locks have been reconstructed and enlarged. Number of shares, 477; originally, £250; price in 1824, £113.

A continuation of the Forth and Clyde canal.

This canal is remarkable for the extent of its railways and inclined planes. Number of shares, 2409; cost, £100; price in 1824, £198. It has, besides, a loan of £43,526, at an interest of 5 per cent.

From a branch of the Ellesmere canal to Newtown. Number of shares, 700; originally, £100; price in 1824, £71.

From the river Neath, at the Giants's Grave, to the Aberdare canal, at Abernant. It serves for the transportation of copper and lead ore from Cornwall to Glamorgan-shire. Number of shares, 247; cost, £107 10s.; price in 1824, £53.

From the Thames and Severn canal to the Wilts and Berks.

From the Trent, at Nottingham, to the Cromford canal, near Langley bridge.

From Melton Mowbray to Oakham. Number of shares, 322; cost, £130; price in 1824, £50.

From the Coventry canal to the river Ias at Oxford, and a part of the grand line between Liverpool and London. It has 3 aqueducts of very considerable magnitude, a tunnel at Newbold 125 yards long and 12½ feet wide, and one at Fenny Compton 1188 yards long and 9½ feet wide. It rises, from the level of the Coventry canal, in 454 miles, to the summit at Marston Tolls, 74 feet 1 inch, by 13 locks; and descends, from the summit at Claydon, in 33 miles, to the Isas, 195 feet, by 30 locks. It has 188 stone and brick bridges. It cost £178,648 stock, besides £130,000 loan, above half of which has been paid off. Number of shares, 1786; originally, £100; price in 1824, £780.
### CANALS OF GREAT BRITAIN.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
<th>Tunnels &amp; Dams</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Forest</td>
<td>1800</td>
<td>18</td>
<td>21</td>
<td></td>
<td></td>
<td>from the Manchester, Ashton and Oldham canal, at Duckenfield, to the Chapel Milton basin. It has a railway 6 miles long. It passes the Mersey, by a bridge 100 feet high, of 3 arches, each of 60 feet span. Number of shares, 2400; cost, £77; price in 1824, £24.</td>
</tr>
<tr>
<td>Portsmouth &amp; Arundel</td>
<td>1815</td>
<td>144</td>
<td></td>
<td></td>
<td></td>
<td>from the river Arun, near Little Hampton, to the bay connected with Portsmouth harbor. Number of shares, 2320; cost, £50; price in 1824, £25.</td>
</tr>
<tr>
<td>Ramsden's</td>
<td>1774</td>
<td>8</td>
<td>56</td>
<td>7</td>
<td></td>
<td>from the Calder and Hebble navigation to the Huddersfield canal.</td>
</tr>
<tr>
<td>Regent</td>
<td>1820</td>
<td>9</td>
<td>86</td>
<td>9.5</td>
<td></td>
<td>the last link, near London, of the chain connecting that city and Liverpool. It commences at Paddington, from the Grand Junction canal, and meets the Thames at Limehouse, descending by 12 locks, to a basin communicating with a ship lock. The locks have double chambers, which are estimated to make a saving of one third of the usual quantity of water. It has 2 tunnels, one at Maid Hill, 370 yards long, the other under Islington, 800 yards. Number of shares, 12,294; cost, £40 10s.; price in 1824, £49 10s.</td>
</tr>
<tr>
<td>Ripon</td>
<td>1767</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>from the river Ure, at Milby, to Ripon.</td>
</tr>
<tr>
<td>Rochdale</td>
<td>1804</td>
<td>31</td>
<td>613</td>
<td>19.7</td>
<td></td>
<td>from the Bridgewater canal, in the town of Manchester, to the Calder and Hebble navigation, at Sowerby bridge. It has 49 locks, 8 aqueducts, a tunnel of 70 yards in length, and several reservoirs. Number of shares, 5631; cost, £85; price in 1824, £94.</td>
</tr>
<tr>
<td>Royal Irish</td>
<td>63</td>
<td>614</td>
<td>9</td>
<td></td>
<td></td>
<td>from Dublin, in a westward direction, to the Shannon, at Tarmonbarry, nearly parallel to the Dublin canal, and about 10 miles distant from it. Its greatest elevation above the sea is 397 feet, to which it ascends from Dublin by 26 locks, and descends to the Shannon by 15 locks.</td>
</tr>
<tr>
<td>Sankey</td>
<td>1760</td>
<td>124</td>
<td>78</td>
<td>6.2</td>
<td>48</td>
<td>from the Mersey and Irwell navigation, at Fiddler's Ferry, to Sutton Heath mines. It has 10 locks, and also a tunnel, near St. Helen's. It was the first canal constructed in England.</td>
</tr>
</tbody>
</table>

*39*
Shorncliffe and Royal Military, From the sea, at Hythe, to the mouth of the river Rother. It is a level, having locks to keep in the water at low tide. It is large enough to receive vessels of 200 tons burthen. Each of its extremities is defended by strong batteries. It was constructed on account of Bonaparte’s projected descent on England, and hence its name of Royal Military canal.

Shrewsbury, From Shrewsbury to the Shropshire canal. One half of the ascent is effected by locks, the other half by inclined planes. It has one tunnel. Number of shares, 500; originally, £125; price in 1824, £150.

Shropshire, From the Severn, at Coalport, to the Shrewsbury canal, at Downington wood. It has several inclined planes and railways, but no locks.

Somerset Coal, From the Kennet and Avon canal, at Monkton Combe, to Paulton. The boats are 72 feet long and 7 broad. It has 22 locks. Number of shares, 800; originally, £245; price in 1824, £245.

Southampton & Salisbury, From the river Test, at Stewton, to the Avon, at Salisbury.

Stafford and Worcester, From the river Severn, at Stourport, to the Grand Trunk canal. It has 41 locks. Its boats are of 20 tons burthen. It has 3 tunnels. Number of shares, 700; cost, £140; price in 1824, £500. The tonnage is not to exceed 1½ d. per mile.

Stainforth and Kendal, From the river Trent, at Keadby, to the Don, at Fishlake.

Stourbridge, From the Stafford and Worcester canal, at Stourton, to the Dudley canal. It has 20 locks. Number of shares, 300; originally, £245; price in 1824, £212.

Stover, From Swanage harbor to Hen Noyadd. Like the Neath canal, it serves to transport copper ore from Cornwall to Glamorganshire foundries. Number of shares, 533; originally, £100; price in 1824, £150.
### CANALS OF GREAT BRITAIN

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Shares</th>
<th>Length (ft)</th>
<th>Breadth (ft)</th>
<th>Tunnels</th>
<th>Locks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tavistock, Mill Hill branch</td>
<td>1810</td>
<td>44</td>
<td>237</td>
<td>32.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thames and Medway</td>
<td>1800</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thames and Severn</td>
<td>1789</td>
<td>304</td>
<td>377</td>
<td>12.3</td>
<td>40-30</td>
<td>5</td>
</tr>
<tr>
<td>Warwick and Birmingham</td>
<td>1799</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warwick and Napton</td>
<td>1799</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wey &amp; Arun Junction</td>
<td>1801</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilts and Berks, Calne branch</td>
<td>1801</td>
<td>52</td>
<td>376</td>
<td>7.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worcester and Birmingham</td>
<td>1797</td>
<td>29</td>
<td>123</td>
<td>4.3</td>
<td>42</td>
<td>6</td>
</tr>
<tr>
<td>Wyrley and Essington</td>
<td>1796</td>
<td>23</td>
<td>270</td>
<td>11.6</td>
<td>28</td>
<td>44</td>
</tr>
<tr>
<td>Hayhead br. Lordsherry br. Wyrley Bank br. Essington br. Norwich and Lowestoff Navigation</td>
<td>1829</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the river Tamar, at Calstock, to Tavistock. It has a tunnel at Morwellham, 460 feet below the surface. This tunnel led to the discovery of a copper-mine. Its boats are 134 feet in length and 5 in breadth. Number of shares, 550; originally, £100; price in 1824, £150.

From the Thames, at Gravesend, to the river Medway. Number of shares, 2670; cost, £42 9s. 5d.; price in 1824, £26. This canal has loans to a large amount.

From the Stroudwater canal to the Thames and Isis navigation. The boats are of 70 tons burthen, being 80 feet long and 5 broad. It has a tunnel at Sapperton, 250 feet below the top of the hill of rock under which it passes. The bottom of this tunnel is an inverted arch.

From the Warwick and Napton canal, near Warwick, to the Digbeth branch of the old Birmingham canal. It has a tunnel at Fazeley 300 yards in length. It has 32 locks.

From the Warwick and Birmingham to the Oxford canal. Number of shares, 980; originally, £100; in 1824, £215.

From the river Wey, near Godalming, to the north branch of the Arun river navigation. Number of shares, 963; cost, £110; price in 1824, £25.

From the Kennet and Avon canal, at Semington, to the Thames and Isis navigation.

From the River Severn, at Diglis, below Worcester, to the Birmingham and Fazeley canal, at Farmer's bridge.

From a detached part of the Fazeley canal, at Huddersford, to the Birmingham canal, at Wolverhampton. The boats are of 18 tons burthen. It has 28 locks.

The works near Yarmouth open an inland navigation in two directions; one 30 miles, by the Yare, the other 20 miles, by the Waveney, without a lock. The river Yare discharges at Yarmouth, about 30 miles below Norwich, but the navigation is obstructed by shoals and shifting sands at its vicinity.
mouth. To avoid these obstructions, the river is to be made navigable for sea-borne vessels from Norwich to a place 20 miles lower down the river, called Reedham Ferry, where a new cut of 24 miles is to be made across the marshes, to join the river Waveney at St. Olave's bridge, whence the water communication proceeds by a small stream (Oulton Dyke) and two lakes (Oulton Broad and Lothing), from the latter connected with the sea by a channel 780 yards long and 40 feet wide, with a sea-lock 50 feet wide in the clear and 24 feet deep, for the purpose of admitting sea-borne vessels. Oulton Dyke and Oulton Broad are to be deepened. The lock constructed at the outlet of lake Lothing makes an artificial harbor, the first that has been formed in England. This lock has folding gates pointing both landward and seaward, so as to admit of vessels passing in or out at any time of tide, and whether the water be higher on the outside or inside. The harbor covers about 200 acres, the whole contents of which it is proposed, occasionally, to let off at low water, to keep open the channel from the sea.

**American Canals.** It is proposed to give a more particular description of the American canals under the article Inland Navigation. In the mean time, a very general enumeration will be here made of the principal works of this kind already completed or in progress, which will shew the astonishing extent to which canal navigation has been opened in the U. States, during the short period, now (1829) only 13 or 14 years, since these works began to be undertaken upon a large scale. It will appear, from the following outline, that not less than 2500 miles of canal are constructed, or in the progress of execution in the U. States, and will probably soon be completed, making a liberal allowance for a suspension of some of the works projected and commenced. The extent of canal in the U. States will soon equal that in Great Britain. The canals constructed and now in progress in the state of Pennsylvania have been estimated at a length of 900 miles; very nearly equal to that of the canals of France, but doubtless inferior in the style and durability of execution.—

The **Welland canal**, in Canada, is intended for opening a slope navigation between lakes Erie and Ontario. It is not completed.—The **Middlesex canal** opens a boat navigation between Boston and the Merrimack river, and runs 28 or 29 miles, in a northwesterly direction, from its outlet into the harbor of Boston, in the town of Charlestown.—The **Blackstone canal** is constructed along Blackstone river from Providence, in Rhode Island, north-westerly 45 miles, to Worcester, in Massachusetts.—The **Farmington canal** leaves the coast of Long Island sound at New Haven, in Connecticut, and takes a north-easterly course, towards Northampton in Massachusetts, 65 miles distant, where it is to communicate with Connecticut river. A great part of it is finished and in operation, but a portion, towards the north-eastern termination, remains to be constructed.—The **Hudson and Erie canal** passes from Albany, in the state of New York, along the western bank of Hudson river, until it meets the Mohawk; then runs, in a north-westerly direction, up the south-western bank of that river, to the town of Rome, where it turns more westerly, on a summit level of about 60 miles, without a lock, and, passing in a line corresponding, in some measure, to the direction of the southern shore of lake Ontario, and crossing the Seneca and Genesee rivers in its course, communicates with lake Erie at Buffalo, 383 miles from Albany. This canal is connected with lake Champlain by the Champlain canal, 63 miles in length; with lake Ontario by the Oswego canal, about 38 miles long; and with Seneca lake by the Seneca canal, about 20 miles long.—The **Hudson and Delaware canal** begins at the west bank of Hudson river, near Kingston, in New York, about 85 or 90 miles north of the city of New York, and runs in a south-westerly direction 65 miles, to the Delaware river, near to the north-east corner of Pennsylvania, and the north-west of New Jersey. It then takes a general direction a little to the north-west, and keeps the northern bank of the Delaware river for 25 or 30 miles, to the entrance of Lackawaxen creek, on the opposite side; crosses the Delaware at a point about 110 miles north of Philadelphia, and, leaving that river, keeps the northern bank of Lackawaxen creek; then crosses it, in a westerly direction, to Raisin Gap, a distance, added to the former, of between 40 and 50 miles, as nearly as can be estimated from Mr. Tanner's map of Pennsylvania, of 1829. This canal opens the Lackawaxen coal district to Hudson river.—The **Morris canal, now in progress, commences, at its western extremity, at the river Delaware, near Easton, and passes across the state of New Jersey in a north-easterly, then in an easterly, then in a southerly direction, 86
miles, to Newark, in that state. Its western extremity is at the eastern termination of the Lehigh navigation in Pennsylvania, and it is intended for the transportation of Lehigh coal to New York.—The Ohio state canal commences at the mouth of Sciota river, where it discharges into the river Ohio, and takes a northerly course, for about 300 miles, to lake Erie, at the mouth of the Cuyahoga river, in the town of Cleveland. This work is in rapid progress.—The Miami canal is also a line of communication between the river Ohio, which it leaves at Cincinnati, and lake Erie. Its northerly termination is in the Maumee, which discharges into the western part of lake Erie. The proposed length of this canal is 285 miles. It is now in progress.—The Miami and Michigan canal. An act was passed in the legislature of Illinois, Jan. 22, 1829, authorizing commissioners, as soon thereafter as they could command funds, and might deem it expedient to commence the work, to effect a navigable communication between lake Michigan and the Illinois river.

This is the fourth projected work for making a communication between the great northern and western waters; one of the others being projected by Pennsylvania, from Pittsburg to Erie, of which a very small part is executed; the other two are undertaken by Ohio, and both in progress.—The Lehigh canal commences at the Maunch Chunk coal-mine, on the river Lehigh, and runs to Easton, on the Delaware; the whole distance of this navigation being 461 miles; but a part of it is river navigation, the length of the canal being 37 miles. Its eastern termination at Easton meets the western terminations of the Morris canal in New Jersey. The Delaware canal commences, at its northern extremity, at Easton, about 55 miles in a right line nearly north from Philadelphia, on the north-western bank of Delaware river, the general course of which, for about 50 miles from this place, is south-easterly, when it turns, in nearly a south-westerly direction, about 30 miles, to Philadelphia. This canal, which is now (1829) in progress, is to follow the general course of the Delaware, keeping its westerly bank to Morrisville, where it bears off from the river, to avoid a bend, and proceeds, in a pretty direct course, a little to the west of south, to Bristol, on the western bank of the Delaware, 196 miles N. E. from Philadelphia.—The Schuylkill canal is constructed on the banks of Schuylkill river, from Philadelphia, about 110 miles, to mount Carbon, the region of the Anthracite, in Schuylkill county, the general direction being nearly north-west.—The Union canal. A little to the westward of the town of Reading, in Berks county, Pennsylvania, about 60 miles from Philadelphia, the Union canal branches off from the Schuylkill canal in a general south-westerly direction, first passing up a branch of the Schuylkill, and then down the valley of the Swatara, somewhat circuitously, about 80 miles, to Middletown, a little above the junction of the Swatara with the Susquehanna.—Pennsylvania canal commences at Middletown, at the termination of the Union canal, whence it is proposed to proceed up along the Susquehanna, in a westerly direction, to the Alleghanies, which are to be passed by a rail-road; now in progress, about 50 miles in length, into the valley of the Ohio, where the canal again commences, and is continued to Pittsburg, a distance, in the whole, of 320 miles of canal and rail-road; the part of the canal beyond the Alleghanies being already completed, and the part on the eastern side being in progress.—The Little Schuylkill canal is 27 miles in length, from the mouth of the Little Schuylkill river to the coal-mines.—Conestoga canal passes from Lancaster, in Pennsylvania, about 63 miles directly west from Philadelphia, down the Conestoga creek, 18 miles, in nearly a south-west direction, to Susquehanna river.—The Chesapeake and Delaware canal, 18 miles in length, from the Delaware river to Elk river, which discharges into Chesapeake bay, being 6 feet deep and 70 wide; along the low land between Chesapeake bay and Albemarle sound, and thence to Pamlico sound. Several branches have been constructed, and the whole is in operation, being a very important work, as will be apparent by an inspection of the map, and somewhat similar to that of the Chesapeake and Delaware canal.—The Chesapeake and Ohio canal is a gigantic enterprise, in progress, for opening a navigation of 360 miles, from Washington, along the Potomac and its branches, across the Alleghanies, and thence down the valley of the Monongahela and Monongahela rivers, to Pittsburg, on the Ohio. The execution of this work was commenced in 1828, at the eastern extremity.—The Louisville canal, though only 3 or 4 miles in length, is a work of great importance.
as well as great expense. It is now in progress, and is intended to form a passage along the side of the rapids of the Ohio, near to Louisville, in Kentucky. The canal is constructing of sufficiently large dimensions to admit of the passage of steamboats; and the difficulty and expense, as in the case of the canal at Trollhata falls, in Sweden, is occasioned by the necessity of excavating rock. — The James and Kanawha canal is a name given to works intended to form a line of transportation, partly by water and partly by land, from the Atlantic coast to the Ohio; being a navigation along James river to the Blue Ridge, partly by an artificial channel, but mostly by the river, and, across the Ridge, by a well-constructed road, graduated to an inclination not exceeding 3 degrees, which has been completed, and descending, by river or canal navigation, along the Kanawha river, to the Ohio. A canal was commenced, along the bank of James river, to pass the falls at Richmond, before the revolution. The work was resumed, and completed, after the establishment of the present government, by a private company; but the state has since assumed these works, and greatly enlarged them, upon an improved construction, in the execution of the plan of the extended line of transportation above described. In Mr. Boye's map of Virginia, the canal is laid down along the north-western bank of the James river, from Richmond to Venture falls; a distance of about 50 miles, and, by the course of the canal, probably as much as 24 or 25. — The Appomattox canal is about 5 miles of canal, in detached portions, being a part of a system of improvement of the Appomattox navigation in Virginia. — The Roanoke canal is a similar work on Roanoke river. — The Santee canal is a proposed and partly executed line of navigation from Charleston to Columbia, and thence to Cambridge, in South Carolina. The whole distance is 160 miles. A canal has been cut, and for many years in operation, 22 miles in length, across from Cooper's river, which discharges into the ocean at Charleston, to Santee river. Thence the route of this navigation is proposed to pass along Santee, Broad and Saluda rivers; the project being an improvement of the river navigation, by removing obstructions, deepening the water in shallow places, and clearing round falls. The work has not, hitherto, been prosecuted with great success. — The canal Corozal, let is a short, artificial channel, connecting the Mississippi with lake Pontchartrain, near New Orleans. It has no locks. — Such is a general geographical outline of the most important artificial channels of inland navigation, completed or commenced in the U. States, down to 1829. The table of dimensions, and the most striking features of construction, of these works, is deferred to the article on inland navigation, where a more satisfactory description, in these respects, may be given, when the results or prospects of some of the great enterprises in progress, at the time of writing this article, shall be more fully ascertained.

Canal; ] 1. a Venetian painter, born in 1687, whose true name was Antonio Canale. He is celebrated for his landscapes, which are true to nature, and his architectural paintings. He died at London, in 1768. There is a bird's-eye view of Venice painted by him. He is also said to have first used the camera obscura for perspective. — 2. Bernardo Bellotti, who was likewise a good artist, and painted at Dresden many Italian landscapes, also goes by this name. He lived in Dresden, where he was a member of the academy of painters, and died in 1770.

Canaries; a cluster of islands in the Atlantic, considered as belonging to Africa, the most easterly being about 150 miles from Cape Non. They are 13 in number, 7 of which are considerable, viz. Palma, Ferro, Gomez, Teneriffe, Grand Canary, Fuerteventura and Lanzarote; the other 6 are very small; Graciosa, Roa or Rocca, Algegranza, Sta. Clara, Inferno and Lobos. Lon. 13° 20'—18° 10' W.; lat. 27° 30'—29° 30' N. The extent and population of the seven largest, according to Ledru, are given in the following table:

<table>
<thead>
<tr>
<th>Island</th>
<th>Sq. V.</th>
<th>Pop.</th>
<th>Sq. L.</th>
<th>Pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teneriffe</td>
<td>73</td>
<td>70,000</td>
<td>658</td>
<td></td>
</tr>
<tr>
<td>Fuerteventura</td>
<td>63</td>
<td>9,000</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>Grand Canary</td>
<td>60</td>
<td>50,000</td>
<td>283</td>
<td></td>
</tr>
<tr>
<td>Palma</td>
<td>27</td>
<td>22,500</td>
<td>837</td>
<td></td>
</tr>
<tr>
<td>Lanzarote</td>
<td>26</td>
<td>10,000</td>
<td>384</td>
<td></td>
</tr>
<tr>
<td>Gomez</td>
<td>14</td>
<td>7,400</td>
<td>528</td>
<td></td>
</tr>
<tr>
<td>Ferro</td>
<td>7</td>
<td>5,000</td>
<td>714</td>
<td></td>
</tr>
<tr>
<td></td>
<td>270</td>
<td>14,000</td>
<td>644</td>
<td></td>
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</table>

Hasscl states the population of the whole at 181,000, and the square miles at 3213. The soil of these islands is very fertile, and produces all kinds of grain, fruits and pulse in great abundance; so that the name of Fortunate Islands, which the ancients gave them, was well deserved; but the method of cultivation practised by the natives tends very little to its improvement.
All the islands furnish good wine; but the preference is given to the wines of Palma and Teneriffe. The situation of the C., the salubrity of their climate, the fertility of their soil, and the quality of their productions, all conspire to render them the most valuable of the Spanish colonies. The exports amount to 242,000 dollars annually, and consist of wine, raw silk, soda and fruits. One of the most recent works on these islands, and probably the most skilful, is that of Leopold von Buch's **Physikalische Beschreibung der Canarischen Inseln** (Physical Description of the Canary Islands, by Leop. von Buch; Berlin, 1835, 4to.). They are of volcanic origin, and were, as has been stated, known to the ancients. Juba II, king of Mauritania, described them first with some degree of accuracy. He graced a triumphal entry of Caesar into Rome, was instructed in all branches of liberal knowledge, and became a highly accomplished prince. Pliny followed his description of the islands. Juba called the C. Proper Fortunadas, but Madeira and Porto Santo, Purpurae. Of the island of Ferro, which he calls Ombría, and of the others, he gives an interesting account. The loss of this work is the more to be regretted, as we might reasonably hope to find in it some information respecting that mysterious tribe who originally inhabited these islands. This people understood how to embalm their dead, who were sewed in goat-skins, put into coffins of one piece of wood, and placed in grottoes. These mummies smell agreeably, but fall to dust if they are taken out of their goat-skin coverings. The Spaniards relate strange things of the civilization of these tribes, called Guanches, of their respect for women, of their chastity, and aristocratic constitution. Their language resembled that spoken on the neighboring continent; but we know too little of it to be able to give any opinion respecting it. Between 1316 and 1334, the Spaniards, pressed by the Moors, discovered and conquered these islands; and they are laid down with accuracy in the old map which Andreas Bianco published in Venice, 1456. The Spaniards seem, however, not to have esteemed these islands much; for the infante of Portugal, Henry the Navigator (q. v.), ordered them to be taken possession of, and prosecuted his discoveries from them to the coast of Guinea. In 1478, the Spaniards undertook again the conquest of the C. At the end of the 15th century, they had subdued the original inhabitants entirely; and they extirpated them at a later period. At present, the islands are inhabited almost entirely by Spaniards: only a few Portuguese reside there. Teneriffe (q. v.) is an island of basaltic formation, thrown up by internal convulsions. The fortified capital is the seat of the governor, has 8400 inhabitants, and an excellent harbor on the eastern side of the island. Another city, Laguna (8500 inhabitants), is the seat of the bishop (who has an income of about 20,000 sterling), and of the tribunal. The island Lancerota, or Lanceletta, contains three volcanoes, and, in 1823, experienced violent eruptions. Five islands of this cluster are uninhabited. The people of the C. are rigid Catholics.

**CANCER, GRAND, or CANARIA; an island in the Atlantic ocean, about 150 miles from the coast of Africa. It is the most fertile and important of the Canary islands, to which it gives name. Canary, or Cività de Palmas, is the capital of the island. (See Canarias.)**

**CANCER, in astronomy; the fourth sign of the zodiac (q. v.), marked thus ♊, which the sun enters on the 21st day of June, thence called the summer solstice. It consists, according to Kepler, of 17, according to Bayer, of 35 stars, 2 of which are of the third magnitude. Flamsteed made a catalogue of 83 stars, the comparative brightness of several of which will be found estimated by doctor Herschel (Phil. Trans., xxxvi., 311). The tropic of cancer is a small circle of the sphere, parallel to the equator, from which it is 23° distant, and marks the sun's greatest northern declination. It is so called because it passes through the beginning of the sign Cancer.**

**CANCER. In medicine, this name is given to a roundish, unequal, hard and livid tumor, generally seated in the glandular texture. Though this is the texture in which it is believed always to originate, it may extend to others. This is doubted by some; and the disease which is often met with in the immediate neighborhood of advanced cancer, and in different textures, is, by them, ascribed to mechanical pressure of the cancerous tumors, aided by the acid discharges which accompany its ulceration. The name was derived from a supposed resemblance of the tumor to a crab, and furnishes a good example of the nomenclature from resemblance, which was very much in use in the early periods of the sciences. Two forms of cancer are recognised by
physicians. They may rather be called two states or stages of the same disease. One of these, and the first, is carcinoma, scirrhus, or concealed cancer, of some writers. The second is the open, or ulcerated cancer—ulcerated carcinoma, as it is designated by writers. Under proper internal treatment, the second stage may be kept off for some time; and, in favorable cases, the extirpation of the tumor by the knife may effect a cure. The disease is kept in check, in the first case, but is not removed, and is very prone to pass into the ulcerative stage. The fact that this can be deferred, by proper treatment, is an important one. The sufferings of the patient are thus made less, especially during the first stage; and, even in the last, their severity is much mitigated. One very early symptom of carcinoma is pain. This pain differs from that which ordinarily accompanies local diseases of a different kind. It is described as lancinating, occurring somewhat in paroxysms, and resembling the suffering which the sudden passage of a sharp and pointed instrument would produce in the part. Besides this, there is always more or less dull pain present. The progress of the disease, and the occurrence of the second stage, are marked by increased pain of both kinds; by increase in the size of the tumor, augmented heat, greater inequality in the surface, a darker color, and increased tenderness on pressure. When ulceration is just established, and even a little before, the patient complains of general irritation of the skin; the stomach is disturbed; and symptoms of constitutional irritation, more strongly marked, make their appearance. Ulceration begins on the surface of the tumor, and parts are destroyed, in succession, from without, until the whole texture presents a mass of disease. Instead of the destructive ulceration, we have, in many cases, fungous masses projecting from the diseased surface; and these, at times, attain considerable size. But it is not a character of carcinoma to grow, and become as large as other diseases of some of the organs in which it appears. This is especially true of it when seated in the womb. An offensive, serous discharge proceeds from the ulcer. Bleeding often takes place from it, especially when fungous, either from mechanical irritation, though slight, or from accidental excitation of the arterial system only. Carcinoma is a malignant disease. Its tendency is to death. The constitution has not power to overcome it; and hence, when left to itself, it is certainly mortal. Internal remedies do little more than palliate symptoms, or prevent the rapid progress to ulceration, which belongs to the disease. The only remedy is the knife; and, in cases in which the constitution and neighboring parts are not contaminated, extirpation by the knife has removed the disease entirely. There are parts of the body which are liable to carcinoma, in which extirpation cannot be practised, and some in which, though an operation has been performed, death has, nevertheless, followed. In cases of this sort, especially those of the first class, palliatives only can be resorted to; such remedies, namely, as mitigate suffering, and retard the progress of the disease.

CANCER-ROOT, or BEECH-DRIP (oro-bancha virginiana, L.): a parasitic plant, indigenous in America, growing almost exclusively on the exposed root of the beech tree. The whole plant is powerfully astringent, and the root of a brownish color, spongy, and of a very nauseous, bitter taste. It has been applied more externally than internally to the cure of cancer. The one-flowered cancer-root (oro-bancha uniflora) is used in the same manner. All parts of the plants are used in medicine.

CANDELABRA. Torches and lamps were the means used by the ancients for obtaining artificial light. The latter were either suspended from the ceilings of their rooms, with chains, or placed upon small, movable tables (lampadaria, candolabra, and candelabri). The candelabra were originally made of cane, with one plate fixedly above and another underneath, or with feet, for supporters. The Greeks called these λαμπαδαρία. The Grecian artists produced, in ornamenting these lampstands, the richest forms, which always, however, had reference to the original cane, and were encircled with an infinite variety of beautiful ornaments. Sometimes they were shafts in the shapes of columns, which could be shortened or drawn out; sometimes the luxuriant acanthus, with its leaves turned over; sometimes they represented trunks of trees, entwined with ivy and flowers, and terminated by vases or bell-flowers at the top, for the reception of the lamps. Examples of these forms may be found in the British museum and the Louvre, but particularly at the Vatican, where a gallery is filled with marble candelabra. Candelabra of yet more delicate forms, of bronze, inlaid with silver and other met-
CANDLABRA—CANDIA.

469

to most of the valleys, in which, and on the declivities of the mountain, is seen a luxuriant vegetation. The air is mild; the summer is cooled by the nor'wester; the winter is distinguished only by showers of rain. The island would, therefore, be a most delightful residence, and supply its inhabitants, as formerly, with grain, wine and oil, wool, flax, silk and cotton, fish, honey, game, cattle, the noblest fruits of the south, and even with metals, in abundance, did not the oppressions and cruelties of the Turks prevent all cultivation, and render it impossible for the discouraged inhabitants (who, instead of being 1,200,000, as in the time of the Greeks, or 700,000, as in the time of the Venetians, amount only to 300,000, half Greeks, half Turks) to attain more than the most indispensable necessaries of life. Manufactures, trade, navigation, the arts and sciences, are not to be thought of. All the harbors, with the exception of that of Canea, are filled with sand, and the cities are mere aggregations of rubbish. The capital, Candia, the most important place of trade on the island, 12,000. According to Homer, king Idomeneus sailed from this island to Ilium, with a vessel of the Greek mythology made Crete the scene of many of the adventures of the gods and heroes. Here Saturn reigned, and afterwards Minos, 1500 years before Christ. After the abdication of the kings, Crete became a republic, and then a seat of the Cilician pirates, till it was conquered by the Romans. In the year 823, it passed from the hands of the Roman emperors in the East into those of the Saracens, who built the capital, Candia, on the ruins of Heraclea, but were expelled again, in 962, by the Greeks. Against the will of the inhabitants, the Byzantine sovereign sold the island to the Venetians in 1204, who, aware of its importance, fortified most of the cities, won the good will of their new subjects by a mild government, and repelled all the assaults of the Genoese and Turks, till the middle of the 17th century. About this time, the attacks of the Turks became more violent, on account of a prize taken by the Maltese, on board of which was the aga of the eunuchs, and, according to a report then very generally spread throughout Europe, the favorite wife and son of the sultan Ibrahim, but probably only a slave of the aga, who had been employed in the seraglio as a nurse, with her son, to whom, however, the sultan was much at-
tached. This vessel was carried, for a short time, into Callisene, a harbor of Candia, without, however, the consent of the Venetians, who had no garrison there. The sultan was highly incensed, ascribed all the fault to the Venetians, and landed a large force in Candia, in June 1615, which soon took Canea and Retimo, and besieged the capital with vigor. The attack was bravely repelled, but repeated in 1649; and was this time also unsuccessful. In 1655, the Turks made a third effort, but afterwards changed the siege into a blockade, which they continued for 10 years without success, since the Venetians, being masters of the sea, supplied the fortress, without difficulty, with provisions, men and ammunition. In 1657, after the peace of Vaxadar, the grand vizier, Kiospurli, in order to restore his reputation, which had been tarnished by the loss of the battle of St. Gotthard, and to regain the favor of Mohammed IV by an important conquest, took vigorous measures for the entire reduction of Candia, investing the capital, May 14th, with 80,000 men. A wall with 7 bastions surrounded the fortress; the same number of ravelins were situated in front of the wall, and several detached works still farther in advance: a numerous fleet held the Turks in check by sea, and the garrison, commanded by the chevalier de Ville and Morosini, was ready to be buried under the ruins of the fortress. The attack of the Turks was directed against the bastion called Panigra. The Christians contested every step of their advance; but the Turks were soon at the foot of a breach, which was, however, so well defended by mines, sallies, and intrenchments, that the most furious assaults, directed by Kiospurli in person, who feared the displeasure of his master, were without success. The winter found the Turks still before the breach, and compelled them to withdraw to their intrenchments. The natives of the East, unaccustomed to a winter campaign, were carried off by sickness; and new masses of troops, with all the materials for a siege, supplied the loss. Changes occurred also in the fortress. In the spring of 1668, the brave chevalier de Ville was recalled, on account of the jealousy of his superiors, and a quarrel with Morosini. His place, however, was well supplied by the chevalier St. André Moutbrun. Volunteers, likewise, poured in from all the countries of Europe, to display their courage on so bloody a field, and to learn the art of war. Numerous engineers made the place their school, and Werthmüller, Rimpler and Vauban were together here. The pope sent troops and money; the Maltese, knights and soldiers. The duke de la Feuillade led thither 600 Frenchmen, some of them of the noblest families, who, with French thoughtfulness, rushed into needless danger, and were, for the most part, destroyed. The count of Waldbeck subsequently came with 3 regiments of Luneberg troops, so that the garrison was always kept from 8000 to 10,000 strong. Treachery had given the Turks information that the bastions of St. André and Solianetta were the weakest points of the fortress; they therefore altered their plan, and attacked the last-mentioned works. Departing from the line of operations which they had hitherto followed, they approached the fortress by employing a great number of men in digging a deep ditch, throwing up the earth towards the place, and continuing to move it forward with shovels, till they reached and filled the trench. During sallies and well-applied mines, however, kept the Turks in check for a long time, and often destroyed their works; but, having finally succeeded in establishing themselves on the bastion of St. Andre, they forced beyond it strong intrenchments, which withstood the most violent assaults; and the approach of winter found the besiegers no farther advanced. In the spring of 1669, the Turks pursued their labor slowly, but surely and successfully. In a short time, nothing but a heap of earth and stones remained to the Venetians of the bastion of St. André, and their last defense was a wall, thrown up during the winter, as a general intrenchment. In this extremity, the dukes of Beaufort and NAVailles appeared with a French fleet and 7000 troops. A desperate sally was undertaken with this new reinforcement. A mine, which was to serve as a signal, and throw the Turks into confusion, did not explode: on the contrary, a Turkish powder-magazine blew up when the French had already got possession of the trenches, and repelled an attempt of the Turks to recover them. This explosion filled the French with such a fear of concealed mines, that they fled in disorder from the fortress, and left 200 men dead on the field, among whom were many brave officers, and the duke of Beaufort. At the same time, the Christian fleet, consisting of 80 ships and 50 galleys, which were to attack the Turkish camp in the flank, was thrown into disorder by the batteries on the coast, and the blowing up of a ship of 70 guns, and the sally was entirely un-
Successful. This misfortune increased the discord which already existed to such a degree, that the duke of Navailles, convinced that the preservation of the fortress was impossible, re-embarked his corps, and returned to France. Individuals belonging to the other troops joined the French; the Maltese, and almost all the volunteers, also, departed shortly after; a new assault of the Turks was more successful than the previous ones, and brought them to the palisades of the last intrenchment; the garrison, amounting to scarcely 3000 men, was desponding and insubordinate; quarrels distracted the commanders, and everything announced that the place must fall at the next assault. It was resolved, therefore, in a council of war, to surrender. The terms of capitulation were solved, therefore, in a council of war, to surrender. They managed Candia in the usual manner. Three pachas, at Candia, Canea and Retimo, governed the island. On account of the feuds of these pachas, the inhabitants of the western mountains succeeded in forming a government of their own, under Turkish protection. As the compacts made with them were not always observed, they were wont, in such cases, to take up arms, were often defeated, but never entirely subdued. The pachas having demanded hostages of them in 1531, they joined the Greek insurgents. Even under the Venetian government, the Candiots had the reputation of suffering no infringement of their privileges, and would not permit the Venetians to establish, in the other districts of Greece, a nobility, degli possidenti, by whose means they might hold the other inhabitants under the yoke of the potestas. Had the mountainers been armed, when the Turks made their first descent on the island, it would probably have been impossible for the invaders to have maintained themselves in Candia. The Sphachiates have played the same part in Candia as the Maniotes in the Morea, excepting that they have not escaped the tribute of the poll-tax. The energy of the inhabitants seems to be now relaxed. (See Greek Insurrection.) The historical importance of ancient Crete, in a mythological point of view, and as a seat of ancient civilization, is shown by Hone's Kréta (Göt., 1823). In 1817, F. W. Sieber, a German physician, penetrated far into Crete, and made many observations on it, which had principally in view the improvement of natural history and medical science. See his Reise nach der Insel Kréta-Voyage to the Island of Crete (Leips. 1823), 2 vols. with plates and a map.

CANDIDATE (from the Latin candidatus, white-robed, because, among the Romans, a man who solicited an office appeared in a shining white garment—toga candida). The candidus of the Romans wore no tunic; either as a sign of humility, or in order to show the wounds received on their breasts. The time of their canvassing was two years, during which they wore the toga candida. In the first year, they delivered speeches to the people, or had them delivered by others, with the consent of the magistrates. This was called profiteri nomen suum, and the year, annus professionis. After this year, they requested the magistrate to enter their names on the list of candidates for the office sought for. An aspirant was seldom refused permission to deliver his speeches; but he was not yet necessarily treated as a candidate by the magistrates,
or proposed by them to the people on the day of election. Before that was done, his life was subjected to a scrutiny in the senate, after the pretor or consul had received his name. If the senate accepted him, he was permitted to offer himself on the day of election, as a candidate. If he was not accepted, he received the answer rationem non habeo; non reman­tia. The tribunes often opposed a candidate who had been accepted by the senate. The morals of the aspirants, in the purer ages of the republic, were always severely examined. In the later period of the republic, nobody could obtain an office if he was not present, and if he had not offered himself on three market-days. (Sall. Cat. 18., Cic. Fam. xvi. 12.) On these days, the candidates tried to intimate themselves into the favor of the people. They went from house to house (ambulando), shook hands with every body whom they met (pre­smendo), addressed each one by his name, for which purpose they generally had a nomen­clator with them, who whispered the names of those whom they met into their ear. Cicero, therefore, calls the candidates nato officiosissima. They placed themselves, on market-days, in elevated places, in order to be seen. On the day of election, they did the same. Favorites of the people accompanied them (de­ductores); some of their suite (divisores) distributed money among the people, which, though prohibited, was done publicly. Divisi­ores were employed to bar­gain with the people, and the money was deposited in the hands of acquestrae. Sometimes a number of candidates united into parties (solidones), in order to defeat the chances of the others. At last, the grounds on which each candidate rested his claims to the office were read, and the tribes delivered their votes. The successful candidate then sacrificed to the gods in the capitol. To oppose a candidate was called ei refra­gar; to support him, sufragar, or sufragatores esse. - We have dwelt so long on this subject, on account of the similarity between the ancient and the modern modes of seeking office. - The word candidate is also used by Protestants, to designate a theologian, who, having finished his studies at a university, is waiting for an appointment in the church.

CANDIDE; the name of a famous tale of Voltaire's, forming an epoch in French literature, in which he ridicules the system of optimism with his usual spirit, and attacks revelation with plausible but superficial arguments. Voltaire is unsur­passed in the art of treating the most serious subjects with light raillery, while he seduces the reader by the charms of his style. Some descriptions in this tale, for instance, that of the carnival at Venice, are excellent.

CANDIDEM; a Catholic feast, instituted by pope Gelasius, in 492, in commemo­ration of the presentation of Christ in the temple, and of the purification of Mary; perhaps intended to take the place of the rude heathen feast called the Lupercalia, which was abolished by him. It is celebrated on February 2, and has its name from the consecrated torches which are carried about in procession, in allusion to the words of Simeon, "a light to enlighten the Gentiles."

CANDEy; the principal point of Candia; lat. 35° 28' 43 11 N.; Ion. 24° 12' 47' E.; supposed to be on the site of the ancient Cyclonia. Population, 7150. The city has been fortified from the time of the Venetian government.

CANDY-ARGUELLES, don José, Spanish minister of finance from 1820 to March, 1821, distinguished himself in the cortes of 1812, no less by his talents than by his zeal for the establishment of a constitu­tion. When he was minister, he laid before the cortes a statement of all the possessions of the crown and of the church in Spain, from which it appeared that the latter surpassed the former by a third part. When king Ferdinand, in 1814, resumed the government, C. was confined in Peniscola, but, in 1816, was restored to liberty, and employed in Valen­cia. In his Memoria Sobre el Credito Publico, he represented the condition of the treasury, at the time when the king swore to observe the constitution, and set forth the measures of the ministry for improving the condition of the finances. According to this report, the annual deficit of 340,050,291 reals was more than the whole revenue. Among other means of remedying the evil, the minister pro­posed to raise 140,000,000 reals by direct taxes; to sell a 7th part of the property of the church and monasteries; also the small possessions of the crown in North Africa, and to make proposals for a loan of 200,000,000 reals. He presented a plan, likewise, for diminishing the great number of officers, and reducing the amount of exclusive privileges. His proj­ects were executed only in part. In 1821, he resigned his office, together with

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the other ministers, and was chosen, in 1822, a member of the cortes. In this body, he joined the party of the moderate liberals. After the fall of the constitution in Cadiz, he fled to England.

Cange, Du. (See Du Fresne.)

Canisius, Peter, born in 1524, at Nimiergen, was the first man in Germany, who entered the order of the Jesuits, of which he became a very active member. In 1549, he was made professor of theology, rector and vice-chancellor of the university at Ingolstadt. He afterwards reformed the university of Vienna, according to the views of the order. His catechism is yet in use. He persuaded Ferdinand I to adopt violent measures against the Protestants, and founded the colleges at Prague, Augsburg, Dillingen, and Freiburg, in Switzerland, in the latter of which he died, in 1597.

Canne, a city in the Neapolitan province, Fuglia, at the mouth of the Aufidus, on the Adriatic, famous for the great battle in which the Romans were here defeated by Hannibal (216 B. C.). The consuls, Publius Emilius Paulus and Terentius Varro contended themselves with acting on the defensive against the Carthaginian general, who endeavored to decide the fate of Rome by one blow; but the Senate, considering that the Roman army consisted of 87,000 men, while that of the enemy amounted only to 50,000, among whom were 10,000 horse, and would have no point of support when beaten, commanded the consuls to give battle. Hannibal, seeing that his plan was changed, allowed Varro to gain a slight advantage in a skirmish of cavalry. The Romans left their strong position at Canusium, on the banks of the Aufidus, and the whole army crossed the river. The consuls Varro drew up his troops on the plain, with his right wing protected by the river. At the same time, Hannibal forded the Aufidus, and led his small army to the attack. The Romans had their own cavalry on the right wing, that of their allies on the left, and the infantry, as usual, in the centre. Hannibal opposed the Numidian cavalry to that of the Roman allies, and that of the Spaniards and Gauls to the Roman. His infantry from Africa he divided into two bodies, each of them near the cavalry. At some distance from both wings, the Spaniards and Gauls, on foot, arranged in an oblique line, occupied the centre. Behind them was a strong reserve. Hannibal himself commanded the centre. He had calculated that the wind called Volfarras, which blew regularly at certain hours in that country, would, at the time of attack, throw dust and sand in the eyes of the Romans, and hide his own evolutions. The consul Emilius Paulus was wounded by a Baelonian slinger, soon after the light troops had begun the engagement. The first shock of the Roman cavalry upon the Spaniards and Gauls was violent. After the fight had lasted for a long time, they alighted, and fought on foot. The Gauls and Spaniards then broke through the dismounted Romans, and cut them down. The Roman infantry, to assist their horse, moved in a curved line towards the wing, under very disadvantageous circumstances, and attacked the Spanish and Gallic infantry, which retired in good order into the intervals, as Hannibal had commanded. By this means, Hannibal was enabled to attack the Romans in flank, as they advanced incanently, with the African infantry, which he had kept back for this purpose. Thus surrounded, and contracted into a small compass, the Romans fell in great numbers, among them the consul Emilius Paulus, and both the proconsuls Servilius and Attius. The Numidian horse destroyed those who fled from the field of battle. The victor made 13,000 prisoners. The Romans lost, according to their own lowest statements, 45,000 men; according to the highest, 70,000. Hannibal collected the gold rings of the knights who had fallen, and sent some bushels thereof to Carthage. But the victory had also weakened his own army. He was in want of money to recruit his troops. This want, rather than the short period of luxurious living in winter-quarters at Cnpua, obliged him, at length, to give up the hope of conquering Italy, after a war of 17 campaigns. (See Hannibal.)

Cannes, of Canne; a small seaport of France, on the shore of the Mediterranean, in the department of the Var; population, about 2800. C. is famous as the place where the memorable march of Napoleon through France began, when he returned from Elba. He landed here March 1, 1815.

Cardinals. (See Anthropophagi and Cannibals.)

Canning, George, was born in London, April 11, 1770. His father, a man of considerable abilities and literary cultivation, had offended his family by marrying a lady of beauty and accomplishments, but without fortune, and died in 1771, leaving his widow destitute. She had recourse to the stage for support, but was
not very successful, and was afterwards twice married. Her second husband was an actor; her third, Mr. Hunn, a linen-drapier of Exeter. She lived to see the age of 15, formed the plan of a periodical paper, called the Microcosm, of which he was the principal editor. In 1797, he was entered at Oxford. His vacations were passed with Sheridan, by whom he was introduced to Burke, Fox, and other distinguished Whigs. But, although Sheridan had already announced him, in Parliament, as the future ornament of his party, C. entered into terms with Pitt, by whom he was brought into Parliament in 1783. During the first session, he remained silent. His maiden effort was made in 1794, on the Sardinian treaty, and rather disappointed expectation. In 1794, he took the degree of M. A., and, from that time, resided constantly in London. In 1795, he was under-secretary of state. In 1797, he projected, with some of his friends, the Anti-Jacobin, or Weekly Examiner, of which Gifford was appointed editor. C. contributed many poetical and other articles to this periodical. In 1798, he supported Wilberforce's motion for the abolition of the slave-trade, and continued always an advocate for the amelioration of the condition of the blacks. In July, 1802, C. increased his fortune and influence by a marriage with Joanna, daughter of General Scott, a lady with a fortune of £100,000. The administration being dissolved in 1801, C. became a member of the opposition, until the restoration of Pitt in 1804. In 1807, he was appointed secretary of state for foreign affairs in the Portland administration. A political misunderstanding with Lord Castlereagh led to a duel between that minister and C., in which the latter was slightly wounded. This dispute occasioned the dissolution of the ministry. In 1810, he opposed the reference of the Catholic claim to the committee of the whole house, on the ground that no security or engagement had been offered by the Catholics. Some of his most brilliant speeches were on this subject. He invariably supported the admission of the Catholics to power, not as an abstract question of right, but as a matter of expediency—of hourly increasing expediency. The adoption of the measure being then a matter of policy, the state of opinion, the condition of affairs, and the securities with which it should be accompanied, were, with him, elements of the question. He proposed securities, in 1813, which, with the bill, were rejected. He supported, in 1812 and 1813, the same motion which he had opposed in 1810; and, in 1821, two bills in favor of the Catholics having been introduced into the house of commons, he observed, "that the moment was peculiarly favorable for discussion; that they were in possession of a peace achieved by Catholic arms, and cemented by Catholic blood." To C. was principally owing the first blow which shook the throne of Napoleon; the British policy in Spain was directed and animated by him. "If there was any part of his political life," he declared, on one occasion, "in which he gloried, it was that, in the face of every difficulty, discouragement, and prophecy of failure, his had been the hand which had committed England to an alliance with Spain." "Never," said he, on another occasion, "ought we to relinquish our hold of the Peninsula. The ruler of France has drawn over all our grand object, to which he stands pledged—the establishment of his dominion in the Peninsula. If he fail in this, his defeat must be most signal." In 1818, he was appointed minister to Portugal, from which he was also returned in 1814, 1818, 1820. In 1814, he was appointed minister to Portugal, and remained absent about two years. In 1819, he declared his decided hostility to parliamentary reform, in whatever shape; and his speech on Lord John Russell's motion for reform, in 1822, is among the most finished specimens of eloquence in the house of commons. On the occasion of the proceedings relative to the queen, he declared, that "toward the object of that investigation, he felt an unaltered regard and affection;" and soon after resigned the presidency of the board of control, and went abroad. Having been nominated governor-general of India, he was on the point of embarking, when the death of the marquis of Londonderry called him to the cabinet as secretary for foreign affairs (Sept. 16, 1822). One of his earliest acts, in this situation, was to check the French influence in Spain; and, in a debate on this subject (April 29, 1823), he observed, "It is true that there is a contest going on in the world between the spirit of unlimited monarchy and the spirit of unlimited democracy. Between these two spirits there is a strife openly in
action, or covertly at work, throughout the greater portion of Europe." It was in this session that Brougham accused him of "the most monstrous truckling which the whole history of political forgiviness could furnish." C. rose immediately, and exclaimed, "That is false!" The affair was settled, after some explanations on the part of Mr. Brougham. He continued to support the propositions in aid of the Catholics, and in 1825, communicated to foreign ministers the determination of his majesty to appoint chargé d'affaires to Colombia, Mexico and Brazil. The consequences of these attempts were infinitely various. In consequence of the attempts made by Spain to assist the insurrections of Portugal, it was immediately determined, by the ministry, to support the regency of that country. On this occasion, C. concluded his speech with these remarks: "Some years ago, I said that I feared that the next war, which should be kindled in Europe, would be a war of opinions. It is the contemplation of this new power, in any future war, which excites my most anxious apprehensions." And, in answer to the argument that the ministers had encouraged the attack upon Portugal, by having permitted the occupation of Spain by France, he uttered the memorable words: "Was it necessary that we should blockade Cadiz? No. I looked another way; I resolved that if France had Spain, it should not be Spain with the Ladies. I called the new world into existence, to redress the balance of the old." April 12, 1827, his appointment to be prime minister was announced. His administration was terminated by his death, the 8th of August following; but not until it had been crowned by the treaty of London (July 6), for the settlement of the affairs of Greece. As a statesman, he was liberal, profound, consistent and independent. His foreign policy was marked by the three great measures of the recognition of the South American states, the maintenance of the independence of Portugal, and the treaty in behalf of Greece. His uniform support of the Catholic claims, and his constant and ardent exertions in favor of the slave population of the colonies, are not less honorable to his humanity than to his policy, his eloquence was persuasive and impassioned; his reasoning clear and logical; his manner graceful; his expression winning, and his whole appearance prepossessing. His wit was brilliant, and his satire was extremely caustic. He died poor. His body is deposited in Westminster abbey. (See Speeches of the Right Hon. G. Canning, with a Memoir, by R. Therry, London, 1828.)—The cousin of G. Canning, the honorable Stratford Canning, is well known by the conspicuous part which he has played during the difficulties between the Porte and the other European powers.

Cannon; a heavy metallic gun, which is moved by the strength of men and horses. It is mounted on a carriage, and is (formerly stone or leaden) balls are projected to a distance from it by the force of gunpowder. The interior of the cannon is called the bore. The solid piece of metal behind is named the breech, and terminates in the button. The dolphin (so called because they used to be made in the form of this animal) are the lunettes of this gun; the handies by which the piece is moved, buntings. The aperture through which the fire is introduced into the bore, to ignite the charge, is called the vent or touch-hole, in which a small tube, used to contain the priming, is placed previous to firing. The supports, which are denominated carriages, are mounted on trucks, as in the case of ship-guns or garrison-guns, or on two wheels, as in the case of field-pieces. When a field-piece is to be moved, two-wheeled frame is fixed to the carriage, which is called a limber, and this process is called to limber up. The charge, or cartridge, is a bag filled with powder, carried near the cannon. The cannon is fired by means of the match, which is a lighted bunch of tow, wound round a small stick; or by a tube, filled with the priming-powder, from which a piece is broken off every time, and forced into a stick, to light the charge. On board most of the English ships there are cannon fired by means of locks. To perform the labor required in managing cannon is called to serve the guns. Cannon were formerly dignified with great names. 12, cast by Louis XII, were called after the 12 peers of France. Charles V had 12, which he called the Twelve apostles. One, at Bois le Duc, is called the Devil; a 60 pounder, at Dover castle, is named Queen Elizabeth's pocket-pistol; an 80 pounder, at Berlin, is called the Thunders; another at Malaga, the Terrible; two 15 pounders, at Bremen, the Messengers of bad news. In the beginning of the 13th century, names of this sort were abolished, and the following came into general use—cannon royal, or carthou, carrying 12 pounds; brass field-cannon, or ¾ carthou, 36; ½ carthou, 24; whole culverins, 18; demi-culverins, 9; falcon, 6; saker, lowest sort, 5; ordi-
nary, 6; largest sort, 8; basilisk, 48; serpentine, 4; aspick, 2; dragon, 6; siren, 60; falconet, 3, 2 and 1; moyens, which carried a ball of 10 or 12 ounces; carbines carried one of 16 ounces. Cannons are, at present, named, from the weight of the ball which they carry, 6 pounders, 12 pounders, &c. The length of the cannon is in proportion to the caliber. Cannon took their name from the French word cane (a reed). Before their invention, machines were used for projecting missiles by mechanical force. These were imitated from the Arabs, and called ingenia; whence engineer. The first cannon were made of wood, wrapt in numerous folds of linen, and well secured by iron hoops. They were of a conical form, widest at the muzzle. Afterwards, they received a cylindrical shape. At length they were made of iron bars, firmly bound together, like casks, by iron hoops. In the second half of the 14th century, they were formed of an alloy of copper and tin, and, in process of time, other metals were added. Some attribute the invention of cannon to the Chinese, and say that there are now cannon in China, which were made in the 80th year of the Christian era. From the Chinese the Saracens probably learned to manufacture them, and Callinicus, a deserter from Heliopolis, in Phoenicia, made them known, in 670 (676), to the Greek emperor Constantius Pogonatus. Bombards were brought into use in France in 1338, and, according to another and more doubtful authority, Solomon, king of Hungary, used them, in 1073, at the siege of Belgrade. From all these accounts, it appears that the true epoch of the invention of cannon cannot be exactly determined: it is certain, however, that they were actually in use about the middle of the 14th century. In 1370, the people of Augsburg used cast cannon. In the beginning of the 15th century, nearly all the countries of Europe, except Russia, where cannon were first cast in 1475, were provided with them. The lead cannon, which were invented and employed by the Swedes between 1620 and 1632, in the 30 years' war, were lined with tubes of wood or copper, and secured on the outside with iron rings. The art of firing red-hot balls from cannon was invented by major-general Weiler, of the electorate of Brandenburg. In the commencement of the 16th century, Maurice of Switzerland discovered a method of casting cannon whole, and boring them, so as to draw out the interior in a single piece. Ares for expeditions firing, loaded from behind, and having the charge closed in with a wedge, were introduced by Daniel Spekle (who died 1589) and Ubal dus. Charles Milton invented a kind of air cannon, 2 feet long, 3 inches diameter in the thickest part, 12 lines caliber, charged with inflammable air, and fired with a Leyden jar, or a piece of cat-skin, by which 12 discharges can be made in a minute. It stands on a frame of glass, and may be directed to any point. In 1740, cannons were made of ice at St. Petersburg, and balls of many pounds weight were projected without injuring the pieces. (See Steam-Gun, Gun-Boat.) Cannon-clock is a contrivance invented by one Rousseau, and placed in the garden of the palais royal, and in the Luxembourg at Paris. A burning-glass is fixed over the vent of a cannon, so that the sun's rays, at the moment of its passing the meridian, are concentrated, by the glass, on the priming, and the piece is fired. The burning-glass is regulated, for this purpose, every month. (For the use of cannon in naval warfare, see Ship.)

Canoe, Alonzo or Alexis; a painter, sculptor, and architect. The variety and extent of his talents made him the Michael Angelo of Spain, whom he also resembled in his private character. He was born in 1608, at Grenada, studied in Seville, with Pacheco, and first made himself known by the statues which he executed for the great church of Lebrijn. In his 24th year, he had acquired the fame of a great artist, and was (1638) appointed painter to the king. In this capacity, he executed several celebrated pictures, and was at the same time one of the chief courtiers of the house of Austria. The king par­doned him. He became a priest, and was made a ransomero (resident) of Grenada, where he passed the remainder of his life in a pious and exemplary manner, and died in 1675.

Canopus. (See Canopus.)

Canoe, also Canoa; the term generally used to designate the small vessels which uncivilized people, living near the water, use. In the East Indies, there is a kind of boat which goes by this name, sometimes from 40 to 50 feet long, and 5 or 6
broad. The North American Indians generally impel their canoes with paddles, which have a very large blade, and are managed perpendicularly. The canoes of Canada are of the most fragile texture, and of so little weight, that, in passing from one river to another, the boat-men carry them on their heads across their portages. They are mostly covered with bark, the pieces of which are sewed together with a kind of grass. This bark is generally not more than a quarter of an inch in thickness; yet, in these frail vessels, the Indians and Canadians do not hesitate to descend very dangerous rapids. The Esquimaux are exceedingly dexterous in the management of their canoes. These consist of a light, wooden frame, covered with seal-skins, sewed together with sinews. The skins are not only extended round the bottom and sides, but likewise over the top, forming a complete deck, and having only one opening to the pieces of which are sewed together, forming a complete deck, and having only one opening to admit the Indian to his seat. To this hole a flat hoop, rising about four inches, is fitted, to which is fastened the surrounding skin. The paddle is about 10 feet long, light, and flat at each end. In the Esquimaux language, the canoe is called a kaiak, or man’s boat, to distinguish it from umiak, the woman’s boat, which latter is a large boat for transporting the women, with their families and possessions. The Greenlanders and Esquimaux use the same kind of canoes, and it is astonishing, when we consider their insignificant construction, at what a distance from the regions they commonly inhabit, these people, especially the former, are found in them. In the islands of the South sea, the natives have a double canoe, united by a strong platform, serving, in this way, as one vessel. Such a canoe is capable of carrying a number of persons, and a considerable lading. Captain Cook gives us a long account of the different kinds of canoes used in Otaghite.

**Canoe**; a person who possesses a proclivity, or revenue allotted for the performance of divine service in a cathedral or collegiate church.

**Canon**, in the arts. When art has succeeded in producing beautiful forms, the question arises, with what proportions beauty of form is united. Artists of genius first started this question, and imitators, inferior to them in talents, scrupulously followed their results, and naturally exalted some existing work into a model for every performance. Among the Greeks, the celebrated statuary Polyclitus (q.v.) first instituted such inquiries; and, as he generally represented youthful, pleasing figures, it is probable that he fixed the standard of beauty in the youthful form. The canon (the model statue) of Polyclitus was accordingly a statue, which was made principally for the purpose of showing the beautiful proportions of the human form in a youth just ripening into manhood. No copy of it is known to exist; the artist probably gave his model of proportion a quiet, simple attitude, without any strong, distinguishing marks. His successors imitated it without deviation. Polyclitus was not the only Greek artist who pursued such investigations respecting the proportions of form. Euphranor, for instance (in the 10th Olympiad), is celebrated in the same way. Among the moderns, Bürer and Leonardo da Vinci have devoted themselves to similar inquiries. See A. Hirt’s Abhandlung über den Canon in der bildenden Kunst in the Abhandl. der Histor-philolog. Classe der Königl. Acad. der Wiss. in Berlin (1814 and 1815), a table annexed to which gives the average proportions (ascertained by careful measurements) of the best ancient statues.

**Canon**, in music, signified, with the ancient Greeks, what now is called monochord. At present, it signifies a composition in which the several voices begin at fixed intervals, one after the other, and in which each successive voice sings the verse of the strain of the preceding one. In Italian, therefore, it is called fuga di conseguenza; in Latin, canon perpetuus, or continuous fugue; in German, Kreis-fuge (circulating fugue). Sometimes each voice begins with the same, sometimes with different notes. Canons may be finite or infinite. The former end, like any other compositions, with a cadence, while the infinite canon is so contrived, that the theme is begun again before the parts which follow are concluded. By this means, the performance might be continued to an indefinite length. A canon may consist of two, three, four or more voices. Generally only one voice of a canon is written, and a sign shows the place where the other voices are to begin. Formerly, at the beginning of canons, it was the custom to place the directions by which they were to be performed, before and sung. These directions were called the rule or canon, and thence arises the title which such compositions have since retained. Canons differ from ordinary fugues; for, in the latter, it is sufficient that the subject be occasionally repeated and imitated according to the laws of counterpoint; but,
in the former, it is essential that the subject be strictly repeated by all the succeeding parts; which repetition may be made in the unison or octave, the fourth, or the fifth, or any other interval of the scale. There are several other canons, as canon polymorphus, canon persona, canon per diminutionem, and canon per augmentationem, which to explain, would exceed our limits. Sometimes, also, a musical passage of a composition, in which one voice repeats, for a short time, another, is called, improperly, a canon.

Canon (Greek); properly a measure, a rule, a standard; thence canon is used to denote the rule or standard of primitive Christianity. The same term is employed to designate the collection of books containing this rule; that is, the canonical books of the Holy Scriptures, whose divine origin the church acknowledges. The canon of the books of the Old Testament, as drawn up by the Jews in the 4th century before Christ (see Hebrew Language and Literature), receives in this form equal respect among all Christians, because Christ and the apostles have expressly appealed to them, and pronounced them writings inspired by God. The apocryphal books of the Old Testament, whose canonical character the Jews did not acknowledge, the Eastern church has never received; but the Western church declared them canonical, in the African council, about the end of the 4th century. Nevertheless, the opinions of the clergy respecting the canonical authority of the apocryphal books of the Old Testament remain divided. Jerome, one of the fathers of the church, denied it, and many theologians coincided with him. (See the following article.) The Protestant churches reject the Apocalypse as not belonging to the rule of faith. Respecting the value and the number of the books belonging to the canon of the New Testament, the opinions of Christians were much divided till the 4th century. As early as the 3d century, the separation was made into the Evangelion (the four evangelists) and the Apostelicon (the Acts and Epistles of the Apostles). The five historical books, the Epistles of Paul, the First Epistle of Peter, and the First Epistle of John, were universally acknowledged to be genuine in the 3d century; hence they are called, by Eusebius, in his Ecclesiastical History, written about A. D. 335, Homolegomena (universally received). The other five Catholic Epistles (Second of Peter, Second and Third of John, Jude and James) he calls Antilegomena (doubtful, not universally received). At that time, the Epistle to the Hebrews was considered genuine by most persons, and the Apocalypse by many. These books were received, in the second half of the 4th century, in the Egyptian church (where Athanasius first used the term canonical), and in the Western church. In the Eastern church, properly so called (the dioceses of the patriarchs of Constantinople, Antioch and Jerusalem), only the Catholic Epistles were of canonical authority at that time; the Apocalypse not till the 6th century. The canon of the New Testament has since remained unaltered, and the Protestant churches hold it in common with the Greek and Catholic churches. The results of critical examinations of the genuineness and canonical character of the single books of the Bible, even when they were unfavorable to the books, have produced no alteration in the established canon. The reasons of the ancient fathers of the church for or against the canonical character of the Biblical books were merely historical and traditional, and built on philological criticism; they are still the most tenable and rational: the philosophical grounds are more subject to be affected by extraneous influences. Modern criticism has attacked, with success, the genuineness of single passages; but it has failed in its attempt to destroy the canonical authority of whole books. With respect to the Apocalypse, or Revelation of John, however, a large number of the Protestant commentators incline to the side of the assailants.—Canon is also the name of the prayers which the Catholic priests repeat before, at and after the consecration of the host. In arithmetic, algebra, &c., canon denotes a formula obtained by the solution of a problem, and containing the rule by which all examples, comprehended under the general problem, may be solved.

Canon of the Holy Scriptures (written by a Catholic). The distinguishing characteristic of the Catholic religion, as is fully explained in the article Catholicism, is, the authority which it attributes to tradition, by which revelation continues in life and power. The Holy Scriptures are esteemed sacred by the Catholics, because the church has transmitted them from age to age as sacred, and illustrative of revelation, as far as any writings can be. The church has only declared what writings have been handed down as of divine origin. The catalogue of these Holy Scriptures is the canon; the writ-
ings themselves are called Canonical Books. In this sense, the Protestant church has no canon; it rejects the authority of all the traditions of the church. Hence, in order to be consistent, it must leave every Protestant, on free investigation, to decide what books he will regard as canonical. But the Bible, the pillar of the Protestant faith, is made up of separate canonical books; and, by pursuing such a course, the basis of the Protestant faith might be undermined. It has been agreed, therefore, however inconsistently, to adopt the New Testament canon of the Catholic church. But, in fixing this canon of the Old Testament, the decisions of the Catholic church have been rejected; and, contrary to the African councils and the usage of the Roman church, established by the council of Trent, part of Esther, also Baruch, Tobit, Judith, Wisdom, Ecclesiasticus or Jesus the Son of Sirach, the two books of Maccabees, the Song of the Three Youths in the Fiery Furnace, described in Daniel, together with the two last chapters of this prophet, are thrown out as uncanonical and apocryphal.

It is worthy of mention, that a controversy on this subject broke off the negotiations for a union of the Catholic and Protestant churches, which commenced in the beginning of the 18th century, between Leibnitz, Molanus and Bossuet.

Canon and Caput in Councils. A council is not only the church universal assembled, which declares the faith of the members, and fixes the doctrines to be defined, but it also possesses the supreme power in the administration of all ecclesiastical affairs, which have not immediate reference to doctrines (as liturgies and rules of discipline). In the language of the church, a distinction is made between these two kinds of ordinances. Such as respect doctrine are called canons; and every other precept or regulation, caput or decreum. The latter are subject to be changed as the spirit of the age requires, and, hence lay no claim to infallibility; the former are the unalterable truths and doctrines of the infallible church of the Lord. The council of Trent makes a distinction between the two, and the capitula or church discipline are superscribed De Reformacione. It would be a great mistake to view these capitula as doctrinal truths, and then to reproach the church with establishing erroneous dogmas as truths essential to salvation.

Canon Law [written by a Catholic]. The famous Gravina begins his Institutes of the canon law thus:—Since the word law is imperative, and includes the idea of physical enforcement, the ancient church preferred to apply to its precepts the milder term of rule or canon (from the Greek exēgor, rule), which agrees with the language of the council of Trent, and the most able canonists, as Van Espen, &c. Canons, therefore, are the laws which the church has promulgated; and by canon lex, in English, is understood the whole body of ecclesiastical laws, ordinances and regulations. The church has been, from the time of its establishment, a free society, possessing and exercising the right of forming laws for itself, either by positive enactment, or by the gradual growth of custom. The regulations of the apostles, the decrees of the general and particular councils, and of the bishops, constitute these laws. Even when, after the downfall of paganism, the Christian church became connected with the state, it retained this legislative power. If the Theodosian code acquired authority, it was only in consequence of reception. The more the organization of the church became settled, the more frequent became the regulations and orders of the supreme bishop (the decretals). There is no question about the authority which was allowed to these decretals, and it is useless to inquire here whether this authority originated from positive enactment or from customary observance. The ecclesiastical as well as the political law is to be traced, in part, to each of these sources. In the course of time, collections were made of these canons, arranged in chronological order (Collectio Canonum). These collections came into use in the fifth and sixth centuries. The chief basis of them was a translation of the decrees of the four first general councils, to which other decrees of particular synods and decreets of the popes were added. In the time of Charlemagne, the collection of Dionysius the Little acquired almost the authority of laws. Equal authority, also, was allowed to the collection of canons ascribed to Isidore, bishop of Seville, which appeared in the ninth century. This famous collection is falsely attributed to Isidore, and abounds in spurious interpolations. It was entitled the Isidorian Code, and is said to have been brought from Spain. The object of the interpolations of the Pseudo-Isidore was probably to give a historical basis to a system grown up out of observance, which transferred many of the former rights of the metropolitans to the pope. After the 10th century, the custom which had before
prevailed, of collecting chronologically the ordinances of the church, and studying them from the sources, was given up, and systematical compendiums of ecclesiastical law began to be drawn from these canons. In these compendiums, it is true, literal extracts of the canons were retained, but often mutilated, and separated from their proper connexion. The most important of these compendiums is that of the Benedictine Gratian (of Chiusi), which he finished in 1151, in the convent of St. Felix, at Bologna. Gratian treated the subjects of the canon law according to a system which he had formed himself, and under each division laid down principles, which he established by quotations from the original decrees. By means of these authorities, with additions of his own, he extended his principles further, and endeavored to reconcile apparent contradictions in the law, or, where they could not be reconciled, to determine which part was binding. Hence the title of his work —<i>Concordantiae Discordantium Canonum</i>. He divides the whole subject into three parts: in the first, he begins with a general essay on law, particularly ecclesiastical law, and treats of the officers of the church, their character, rights, duties, consecration, and share in the government of the church; the second part contains the system of the powers of the church, particularly of its jurisdiction and judicial processes: the third part embraces the rules respecting religious rites, the liturgy, the sacraments, &c. This new collection met with great success. Within 10 years after its appearance, the universities of Bologna and Paris had their professors of canon law, who taught from Gratian's work; and, within a short time, it superseded all former chronological collections. As the civil law acquired authority in so many countries from the circumstance that it was taught in the universities, so the <i>Decretum Gratiani</i>, in the same way, became a code, and with more reason, since it expounded a law really existing; and what Gratian had added was, to a certain degree, considered as commentary.

Any direct cooperation of the popes in elevating the <i>Decretum Gratiani</i> to the authority of a code has never been proved. This <i>Decretum</i>, however, is only the first part of the present <i>Corpus Juris Canonici</i>. After the appearance of the <i>Decretum</i>, new decrees of councils and new decretals were promulgated, which several authors collected into appendices. All these new collections pope Gregory IX ordered to be put in order, which was done by the Dominican Raymond, of Pennafort. The work was divided into five books. This authentic collection was finished in 1234, and sent to the universities of Bologna and Paris. It bears the name of <i>Decretales Gregorii Noni</i>, and has the authority of law. The later decretals and decrees of councils were collected by Boniface VIII, and published as the sixth book (<i>Liber Sextus</i>) of the Gregorian Decretals, in 1288. They have also the authority of laws. Pope Clement V published, in 1313, a collection of his decrees, mostly issued at the council held at Vienne, in France: they are also a part of the <i>Corpus Juris Canonici</i>. About the year 1340, the decretals of John XXII were published; they are called <i>Extravagantes Johannis</i> <i>XXII</i>; and, at a later period, the subsequent decretals, to the time of Sixtus IV, who died in 1484, called <i>Extravagantes Communnes</i>, appeared. These <i>Extravagantes</i> have not altogether the authority of laws. Under pope Pius IV, a commission of 35 persons (the <i>correctores Romanii</i>) was appointed to revise the <i>Decretum Gratiani</i>. The labor was continued under Pius V, and completed under Gregory XIII, and sanctioned by a bull of July 1, 1580. The later bulls have the force of law, if they concern a subject on which the pope has an unquestionable right to legislate, or as far as the secular governments accept them. The canon law, excepting some of its regulations, is in force in Germany, even in civil cases. Luther, it is well known, burned a copy of the canon law at Wittenberg, but the Protestant courts have continued to apply it, except where it disagrees with Protestant principles. The canons, even those of the general councils, which respect the discipline of the church, have no authority in the Gallican church, unless it is proved that they have been admitted as laws of the kingdom. The celebrated declaration of the clergy of France, of 1682, is a series of very important canons. They are to be considered as rules of the Gallican church and laws of the kingdom. Many Catholics are willing to admit that there exist arbitrary canons in the ecclesiastical codes, as much as unconstitutional laws in civil governments. In England, when the Catholic faith prevailed in that country, there existed, besides the general canon law, the legates and provincial constitutions; the former being laws enacted in national synods, held under the cardinals Otho and Otho, legates from pope Gregory IX and Clement IV, about the years 1220 and 1238; the
latter being decrees of various provincial synods, under several archbishops of Canterbury. The authority of the canon law in England, since the reformation, depends upon the statute 25th Henry VIII, according to which the ecclesiastical laws were to be revised by the king and a commission of nobles and clergymen, and such as were not repugnant to the laws of the realm and the king's prerogative were to remain in force till so revised. This revision was never made. There are four species of courts in England, in which the canon law, as well as the civil, is, under different restrictions, permitted to be used: 1. the courts of the archbishops and archdeacons, and their derivative officers, usually called, in the English law, courts Christian (curiae Christianitatis), or ecclesiastical courts; 2. the military courts; 3. the courts of admiralty; 4. the courts of the two universities. The reception of these laws in general, and the different degrees of their reception in these courts, are grounded entirely upon custom, corroborated, in the case of the universities, by acts of parliament. The courts of common law have a superintendence over these courts. An appeal lies from all of them to the king.

**Canonical Books.** (See Canon, and *Synopsis.*)

**Canonical Hours** are certain stated times of the day, devoted, more especially by the Roman church, to the offices of prayer and devotion, as matins, lauds, sext, ninth, vespers. In England, the canonical hours are from 8 to 12 in the forenoon, before or after which marriage cannot be legally performed in any parish church.

**Canonization;** a ceremony in the Roman church, by which deceased persons are declared saints. Alexander III, in 1170, pronounced it an exclusive privilege of the papal chair. This ceremony is one of the most solemn in the Roman church. The pope institutes a formal investigation of the qualifications of the deceased person recommended for canonization, in which his manner of life and the genuineness of the miracles ascribed to him are strictly examined; and an advocate of the devil, as he is called, is appointed, to assail the memory of the candidate, but, of course, always loses his cause. If the examination is satisfactory, the pope pronounces the beatification (q. v.) of the candidate; but, in order to collect new proofs of his merits (e.g., of miracles performed by his relics), the actual canonization generally takes place many years afterwards; and then a day, usually the anniversary of the death of the new saint, is dedicated to his honor, his name is inserted in the Canon or the Litany of the Saints in the Mass (thence canonization), churches and altars are consecrated to him, and his remains are preserved as holy relics. The last instance of canonization occurred in 1803. (See Saints.)

**Canopus, or Canopus, in Egyptian antiquities, is the name given to large-bellied vessels, used formerly for preserving the water of the Nile fresh and fit for drinking. They were frequently made of insult (as the fine canopus of green basalt in the villa Albani), and decorated with figures in relief or paintings; or of costly white alabaster, like that in the church of Ptolemy, with spiral flutings; or they were formed from black, burned clay. Under the shape of such a vessel, surmounted by a human head, connected also sometimes with serpents, and similar attributes, the Egyptians worshipped one of their beneficent deities. The city Canopus or Canopus, between Alexandria and the western mouth of the Nile, is said to have derived its name from this deity. The worship of Serapis was introduced, in the room of that of this rude idol, under the first Ptolemy. (See Part 1st of Creuzer's *Symbols,* where representations of this idol are given. For information respecting the worship of the same, see Creuzer's *Dioscurs.* According to Eusebius, the spherical shape of the vessel was to express the universal nature, or the world. The human head upon it signified the all-enlivening spirit (uranus), which was denoted also, in former times, by the figures of a bull and a serpent. According to Zosimus (*Histoie Imperatori,* page 34), Canopus was the same as Knuph, which seems to come from the same root, and denotes the kind, protecting god. There are traces, in Italy, of the worship of this deity, in that country, in the time of Adrian.

**Canosa;** a city in Lower Italy (*Terra di Bari,* famous for the tombs in its vicinity, near the field where Hannibal defeated the Romans. They are cut in rocks, on a hill. Vases of course, whith clay have been found in them. In 1813, a beautiful burial-chamber was opened. It had a small ante-chamber, supported by pillars, and contained the corpse of a warrior, in armor, with a helmet on his head, but one leg bare. The body crumbled to dust as soon as it was exposed to the exterior air. The wall of the apartment contained a fine *basso-relevato.* A copper lamp and a number of beautiful vases...
were also found here. (See Millin's Description des Tombeaux de Canosa ainsi que des Bass-reliefs, des Armures, et des Vases peints qui y ont été découverts en 1813 (Paris, 1813, folio), with correct representations). The paintings upon the vases are the most important part of this discovery. They refer to the Greek-Italian mysteries of the eldest inhabitants.

Canosa (near Reggio, in the duchy of Modena); a mountain castle, now in ruins. Adelheid, widow of king Lotharius, was besieged here, in 951, by Berenger II., when she offered her hand and the crown of Italy to Otto the Great, emperor of Germany. In the 11th century, Canosa belonged to Matilda, duchess of Tuscany, with whom Gregory VII resided, in 1077, when he imposed a severe penance upon the excommunicated emperor Henry IV.

Canova, Antonio; the third sculptor of modern times, who has formed an epoch in Italian statuary. Michael Angelo Buonarotti was the first, Bernini the second. C. may be considered as the restorer of the graceful and lovely style, and the founder of a new school, as far as it respects softness and delicacy of execution, and excellent handling of the marble. He was born, Nov. 1, 1757, at Possagno, in the Venetian territory. While a boy of 12 years old, he displayed his talents by modelling the figure of a lion in butter, which was placed on the table of Falleni, the seigneur of the place. The Falleni, father and son, sent him, therefore, as an apprentice, to a statuary in Bassano, where he acquired skill in the mechanical part of the art. His first work, executed in his 17th year, was an Eurydice, in soft marble, of half the natural size. He was now sent to the academy of Venice, where his proper study of the art commenced. He gained several prizes, and excited expectations which he more than equalled in the sequel. The first work, which he was commissioned to execute, was the statue of the marchese Poleni, of the natural size, for the city of Padua. In his 25th year, he finished the group of Deucalion and Leuca, of the natural size, in Carrara marble. It is remarkable as a juvenile work, but is only a faithful imitation of common nature. The senate of Venice sent him, in 1779, to Rome, with a salary of 300 ducats. Here the first fruit of his study was an Apollo crowning himself with laurel, three palms high, in marble. It is weak, and without character. Yet the artist, in this production, has advanced beyond the mere imitation of nature; and this statue is to be considered as his transition to the ideal. A group as large as life—Theseus sitting upon the slain Minotaur—was the first large work by which C. made himself known in Rome (1780). It is one of his best works. Theseus has the character of a hero; and the forms show the study and style of the antiques. It was received with universal applause, and count Fries, in Vienna, purchased it. In 1783, C. undertook the execution of the tomb of pope Clement XIV, in the church Degli Apostoli. He retained the usual style of composition, and only improved on the depraved taste of the school of Bernini. He next made the group of Cupid and Psyche, where he first displayed his own peculiar style, of which loveliness is a striking characteristic. The figures are exceedingly delicate and graceful; yet there is no point of view from which the countenances of both can be seen at the same time; besides, the wings of Cupid project disagreeably from the group, which presents too many interstices. About the same time, he executed the likeness of the young prince Cartosiski, in the character of Cupid. He was employed on a second public monument, the tomb of pope Clement XIII, in St. Peter's. It was finished in 1785, and is distinguished by its colossal size and simple style. (See the engraving of Raphael Morglen.) The figure of Religion is objected to as stiff; the long rays, the huge cross, and the petty folds of the lower dress, give her a tasteless air. The Genius has more beauty of appearance than depth of expression. Meanwhile, the fame of the artist continually increased. He established, in the palace of the Venetian ambassador, a school for the benefit of young Venetians. His next works were a winged Cupid, standing; another group of Cupid and Psyche; a group of Venus and Adonis (in which the figure of the latter is particularly beautiful), for the marchese Verio, in Naples; the tomb of the Venetian admiral Emo, for the republic of Venice. This is a combination of basso-relievo, with figures in full relief. C. also made a very lovely Psyche, standing, half-dressed, with a butterfly in her left hand, which she holds by the wings with her right, and contemplates with a calm, smiling mien. He also modelled, at this time, many basso-relievos, mostly scenes from the life of Socrates, taken from ancient fable and history, which cannot all be called successful. Only one of these models, which represents the city of Padua as a sitting
female figure, he executed in marble. A repentant Magdalen, of the natural size, belongs to the works in marble, in which he has carried the expression of the melting and the soft to the highest degree. The relaxing effect of repentance is expressed with great truth. Isis Hebe is a delightful figure. In an easy and animated attitude, the smiling goddess of youth hovers upon a cloud, pouring nectar, with her right hand, into a bowl, which stands on both vessels, as well as the coronet of Hebe, and the edges of her garment, are gilt. C. is fond of a variety of material, and often endeavors to give to his statues the effect of pictures. He repeated this in the preceding statue. He next displayed his talent for the tragic, in the raging Hercules hurling Lichas into the sea, the group is colossal, and Hercules somewhat larger than a Politian; but it makes a disagreeable impression, which proves that the genius of C. was not adapted to such subjects. His representation of the two pupils, Kreugas and Belauros, is much more successful. A standing group of Cupid and Psyche, which has been often repeated, was the triumph of his art. Psyche here appears again holding the butterfly. A Palamedes, subsequently executed by C. in marble, was overthrown, in the winter of 1805, by an inundation, and broken in pieces. In 1796 and 1797, C. finished the model of the colossal tomb of the late archbishop of Vienna held to carry the expression of the melting of the two pugilists, Kreugas and Demoxenos, is much more successful. In the same year, he made the colossal statue. It is impossible to conceive a more characteristic likeness, exhibiting, at the same time, the ideal character of the ancient heroic style. We have not a more successful work of the kind than this bust: the figure of the statue is not so good. George IV has since presented the latter to the duke of Wellington. The statue of madame Letitia Bonaparte was purchased, in 1819, in Paris, by the duke of Devonshire, for 35,000 francs. Among the later works of the artist are a Washington, of colossal size, in a sitting attitude, now in the state-house at Raleigh, the seat of government of North Carolina; the tomb of the cardinal of York and of Francis II; an imitation of the Medicean Venus; a Venus rising from the bath; a portrait statue, lying, half-dressed, upon a couch; the tomb of the late engraver Volpato; the colossal group of Theseus killing the Minotaur, far surpassing his earlier works in the heroic style; the tomb of Alfieri, for the countess of Stolberg; the tomb of the artist, in the church of the Augustines, at Vienna. The design of it is original; for the first time, the great artist ventured to leave the common track. In 1797, he made the colossal model of a statue of the king of Naples, one of his finest works. In the beginning of the revolution, the statue of C. was in great danger from the Jacobins; but the lovely Psyche, Hebe and Cupids softened the rage of the mob, and saved the work-shop of the artist, in the back part of which the royal colossus was concealed. This statue, 15 palms high, was executed in marble, in 1803. During the revolution of 1798 and 1799, C. accompanied the senator prince Rezzonico on a journey through Germany. After his return, he remained for some time in the Venetian territory, and painted, for the church of his native village, Possagno, an altarpiece, in which are represented the dead Christ, the Maries, Nicodemus and Joseph, and, on high, God the Father. He afterwards executed, in Rome, his Perseus with the head of Medusa, which, when the Apollo of Belvedere was carried to France, occupied its place and pedestal. This statue increased the fame of C. more than any of the preceding works. But Perseus has no decided character. It is only an imitation of the Apollo. The separate parts are of exquisite beauty in form, as well as in masterly, delicate finishing. The magical charm of the finish dazzles the eye, and makes us often forget the more severe forms of art. Far less successful is the Mars pacificus, of equal size. In 1802, C. was made, by Pius VII, superintendent of the Roman works of art, and knight of the Golden Spur. In the same year, he was invited by Bonaparte to Paris, to make the model of his colossal statue. In the beginning of 1803, the model of the emperor's bust, and afterwards that of his colossal statue, was to be seen in the workshop of the artist. It is impossible to conceive a more characteristic likeness, exhibiting, at the same time, the ideal character of the ancient heroic style. We have not a more successful work of the kind than this bust: the figure of the statue is not so good. George IV has since presented the latter to the duke of Wellington. 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the archduchess Maria Louisa of Austria. After the second fall of Napoleon, in 1815, C. was commissioned, by the pope, to demand the restoration of the works of art carried from Rome; went from Paris to London, and returned to Rome in 1816, where Pius VII inscribed his name in the golden book of the capitol, declared him "to have deserved well of the city of Rome," and made him marquis of Ischia, with a pension of 3000 scudi. In 1815, C. was commissioned, by the pope, to demand the restoration of the works of art carried from Rome; went from Paris to London, and returned to Rome in 1816, where Pius VII inscribed his name in the golden book of the capitol, declared him "to have deserved well of the city of Rome," and made him marquis of Ischia, with a pension of 3000 scudi.

C. died at Venice, Oct. 13, 1822.—In his manner of treating the marble, a particular endeavor to produce the appearance of the greatest softness is visible. Not satisfied with giving to the surface of the marble the most delicate finish, by means of the rasp and the pumice-stone, he has invented a corrosive color, of a yellowish hue, and prepared with soot, which he applies, after the last polish, in order to break the dazzling white of the marble, and to give it the soft, mellow appearance of ivory or wax. This excessive refinement in finishing is more attractive to amateurs than to true connoisseurs. C. used to make his models first of a small size, in wax, then in clay, of the same size as the work was to be. From this last a cast was taken in gypsum. The first shaping of the marble from the cast he left to skilful workmen.—As a man, C. was respectable and amiable. He was active, open, mild, obliging and kind towards every body. He had neither the pride nor the envy of an artist. His opinion of himself was very modest, notwithstanding his fame was spread through all Europe. He was not only disinterested, but animated by the noblest benevolence. He assisted promising young artists, and established prizes for the encouragement of the arts. In short, his moral character was so excellent, that, even among his many rivals, there is but one voice respecting his worth as a man. His last work was a large group, the principal figure of which represents Religion victorious. It was intended to be placed in Rome, as a monument commemorative of late events, the expense to be defrayed by a subscription in England. C. was also an agreeable painter, but, strangely enough, more of a colorist than a correct designer. (See the Life of Canova, by Missinni; 4 vols., Prato, 1824: also, the Biografie, by the count Cicognara; Venice, 1829.) Engraved representations of all his works have appeared in Italy and at Paris.

Canova, George and Alexander. These Greek princes are descendants of the ancient Byzantine family of the same name, of which the emperor John Cantacuzenus was a member. (See the next article.) Under the dominion of the Turks, the Cantacuzenes belonged to the first families of the Fanar, in Constantinople, called the Panarettes. Many years ago, they settled in Russia, where the brothers George and Alexander were employed in the Russian service. As members of the Hetiea (q. v.), they followed prince Alex. Ypsilanti, in 1821, to Moldavia. George accompanied Alex. Ypsilanti to Jassy, Feb. 22, and Alexander repaired to Kischenaw, Feb. 28, O. S. (March 19, N. S.), where the Hetierists, who wished to fight in the cause of Gre-
clan freedom, were assembled. He received, at this place, from Alex. Ypsilanti, orders to repair to the Morea. April 16, O. S., he proceeded to Trieste, by way of Vienna and Laybach. At Laybach, he had two interviews with count Nessiord, the Russian minister, who said, among other things, "It is the will of his majesty, that you do not go to Greece; but you may continue your travels." This made Alex. Cantacuzeno irresolute what to do; but, being informed, during his residence of four weeks in Venice, of the murder of the patriarch, and the breaking out of the Greek insurrection in the Morea, the idea that his absence might corroborate the suspicion that the revolution met with the disapprobation of Russia, induced him to sacrifice everything to the cause of his country. He obtained from the Russian consul a passport to return to Odessa by land, and went to Greece without interruption. For this step, he was subsequently forbidden to return to Russia. Of young Greeks, from the various universities, the French captain Bal­lestras, and Demetrius Ypsilanti, who had been intrusted, by his brother Alexander, with the management of the insurrection in the Morea, embarked with him. June 20, they reached Hydra, where they were received with the greatest rejoicings. Alex. Cantacuzeno immediately undertook the charge of the department of war, organized a general administration of the islands, and formed a band of volunteers, whom Balestras commanded. But they were soon in want of arms and powder. June 20, Cantacuzeno and Demetrius Ypsilanti proceeded to the Peloponnesus, to Gerassa, in Verona, a village near Tripoli­ziana. Cantacuzeno immediately invested the fortress of Malvasia (Epidaurus), and reduced it by famine, July 21, 1821. He next deliberated with the Hy­droits and Spezioiis respecting the formation of a national senate, and was, in other respects, active in establishing order. He then proceeded to Tripoli­ziana, and, at the head of the Albanian soldiers, took part in the siege of the place; refused, in the meanwhile, an offer of the Cretans, who wished to confer on him the command of their island; travelled through the provinces of Ellas, in order to establish closer relations to the government; and, on the 19th of June, he arrived at the Morea. There he was received, from the Greek senate, the com-

CANTACUZENO-CANTATA.

mission to convey to Petersburg the solicitation of the Greeks for succor from the Russian government; but, being unable to obtain a passport for this purpose, he remained in Dresden. His brother George, under the command of Ypsilanti, was engaged in the unsuccessful struggle against the Turks in Moldavia and Walachia, and published a memorial on the subject at Kischenau, Oct. 28, containing, likewise, a vindication of his conduct. Both of the brothers have been erroneously estimated by many. Even Pouqueville, in his Histoire de la Ré­génération de la Grèce (Paris, 1824, 4 vols.), has represented the two Cantacuzenos as one person, and given an incorrect view of their character. (See Ypsilanti.)

CANTACUZENUS, John, a Byzantine emperor and historian, was born in 1295. While minister of Andronicus III, he negotiated a favorable peace with the Gen­oaese in 1336, and repelled the encroachments of the Turks in 1337. On the death of Andronicus in 1341, C. became regent during the minority of the young emperor, John Paleologus. He defeated the Bulgarians and Turks, assumed the diadem, and entered Constantinople, victorious over his rivals, in 1346. He used his power with moderation, and endeavor to heal the wounds which five years of civil war had inflicted on the state; but religious disputes, civil dissensions and foreign enemies soon disturbed his government; and the jealousy of Pale­ologus, the rebellion of his own son, war, plague, the frightful disorders which prevailed in the empire, and his own loss of popular favor, induced him to renounce the crown. He retired to a monastery (1355), where he employed himself in literary labors. He is considered one of the greatest among the successors of Constantine. His Four Books of Byzantine His­tory were printed in 1645 (Paris, 3 vols., folio), and belong to the collection of the Byzantine historians. His other works, principally theological, are partly printed, and partly in manuscript.

CANTAL; a chain of mountains in Upper Auvergne, France, the highest peak of which, called le plomb de Cantal, is said to be nearly 6000 feet above the level of the sea. They give name to a department. (See Department.)

CANTATA; an elegant and passionate species of vocal composition, consisting of an intermixture of air and recitative. It was invented by Barbara Strozzi, a Venetian lady, who flourished about the middle of the 17th century, and was at one time extended to such length as to
form a little opera, but has since been cultivated in Italy, Germany and England only as chamber music.

Canteen (from the French cantine, Spanish cantiana) signifies both a small case and a tavern for soldiers. In military language, it denotes a semi-cylindrical tin case, carried over the shoulder, and a vessel for holding an officer's eating utensils; likewise, a knapsack, to hold his cooked victuals; also a vessel to hold the ration of spirits or wine served out to the English troops when employed abroad.

Canteen, moreover, signifies a public house licensed in English barracks or forts, to sell liquors and tobacco to the soldiers.

Canterbury, Domitian, was born in Moldavia, in 1673. At the age of 15, he was sent as a hostage to Constantinople, where he remained 4 years. He served his first campaign in 1682, under his father, upon whose death, in the succeeding year, he was chosen prince of Moldavia, at the age of 20. This choice was not confirmed by the Porte, and he was ordered to reside at Constantinople, where his abilities soon gained him the favor of the government; and he was twice nominated hospodar of Moldavia. He successfully used his influence to transfer that dignity to his brother. He was appointed the third time, in 1716, with the promise of the annexation of Walachia, and exemption from tribute. Notwithstanding this promise, as soon as he was invested with his office, he was called upon for the amount usually paid on such occasions. He entered, therefore, into a treaty with the czar Peter, by the terms of which the principality was to be hereditary in the family of C., under the protection of the czar, whom Cantemir was to serve in his own person. The czar, however, being abandoned by the Poles and betrayed by the Moldavians, was obliged to retire, and C. took refuge in his dominions, with the rank of prince of the Russian empire. He died at Astrakan, in 1723.

C. spoke 8 languages, and understood the ancient Greek, French and Schavonian. He was a member of the academy of Berlin. His principal work is called History of the Growth and Decay of the Ottoman Empire; it has been translated into English, French and German. He is the author, likewise, of the Present State of Moldavia, and the System of the Mohammedan Religion, which have both been published. His other works are in MS.

Canterbury (ancient Ducesium, Du-cesium, Durobrivae, and Cantuaria-burg) is an city, Eng., capital of Kent; 56° E. London; lat. 51° 55' E.; lat. 51° 17' N.; pop. 10,498; houses, 2,083. It is the see of an archbishop, primate of all England, situated in a valley, between gently-rising hills, on the river Stour; founded before the Christian era. It is a county of itself, and the magistrates have authority to determine all law-suits between the citizens, and to try for capital crimes committed within the city. There are two markets weekly, on Wednesday and Saturday. It contains a cathedral, and 12 parish churches within the walls, and 3 in the suburbs. The cathedral is spacious and magnificent, built in the form of a double cross, 514 feet long; the height of the great tower is 235 feet. The Jews have a synagogue here: Methodists, Baptists, Presbyterians and Quakers have each a place of public worship. It sends 2 members to parliament. The principal manufactures are cotton and silk. It is famous for its brawn. The country round it produces a great quantity of hops. In former times, this place was distinguished for the festivals celebrated here in memory of St. Thomas à Becket, who was murdered here. (See Becket.)

Cantharis, or Spanish fly (in medicine); the name of a kind of fly, the canthara vesicatoria, Geoffroy; melot vesicatoria, Lin.; lyda vesicatoria, Fab.; belonging to the family of the trechidae. They are very common in Spain, Italy and France, where they are found in large families on the ash, lilac, plum, &c. Their body is from 2 to 10 lines long; the feelers are black, setaceous, composed of 12 articulations; the elytra long, flexible, of a shining, golden green, and the tarses of a deep brown color. According to Robins, they contain, with several other ingredients, a peculiar substance, called cantharidin. (q.v.) These insects are, of all the vesicating substances, those which are most commonly used. Their action is principally confined to the skin; however, their active principles may be absorbed, and cause serious accidents. The application of a blister is often followed by strangury, hematuria, priapism, &c. Taken internally, they act as the most energetic acid poison; they produce irritation on the intestines, and especially affect
CANTHARIDES—CANTON.

The 'enito-urinary organs, which they stimulate violently. In certain disorders, they are administered in small doses, as powerful stimulants. The medicine is of a very dangerous character, and its use requires the greatest caution on the part of the physician. Several species of blistering fly are found in the U. States, some of which are more powerful than the Spanish fly.

* Cantharis, the vesicating principle of the cæntharides, or Spanish fly, is white, in small, crystalline scales, insoluble in water and cold alcohol, soluble in ether, boiling oils and alcohol, from which it precipitates by cooling. The vesicating properties could be extracted from cantharides by oil of turpentine, and probably a satisfactory ointment be prepared by merely evaporating the oil of turpentine at a moderate temperature. (See Cantharides.)

* Canticles. (See Solomon, Song of.)

* Cantium; an ancient territory in South Britain, whence the English word Kent is derived, supposed to have been the first district which received a colony from the continent. The situation of Cantium occasioned its being frequently visited by the Romans, who generally took their way through it in their marches to and from the continent. Few places in Britain are more frequently mentioned by the Roman writers than Portus Rutupensis, Portus Dulensis (now Dover), Durovernum and Durovernum (now Rochester and Canterbury) were also Roman towns and stations. Cantium, in the most perfect state of the Roman government, made a part of the province called Flavia Caesariensis. (See Kent.)

* Canto Fermo; the name given to the ancient chants of the Roman Catholic church, which were adopted as standing melodies. These chants, until counterpoint was discovered, were unaccompanied, or only harmonized with octaves.

* Canto FIGURATO. This term was applied, by the old Christian ecclesiastics, to the canto fermo in its more cultivated state, when harmony began to assume modulation.

* Canton, principal city of the Chinese province of the same name, otherwise called Chough-lang, or Kowloon, is situated in 23° 30' N. lat., and 113° 2' 45' E. lon., on the banks of the river Taho, which is here very wide. This city, distinguished for size, wealth, and a numerous population, is the only seaport in China open to the ships of Europe and America. The estimate of missionaries, that it contains 1,000,000 of inhabitants, is exaggerated. The number is probably nearer 750,000. The circuit of the walls, which are of a moderate height, is over 9 miles. Only about a third part, however, of the space enclosed is covered with buildings; the rest is occupied with pleasure-gardens and fish-ponds. The neighboring country is very charming, hilly towards the east, and presenting, in that quarter, a beautiful prospect. The houses are mostly of one story; but those of the mandarins and principal merchants are high and well built. In every quarter of the town and the suburbs are seen temples and pagodas, containing the images of gods. The populous streets are long and narrow, paved with flat stones, and adorned at intervals with triumphal arches. Shops line the sides, and an unbroken range of piazza protects the occupants of the houses, as well as foot-passengers, from the rays of the sun. At night, the gates are closed, and bars are thrown across the entrances of the streets. The traders express themselves with sufficient fluency in the languages of their European and American customers, with whom they deal almost exclusively, selling them porcelain, lacquer ware, &c. The Americans trade here to a greater extent than any other nation: next to them come the English. The greatest part of the silver, which is carried from America to Europe, eventually circulates through China, by means of the ports of Canton and Batavia, to which large supplies of the productions of the empire are transmitted. The principal articles of export are tea, India ink, varnish, porcelain, madder, silk and satin. A company, consisting of 12 or 13 merchants, called the Cohong, is established here, by order of the government, for the purpose of purchasing the cargoes of foreign ships, and supplying them with return cargoes of tea, raw silk, &c. This society interferes, undoubtedly, with private trade, but adds greatly to the security of the foreign dealer, as each member is answerable for all the rest. Carriages are not used here, but all burdens are transported on bamboo poles laid across the shoulders of men. All the inhabitants of distinction make use of litters. Chinese women are never seen in the streets, and Tartar women but seldom. The European factories, to wit, the Dutch, French, Swedish, Danish and English, are situated on a very commodious quay, on the bank of the river. Nearly a league from Canton is the Boat-town, which consists of about
40,000 barks, of various kinds, arranged close to each other in regular rows, with passages between them, to allow other vessels to pass. In this manner they form a kind of floating city, the inhabitants of which have no other dwellings, and are prohibited by law from settling on shore. As this is the onlyemporium in the empire for foreign commerce, which is carried on not only by Europeans and Americans, but also to a great extent by the Chinese themselves, with almost all the ports of India and the eastern Archipelago, the number of vessels frequently seen in the river, at once, is said to exceed 5000. An American paper, issued twice a month, called the Canton Register, has lately been established at Canton. The following table gives the amount of imports from Canton into the ports of the U. States, also the exports of domestic and foreign goods from the U. States to Canton, from 1821 to 1827.

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports</th>
<th>Dom. Exp.</th>
<th>For. Exp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1821</td>
<td>$8,111,951</td>
<td>$338,535</td>
<td>$3,962,025</td>
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<tr>
<td>1822</td>
<td>3,292,539</td>
<td>421,230</td>
<td>5,506,105</td>
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<tr>
<td>1823</td>
<td>6,311,435</td>
<td>288,575</td>
<td>4,317,080</td>
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<tr>
<td>1824</td>
<td>3,618,502</td>
<td>330,406</td>
<td>4,970,705</td>
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<tr>
<td>1825</td>
<td>7,573,175</td>
<td>100,059</td>
<td>5,410,436</td>
</tr>
<tr>
<td>1826</td>
<td>7,423,185</td>
<td>242,451</td>
<td>2,824,193</td>
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<tr>
<td>1827</td>
<td>3,617,185</td>
<td>200,002</td>
<td>3,573,543</td>
</tr>
</tbody>
</table>

The climate of Canton is healthy, warm in summer, but pretty cold in winter. Provisions, including various luxuries, are abundant.

Canute I, king of England and Denmark, ascended the throne of both kingdoms A.D. 1013. He was called the Great, on account of his power, as Alfred had been for his virtue. The barbarities committed by the Danes in England excited Ethelred II, the 13th king of Saxony descent, to a bloody vengeance. In 1062, he caused all the Danes, women and children, to be massacred on the same day. The sister of Swyn, then king of Denmark, he caused to be beheaded in his presence. Swyn landed in England, and laid waste the country with fire and sword. Ethelred had escaped to Normandy. Swyn died 1014, before he had time to confirm the Danish power in the island. This was accomplished, however, by his son and successor, Canute. He began his reign by devastating all the eastern coast of his new kingdom, and causing the English, who were given to his father as hostages, after he had cut off their noses and hands, to be drowned at Sandwich. He then received reinforcements from Denmark, and extended his ravages in the south of England. The valiant Edmund marched against him with an army, and, although he was several times overcome, through the treachery of Edric, his brother-in-law, he still maintained himself against Canute, so that the English and Danish nobles, weary of the long-continued contest, sought to bring about a division of England between the two princes. A solemn treaty secured to Canute the north of England, and to Edmund the south. But only a month after this contract, Edmund was assassinated by two chamberlains, hired by Edric and Canute became master of all England. At a general assembly of the states, he induced false witnesses to affirm that Edmund had appointed him heir to his crown, to the prejudice of his two minor children. After the assembly had confirmed this settlement, Canute sent the two young princes to the king of Sweden, with the request that he would put them to death. The latter, however, sent them to Hungary, where they met with the kindest reception. Canute, who had begun his reign with barbarity and crime, afterwards became humane, and even pious, and even superstition. He commenced a more equitable administration, by punishing the English natives, who had betrayed their king, and by causing Edric to be hanged, and thrown into the Thames. He restored the Saxon customs at a general assembly, and ensured to the Danes and Englishmen equal rights and equal protection of person and property, so that the horror which had been excited by his tyranny was changed into respect and gratitude. His power was confirmed by his marriage with Emma, Ethelred's widow. He now made two expeditions to the continent, one to conquer Sweden, and the other to reduce Norway. But the most powerful prince of his age was at length brought to feel the vanity of earthly greatness. He erected churches and monasteries, and even performed a pilgrimage to Rome, where he obtained important privileges for the schools of England. It was this spirit of piety that animated him, when, to confound his flatterers, he seated himself upon the altar, and commanded the waves to retire. As they advanced, and bathed his feet, Canute arose, and said, "Thus far shalt thou go, and no farther." His last expedition was against Malcolm, king of Scotland. He died four years after, A. D. 1035, at Shaftesbury. By his will, he left Norway
to his eldest son, Sweyn; to the second, Harold, England; to the third, Hardinute, Denmark.

**Canzone**; a kind of lyric poem, of Provençal origin. It is found in the Italian poetry of the 13th century. At first, it was quite irregular, but was confined to forms. Hence it is called canzone Petrarcheana: it is also called canzone Tuscan, because it originated in Tuscany. It is divided into several stanzas, in which the nature and disposition of the verses, which are of 11 and 7 syllables, and the place of the rhymes, are uniform. The canzone usually concludes with a stanza which is shorter than the others, and is called tredesca, contegno, testo, and more generally applied to the two latter.

**Caoutchouc.** This substance, improperly termed elastic gum, and more commonly, from its application to remove pencil-marks from paper, *bulla rubber*, is obtained from the milky juice of several plants, which are natives of the torrid zone. It is brought principally from South America. This juice, obtained from incisions, is applied, in successive layers, over a mould of clay, and dried by exposure to the sun, and to the smoke from burning fuel. When perfectly dry, the mould is broken, leaving the caoutchouc in the form of a hollow ball. In its solid state, caoutchouc is of a close texture, distinctly fibrous, of a light-brown color, or sometimes nearly white. Its elasticity is such that it can be stretched to a great extent; and, on removing the stretching force, it recovers its original dimensions. Its softness and plasticity are increased by heat. Boiling water renders it so soft, that two slips, newly cut and pressed closely together, may be firmly united. By a greater heat, it is fused, and may, in that state, be applied, as proposed by Mr. Aitkin, to the surface of steel instruments, which it will cover with a transparent film, that effectually preserves them from rust. It is insoluble in alcohol and in water. Sulphuric ether, when purified by washing in water, dissolves it; and, by evaporation, the caoutchouc may be recovered unchanged. Oil of turpentine softens it, and forms with it a sort of paste, that may be spread as a varnish, but is very long in drying. The fluid now commonly used to dissolve it is the purified naphtha from coal tar, which is, at the same time, a cheap and effectual solvent, and which does not change its properties. This solution is employed to give a thin covering of caoutchouc to cloth, which is thus rendered impervious to moisture. Caoutchouc is also readily soluble in eucalypt oil. Caoutchouc, from its softness, elasticity, and impermeability to water, is applied to the formation of catheters, bouches, and tubes for conveying gases. These are formed by twisting a slip of it round a rod, and causing the edges of the slips to adhere by pressure, when softened by maceration in
warm water. It is also used for overshoes; and its solution in oils forms a flexible varnish.—It was not until about the year 1736 that this very extraordinary natural production was made known in Europe. It is obtained by making incisions through the bark of the tree, chiefly in wet weather. From the wounds thus formed the juice flows abundantly. It is of a milky-white color, and is conducted by a tube or leaf, supported by clay, into a vessel placed to receive it. Some writers assert that, on mere exposure to the air, it gradually hardens, and others, that it goes through a certain process for this purpose, which the Indians of South America keep a profound secret. It is usually brought to Europe in the form of pear-shaped bottles, which are formed by spreading the juice over a mould of clay, exposing it to a dense smoke, or to a fire, till it becomes so dry as not to stick to the fingers, when, by certain instruments of iron or wood, it is ornamented on the outside with various figures. This done, the clay in the inside is moistened with water, and picked out. India rubber is remarkable for the flexibility and elasticity which it acquires on attaining a solid state, and also for the numerous useful purposes to which it is capable of being applied. By the Indians, it is sometimes formed into boots, which are impenetrable by water, and which, when smoked, have the appearance of leather. Bottles are made of it, to the necks of which are fastened hollow reeds, through which the liquor contained in them can be squirted at pleasure. One of these, filled with water, is always presented to each of the guests at their entertainments. Flambeaux are likewise formed of this substance, which give a very brilliant light; and it is said that a torch of it, an inch and a half in diameter, and two feet long, will burn 12 hours. The inhabitants of Quito also prepare a species of cloth with the hardened juice of this tree.

Cap; the cover of the head or head of any thing. The word is very often used in the mechanical arts.—In ship-building, cap is a square piece of timber placed over the head or upper end of a mast, in which is a round hole to receive the top or top-gallant-mast, which are thus kept steady and firm. — Cap of a block; a semicircular projection from the sides and round the end of a block above the pins.—Cap merchant; the purser of a ship.—To cap verses is an exercise of the memory among school-boys; the one repeating a verse, and the second proceeding where he left off, and so on with the rest. — Caps were not worn by the Romans for many ages. When either the rain or sun was troublesome, the lappet of the gown was thrown over the head; and hence all the ancient statues appear bareheaded, excepting, sometimes, a wreath or the like. The same usage prevailed among the Greeks, to whom, at least during the heroic age, caps were unknown. 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CAPE BRETON—CAPE OF GOOD HOPE.

miles in length, and from 20 to 84 in breadth, full of mountains and lakes, and intersected by a great number of creeks and bays. The soil is fertile, and abounds in timber. In the mountains are coal mines; in the valleys, excellent pasture; and the coast abounds in fish. The chief towns are Louisburg, Sydney and Annapolis. Population, 3000. Lat. 45° 34' to 47° 3' N.; lon. 59° to 61° 20' W.

Cape Breton, a river of North Carolina, being the southern extremity of Smith's island, on the south side of Massachusetts bay; lat. of the cape, 42° 3' N.; lon. 70° 14' W. The peninsula is 65 miles in length, and from 1 to 20 in breadth, and in the form of a man's arm, bent inward both at the elbow and the wrist. Though mostly sandy and barren, it is nevertheless populous; and the inhabitants derive their subsistence chiefly from the sea. The cape was discovered in 1602, by Bartholomew Gosnold, who gave it its name from having taken a great quantity of cod-fish near it.

Cape Fear; a dangerous cape on the coast of North Carolina, being the southern extremity of Smith's island, on the south side of Massachusetts, on the coast of that state, and from 18° to 28° E. lon. The space included within these limits is about 120,000 square miles, with a population of about one to a square mile. On the west and south, it is washed by the ocean, and, on the north, it is bounded by a range of lofty mountains. The principal bays on the coast are Saldanha, Table, Plattenburg, Algoa bays. Cape Aguillas is the most southern point of the old world. In the interior, almost every variety of soil and surface is found. Several ranges of mountains, running nearly parallel to the southern coast, divide the country into successive terraces, between which lie belts of fertile land, or vast barren plains. One of these, called the Great Karroo, is 300 miles long and 100 broad, presenting a scene of complete desolation. In fact, according to Barrow, nearly seven tenths of the colony are destitute of vegetation during a great part of the year. The summits of the Nieuweldt Gebirgte, the highest chain of southern Africa, are covered with perpetual snow. The Table mountain is a stupendous mass of naked rock, rising, almost perpendicularly, about 3583 feet in height. The colony is deficient in navigable rivers for vessels of any considerable burden. The principal streams are the Doorn and the Berg, flowing into the Atlantic; the Breede, Groot, and Great Fish, emptying themselves into the Indian ocean. The last, in part of its course, separates the Cape colony from Caffraria. The spring and autumn are temperate, and the most agreeable part of the year. The heat is excessive in summer, and, on account of the elevation of the surface, many parts experience the extreme of cold in winter. The soil is, of course, various, but its general character is not that of fertility. The cultivation is very imperfect, the inhabitants depending principally on pasturage. Wheat and maize thrive well; the vine flourishes luxuriantly; oranges, lemons and figs are good, but all kinds of nuts have failed. The aloe and myrtle grow to a great size. Timber is scarce; the chestnut, willow, almond and plum are indigenous. The domestic animals of civilized man have all been introduced. The sheep are of the broad-tailed kind. Lions, tigers, wolves, hyenas, buffaloes and jackals are numerous in the vicinity of the settle-
mints. In the more remote parts are the elephant, the rhinoceros, the guagua, the giraffe, &c. The spring-hog is seen in herds of 10,000. Monkeys, armadillos, and other small animals, are numerous. The ostrich is common. Vultures, eagles, kites, and the gigantic condor inhabit the mountains. There are also pelicans, flamingoes, parrots, and many kinds of aquatic birds. Noxious reptiles are not numerous. Fish are plentiful on the coasts. The capital is Cape Town. (q. v.) Scarcely any manufactures have been introduced into the colony, and its commerce is very limited. Some British merchants have settled at Cape Town, and the trade appears to be increasing. The principal export is Cape wine. The imports are in small quantities, and consist of cloth, hardware, furniture, hats, &c. The average amount is about a million of dollars. The value of the colony to Great Britain must not, however, be estimated by its revenue. It is important, principally, as the connecting link between that kingdom and her possessions in the East. The Dutch settlers, who live in the interior, are called boors, and are in a very degraded condition. Indolent and stupid, every thing about them exhibits the utmost wretchedness in the midst of plenty. (See Barrow's Travels in Southern Africa; Vaillant, Lichtenstein and Campbell's Travels, and the reverend Mr. Latrobe's Visit to South Africa, in 1815 and 1816. Beauvois, the French traveller, has also lately given interesting information on the south of Africa.)

Cape Hatteras; a noted and dangerous cape on the coast of North Carolina; being the projecting point of the long reef of sand, extending from Ocracoke inlet to New inlet; lat. 33° 14' N.; lon. 75° 30' W.

Cape Haytiens (formerly called Cape Français, or Le Cap, and, during the reign of Christopho, Cape Henry); a town of Hayti, and the capital of the island and republic; lon. 72° 16' W.; lat. 19° 46' N. It is situated on the north coast; was founded in 1670; burnt in 1729, by the blacks; was the last town retained by the French in the island, but was surrendered by them to the blacks in 1803; it then became the capital of the black emperor, Henry Christophe. Before it suffered so severely by intestine convulsions, it contained a number of elegant buildings, about 900 houses of stone and brick, and a population of from 8 to 12,000; some 30,000, 12,000 being slaves. It is situated in a very fertile tract, and has one of the most secure and convenient harbors in the island. It is built on a cape, at the edge of a large plain, 60 miles long and 12 broad, between the sea and the mountains. Its situation is not fortunate, as it is screened from the land wind by the mountains, and thus left exposed to the unmitigated fervor of the sun's rays. The plain is well watered and highly cultivated. It is cut through by straight roads, 40 feet broad, lined with hedges of lime and lemon trees, leading to plantations which produce as great a quantity of sugar as any spot of the same size in the world.

Cape Horn; a cape on the south coast of Terra del Fuego. It is the southern extremity of South America; lat. 53° 58' S.; lon. 67° 21' W. The navigation round Cape Horn is very dangerous, on account of frequent tempests; yet, of late, it has been the common course of vessels, being found much preferable to the tedious passage through the straits of Magellan. The shore is inhabited by Indians, of whom little is known. The cape was discovered by Jacob Le Maire, a Dutchman, in 1616. It is cold, lofty, and covered with wood.

Cape Lookout; a dangerous cape on the coast of North Carolina; lat. 34° 22' N.; lon. 76° 37' W.

Cape Town; capital of the cape of Good Hope; lat. 33° 56' S.; lon. 18° 23' E.; population in 1818, 18,173; of whom 7490 were whites, 1905 free blacks, 536 Hottentots, 7492 slaves. It is agreeably situated, rather more than 30 miles from the cape of Good Hope, properly so called, at the head of Table bay, in a valley between the Table and Lion mountains. It is defended by a castle of considerable strength, and contains a court-house, a gaol, a Calvinistic church, a Lutheran church, a theatre, and 1143 houses, many of which are fine. The tone of society is wholly commercial, the minds of all classes being bent on trade. There was not, in 1818, a public school nor a bookseller's shop in the town. The streets are broad, but ill-paved. The price of provisions is very reasonable. The town is well supplied with springs of excellent water, sufficient also for the ships which stop at the port. The harbor is tolerably secure from September to May, while the S. E. winds prevail. During the rest of the year, when the wind blows generally from the N. and N. W., ships are obliged to resort to False bay, on the opposite side of the peninsula. A missionary is supported.
Cape Verde (anciently, Aracemaurum): on the west coast of Africa; lat. 14° 44' N.; lon. 17° 31' W.

Cape Verde Islands; islands of Africa, in the Atlantic; so called from cape Verde, opposite to which they are situated; 390 miles W. cape Verde, and between 15° and 18° N. lat. They belong to Portugal. As to their number, some reckon 10, others 14 or more, by giving the name of islands to those which are only rocks. They are, in general, mountainous; lower hills are covered with a beautiful verdure, as well as the extensive valleys between; but with little water, except what is found in ponds and wells. They are said to have been, and probably were, known to the ancients, under the name of Gorgades. The air is extremely hot and unwholesome. It rarely rains; and the ground is so hot that one can hardly stand in places exposed to the sun. It is dangerous to pass the night in the open air, for the great heat is often succeeded by a sudden cold, which proves mortal to such as are exposed to it. The soil is, for the most part, stony and barren; nevertheless, some parts produce rice, maize, bananas, lemons, oranges, citrus, pomegranates, figs and melons. Grapes are gathered twice a year.

The manufacture of leather and salt forms the principal riches. Two of the islands, St. Yago and St. Philip, depend immediately on the king, and are the only ones fortified. The number of inhabitants is calculated at 100,000. Few whites are now seen. The governor and priests are often Negroes. The chief town is Praya. In the small island of Mayo, much salt is made. Numerous vessels, principally American, visit this place for the sake of obtaining it, and bring flour to give in exchange. In 1827, the imports into the U. States from these islands amounted to $77,425; the exports to them from the U. States, to $104,165. The island of Fuego, one of the group, consists of one single mountain, formerly a volcano, according to lieutenant Mudge, 9700 feet above the level of the sea.

Cape Town—Capello.

Here by the London missionary society.

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Capello, Bianca; a noble Venetian lady, whose singular adventures and final elevation have rendered her exceedingly remarkable. She was born about 1542, being the daughter of Bartolomeo Capello, a patrician of Venice. She early fell in love with a young and handsome clerk in the banking-house of Salviati, named Buonaventuri. The consequence of the intrigue was the pregnancy of the lady, and the flight of the lovers to Florence, where they married, and Bianca lay in of a daughter. Here they lived some time in great apprehension and obscurity, until some accident or contrivance introduced Bianca to the notice of Francis, son of Cosmo, grand-duke of Tuscany. Her uncommon beauty and engaging manners made an immediate impression on a prince notorious for his attachment to the sex; and the consequence was, that she and her husband were quickly settled in a splendid palace, and the latter made chamberlain to the duke, and, to the great disgust of the Florentines, intrusted with a large share of public business. Bianca was, in the mean time, introduced at court, and became the object of great admiration; and it is asserted, that, even at that time, Francis promised to marry her, should they become released from the marriage ties by which they were each of them bound. This took place in a very few years on her part. Buonaventuri, having engaged in an intrigue with a woman of rank, was assassinated by her family; and Francis now avowedly proclaimed Bianca his mistress. As Francis, who had no issue, passionately desired even a natural child, Bianca, whose in-
temperate mode of living was not favorable to his wishes, carried on all the forms of pregnancy, and presented to her decreed lover a new-born male child, of poor parents, whom he joyfully received as his own, and christened Antonio. A legitimate son, produced to him soon after by his duchess, induced him to be less open in his attentions to Bianca; but the death of his wife, very soon after, opened the latter a road to her final elevation, and she was quickly united to Francis by a private marriage. Her ambition, however, was not to be gratified without publicity; and she induced the grand-duke to send a solemn embassy to Venice, to inform the senate of his marriage, and to request them to confer on Bianca the title of daughter of the republic, which honor was supposed to entitle those on whom it was bestowed to a royal alliance. That government assented, and Bianca, being crowned daughter of the state, was solemnly installed grand-duchess of Tuscany in 1579. In 1582, the legitimate son of Francis expired; and, soon after, he declared Antonio his lawful son, although, it is said, Bianca had acknowledged her impostion. Ferdinand, the brother of Francis, and his lawful heir, was not blind to these proceedings, and paid the greatest attention to the subsequent reported pregnancies of the duchess, until the state of her health setting all idea of further progeny aside, she essayed to effect a reconciliation between the brothers, and Ferdinand paid a visit to Florence. He had been there but a short time, when Francis fell ill, at his hunting village of Poggio, where his brother was a guest; and, two days after, the duchess being seized with the same symptoms, they both died, after about a week's illness, in October, 1587, Bianca being then in her 45th year. The known character of the Medici family caused this catastrophe to be attributed to poison; and a story is current, that Bianca, intending to poison Ferdinand with a prepared viand, he had addressed to make the duke and duchess eat of it themselves. As there was no direct motive for the attempt at the period, and it rests only on the character of the parties, it is more reasonable to suppose that a malignant fever, at an unhealthy season, was the real cause of the sudden termination of so extraordinary a career. The hatred of the Florentines has made Bianca a monster of vice and cruelty; a thousand absurd stories were propagated of her propensity to magic, and other crimes; and, perceiving the impossibility of gaining their affections, she employed trains of spies and informers, which added still more to their animosity. The truth seems to be, that she was a woman of consummate beauty and address, with little or no principle; and such was the character of the Italian courts, at the period in which she flourished, that she had only to act in the spirit of the times, to become very nearly as vicious as the Florentines described her.

Caper. Capers are the unopened flower-buds of a low shrub (*Capparis spinosa*), which grows from the crevices of rocks and walls, and among rubbish, in the southern parts of France, in Italy and the Levant. The stems of the caper-bush are trailing, and two or three feet long. The leaves are alternate, of somewhat oval shape, veined, and of a bright-green color; and the flowers are large and beautiful, with four petals, and white, with a tinge of red.—In the south of France, the caper-bush is very common. It grows wild upon the walls of Rome, Sienna and Florence, and, when trained against a wall, flourishes even in the neighborhood of Paris; notwithstanding which, it is almost unknown in English gardens, where it cannot be made to flower without the aid of artificial heat. It is cultivated, on a large scale, between Marseilles and Toulon, and in many parts of Italy. In the early part of the summer, it begins to flower, and the flowers continue successively to appear, until the commencement of winter. The buds are picked every morning, before the petals are expanded; and, as they are gathered, they are put into vinegar and salt. When a sufficient quantity is collected, they are distributed, according to their size, into different vessels, again put into vinegar, and then packed up for sale and exportation. This pickle is much used in sauce for boiled mutton. To persons unaccustomed to it, the taste of capers is unpleasant; but, after a little while, the palate becomes perfectly reconciled to it. The flower-buds of the marsh-marigold (*Caltha palustris*) and nasturtiums are frequently pickled, and eaten as a substitute for capers. The bark of the root, cut into slices, and dried in small rolls or quills, like cinnamon, is sometimes used in medicine, in cases of obstruction of the liver.

Caper, in shipping, is the Dutch and German name for *preservative*. Capernaum; a town in ancient Palestine, on the west side of the sea of Tiberias; lon. 35° 41' E.; lat. 32° 45' N. Near
CAPERNAUM—CAPI AGA.

It were a mountain and rivulet of the same name. This place is famous, in Christian history, because Jesus used to reside here during the time of his ministry; and in its vicinity he delivered the sermon on the mount. Nothing of it now remains. As Capernaum is not mentioned in the Old Testament, it may have been built after the return from the Babylonish captivity. It stood on the coast of Galilee, on the borders of Zabalon and Nepthalim.

CAPET; the name of the French race of kings, which has given 113 sovereigns to Europe, viz. 36 kings of France, 22 kings of Portugal, 11 of Naples and Sicily, 5 of Spain, 3 of Hungary, 3 emperors of Constantinople, 3 kings of Navarre, 3 dukes of Burgundy, 12 dukes of Brittany, 2 dukes of Lorraine, and 4 dukes of Parma. The history of this royal race is, at the same time, the history of the rise and progress of the French monarchy. (See France.) The fate of one of the most interesting countries and nations in Europe is connected with the name of Capet. After having been deprived of four thrones, and again restored to them, the family funds forth as the first and most ancient support of the European principle of political legitimacy, that divine right, which, in this house, commenced with treason. Its origin is remarkable. Pepin the Short, the father of Charlemagne, and mayor of the palace under the Merovingian dynasty, had displaced that royal house, and usurped the throne of the ancient kings of the Franks. After a space of 255 years, his own descendants, the Carolingian monarchs, experienced a similar fate. Under the last Carolingians, destinie alike of energy and wisdom, Hugh the Great, duke of France (by which was then understood the Isle of France), Orleans and Burgundy, exercised a power as unlimited as that of the mayor of the palace under the Merovingians. On the death of Louis V, without children, in 987, his uncle Charles, duke of Lower Lorraine, laid claim to the throne, which the Franks had sworn to preserve to the family of Charlemagne. The French nobility, supported by pope John XV, proclaimed Hugh, son of Hugh the Great, duke of France and count of Paris, king, with the surname of Capet (capetus, capio, to seize; or, more probably, from a sort of hat, caput). The valiant Charles of Lorraine was surprised in Laon, by the treachery of a bishop, and made prisoner. He died, soon afterwards, in prison, and his son Otho, duke of Lower Lorraine, died in 1006. Both his younger brothers died childless in Germany. Thus the race of Capet was left in possession of the throne of France. According to some historians, Hugh Capet was descended from a German family. He was married to a German princess, Adelaida, daughter of king Henry I of Germany ( duke of Saxony). Hugh was crowned at Rheims, and swore to preserve to the nation, and particularly to the powerful feudal nobility and clergy, all their existing privileges. By his wise measures, he gave permanence to his dynasty, which, next to the family of Guelfs, is the eldest sovereign house at present existing. (See Bourbon.) Hugh, and the succeeding monarchs, till Louis VII, took the precaution of their successors invested with the royal title during their own lifetime. Thus Hugh had his son Robert crowned and anointed, as his colleague, as early as Jan. 1, 988. He abolished, by law, the partition of the hereditary estates among the sons of the kings, and forbade the alienation of the family domains. The daughters of the kings were endowed, from that time, with money, and the appanage which was given to the princes of the blood returned to the crown in default of male heirs. Both these principles were more fully confirmed by later laws. Thus Hugh Capet, by uniting his hereditary duchy, consisting of Paris, Isle de France and Burgundy, unequally with the crown, may be regarded as the founder of the French monarchy. What he had begun was completed by his successors, particularly in the times of the crusades, and by the establishment of standing armies. All the political statements illustrative of this subject are collected by the marquis de Pastoret, peer of France, in his continuation of the Ordonnances des Rois de France de la troisieme Race, vol. xv. xvi. xvii. (Paris, 1811, 1814, 1820, fol.), with which may be compared the essay of the advocate Bougnat, which obtained the prize of the academy of inscriptions, Essai sur les Institutions de St. Louis (Paris, 1821).

CAPI AGA; in the Turkish court, the superintendent of the eunuchs. He also announces all who desire to speak to the grand vizier, and introduces foreign ambassadors to an audience.—Capigi (capidzeh) is a name applied to the guards or door-keepers of the seraglio, in number about 400. Their superintendent is called Capigi Baschi. They likewise convey the sultan's orders. Among their duties
Capias. A writ or process of capias is one whereby the sheriff is ordered to arrest the body of the defendant, either before judgment, to compel him to answer to a suit; and this is called a capias ad respondendum; or, after the judgment, to compel him to satisfy the judgment; and this is called a capias ad satisfaciendum, commonly abbreviated ca. sa. In case of injuries without force, the civil law, and, originally, the common law, did not authorize the arrest of the defendant before judgment, that is, the arrest to answer; and upon feudal principles, says Sir William Blackstone, 3 Com. 281, “the person of a feudatory was not liable to be attached for injuries merely civil, lest, thereby, the lord should be deprived of his services.” The first writ of capias ad respondendum was given by act of parliament in 1307, 52 Henry III, c. 23, § 1, which provided, that, “if bailiffs, which ought to make account to their lords, do withdraw themselves, and have no lands nor tenements whereby they may be distrained, they shall be attached by their bodies, so that the sheriff shall cause them to come to make their account.” This act applied to a particular description of receivers, and supposes them not only to be debtors, but also to have in their own hands the evidence of the amount of the debt, the production of which was one object of the process. The statute of 13 Edward I, c. 11, passed in 1285, 18 years after the former, extends this process to “all manner of receivers bound to yield account,” and provides “if they be found in arraignment upon this account, their bodies shall be arrested, and, by the testimony of the auditors, shall be sent into the next gaol, and be imprisoned in irons under safe custody, and remain in prison at their own cost, until they have satisfied their master [the creditor] fully of their arrears.” This statute seems to suppose the proof and establishment of the debt before the arrest, and, so far, seems to have the character of a ca. sa.; but it is considered a capias ad respondendum by Sir William Blackstone; so in Jacobs’s Law Dictionary, and, indeed, generally. And it appears that the practice of arresting on mesne process, that is, before judgment, to answer, in civil suits, grew out of these statutes; for the subsequent statutes of 23 Edward III, c. 17 (A. D. 1350), providing that “such process shall be made in writ of debt, delinque of chartels, and taking of beasts, by writ of capias, as is used in writ of account;” and of 21 Henry VII, c. 9 (A. D. 1503), providing that “like process shall be hereafter, in actions upon the case, as in action of trespass or debt;” evidently have reference to an arrest to answer. A writ upon which a suit is commenced is either a capias, distress or summons; either the person of the defendant is seized, and (unless he is bailed) imprisoned until the trial, or his goods or lands are seized as a guarantee of his appearance to answer; and more often, in modern times, to obtain a lien to secure satisfaction of the judgment; or he is only summoned, that is, merely has notice, that a suit has been commenced before such a court, by such a plaintiff, and is to be heard at such a time. This last is uniformly the process adopted in claims of land. But by the statute of 5 Geo. II, c. 27, since made perpetual by another statute, it is provided, that, “in all cases where the cause of action shall not amount to ten pounds, the plaintiff shall not arrest the body of the defendant;” and “in all cases where the cause of action shall amount to ten pounds, an affidavit shall be made and filed of such cause of action, and the sum specified in such affidavit shall be endorsed on the writ, for which sum the sheriff shall take bail, and no more.” “It is curious to remark,” says Mr. Tidd, “the changes which the law of arrest has undergone at different periods. Anciently, an arrest was not allowed, except in action of trespass et armis; afterwards, an arrest was introduced with a capias in other actions; now, by the operation of the before-mentioned statutes, an arrest cannot be made in the only action where it was formerly allowed.” But, as has been justly remarked in a Pennsylvania case (6 Binn, 302), the reason for not requiring bail in trespass is, the difficulty of fixing the amounts for which it ought to be required. In the U. States, except Louisiana, the form of process is usually adopted from the English law, but with so great modifications on this particular subject, that it is not easy to lay down any general rule; and to state the particular cases in which an arrest of the person on mesne process is allowed in each of the states, would far exceed the limits prescribed by the plan of this work. The general principle was laid down, in the trial of Judge Chase on articles of impeachment, in 1804, that, in criminal proceedings, wherever the offence charged subjects the party to the punishment of imprisonment, the process
may be commenced by an arrest of the person, that the party charged may be held in custody, to receive punishment in case of his being found guilty. In civil cases, the capias ad respondendum was anciently adopted very extensively, if not universally, under the colonial governments, in actions of account, assumpsit, covenant, debt and case. The capias was adopted early and implicitly, in many of the states, as a part of the common law; and a large part of the legislation on the subject, subsequent to the adoption of the constitutions of the states, is a modification of a practice already existing. And there were laws authorizing the arrest are not to be found, except by implication from those modifying and regulating the practice. In many of the states, however, arrest on mesne process for debt is abolished, except in cases where it is apprehended the debtor intends to escape. In other states, the debtor is arrested on the capias ad satisfaciendum, but set at large immediately on surrendering his property, on oath, for the benefit of his creditors. It seems, indeed, to be putting a slight value upon personal liberty to permit arrest in any case, without the intervention of a magistrate; and, in case of debt or otherwise, to arrest a person not apprehended. Therefore, lost in these vessels. The support of the solid, and the formation of the fluid, parts of the system take place especially in these vessels.

CaPITAL, in political economy, is the stock of valuable exchangeable commodities possessed by individuals or a community. This is the usual and more limited meaning of the term; for, in comparing the capital of one individual with that of another, we have in mind the amount of money for which the stock of each can be exchanged. The market value is in view. In estimating the capital of any individual, we necessarily take into consideration the debts due to and from him; and many men of large capital are only possessed of claims upon others; their whole stock is in the hands of others at interest; and they have only promises for a certain amount of money, and actually possess neither lands nor goods to any considerable value; while others possess large quantities of both, and yet have little or no capital, since they owe, in money, the value of the greater part or the whole of their possessions. Now it is plain that no individual can undertake production, to any large extent, without an extensive stock. He must have land to cultivate, or materials to work up, and implements to work with. Even a savage must have a capital, such as his hut, clothes, cooking utensils, food enough to support him until he can obtain a new supply, and implements, such as a hatchet, gun, canoe, fishing gear, with which to procure this supply. The first effort of industry is to supply the implements, apparatus and machinery for his own employment; and as society and the arts advance, and the operations of industry are extended, the implements, apparatus, machinery and materials, requisite in conducting the processes of production, must...
will constitute a part of the capital of a
community, and also of an individual,
which is essential to success in produc-
tive processes. And these can be command-
ed by any one in proportion to the extent
of his individual capital; or, if he have
credit, then his resources for production
will depend upon the capital of others—
in other words, that of the community to
which he belongs.—In considering the
aggregate capital of a community, we
may put out of the question all the debts
due from any of the members to others;
for, whether these be great or small,—
and they will vary according to the prac-
tice of giving credit is more or less in use,
—still the capital of the community will
consist in its lands, buildings, ships, ma-
chinery, materials on hand, implements;
in short, in all those things which bear a
value in the market. Provided the com-
unity owes no debts abroad, these will
constitute its aggregate capital; and, if its
members are indebted abroad, we find its
actual net capital, as in the case of an in-
dividual, by deducting the amount of its
debts from the value of its possessions,
without regarding the debts due from
some of its members to others.—In com-
paring the capital or wealth of two com-
munities, we may be led into an error by
comparing the value of their possessions
in gold and silver, since the value of these
metals is well known to differ in differ-
ent countries, by whatever standard the
comparison be made. If, for instance,
we compare the value of the metals in
reference to the wages of a common day
laborer, we find he has 2 or 3 pence a
day in Egypt, and from 50 to 72 pence in
the U. States. We shall find the same
diversity in other things. If we take a
horse, of the same beauty and serviceable
qualities, for an example, we shall find
his price, in money, to be twice as great
in one place as in another. In order,
therefore, to make such a comparison
through the medium of the metals, or by
adopting them as a common measure, we
should, in the first place, correct the
measure itself, and ascertain whether an
ounce of gold, in one of the places be-
tween which the comparison is to be
made, is worth a half of an ounce or an
ounce and a half in the other; and the
way of correcting the standard would be,
to take equal quantities of a great num-
er of articles of the same quality, in the
two places, or equivalent quantities of
equivalent articles, as nearly as their
equivalence can be ascertained, and com-
pare their money prices in the two places.
But this correction of the common mea-
ure is not very easily made. The means
of comparing the value of money at suc-
cessive periods, in the same community,
are very defective; and the only attempt
at any scale of value, of this description,
known to the writer of this article, is that
of Mr. Evelyn, published in the Transac-
tions of the royal society of London for
1708, and corrected, since, by Mr. Col-
quially. But suppose the comparative
value of money, in two states or king-
doms, to be ascertained, and then a valu-
at of all the property in each, of every
description, to be made, the capital of
each and the comparative capital of the
two are thus ascertained. But this com-
parison would not show the comparative
resources of the two, either for war or for
production. This will appear from the
obvious fact, that a river like the Hudson
is a greater facility to transportation than
the Languedoc canal; yet, in making a
return of the property, or the estimation
of the capital of France, the Languedoc
canal would be a great item, whereas the
Hudson river, though of equal or greater
utility, would not appear as constituting
a part of the capital of New York. The
inhabitants are the great agents of pro-
duction in every country; and, though
their productive efficiency will be influ-
enced, very essentially, by the amount of
capital, fertility of the soil, quality of its
products, facilities of transportation, ar-
rangements of industry, still the charac-
teristics and skill of the agents themselves
are the most important circumstances in
estimating the productive resources of a
community. Industry and skill will rapidly
create capital. Mr. Phillips, in his Man-
ual of Political Economy, estimates that
the whole value of the capital of a coun-
try is consumed and reproduced every
two or three years. But the training
of a population, and forming its character
and habits, is a work of many years. The
most important ingredient in the national
resources is, therefore, not only no part
of its capital, but is a thing of very slow
growth, and results from the combined
and long-continued influence of a thou-
sand causes, moral, physical and political,
too complicated to be disentangled, and
so blended that the action of each cannot
be distinctly traced. Economists have
confined their views of production too
much to considerations of capital, and
neglected, or, at least, not given sufficient
weight to, the other economical capacities
and resources.—Capital is distinguished
into floating, or movable, and fixed; the former consisting of things that may be moved, and are susceptible of manual delivery; the latter, of those confined to one place, as a house or piece of land. We use the terms in a different sense when applied to any particular establishment, by the floating capital of which is meant that which remains after payment is made for all their apparatus and the implements of their business, and which is usually invested in the materials to be manufactured or transported, or to pass through the process by which it is, which constitutes the business conducted. Thus one carrying on a flouring-mill wants a floating or disposable capital, over and above the cost of his works, to be invested in wheat to be floured, and flour not yet disposed of. This instance illustrates what is meant by the floating or disposable capital of a whole community being that movable, exchangeable stock of things on hand, over and above the fixtures and apparatus of production, including lands, buildings, ships, working animals, all the implements of the arts, with necessary food, clothing, and a stock of seed sufficient for the time requisite for reproduction. What remains over these is the disposable capital, and, in a flourishing community, the disposable floating capital is constantly invested in new fixed capital, implements and apparatus of production. A declining community, on the contrary, consumes a part of its implements and apparatus of industry, or, what is in effect, the same thing; it does not repair and replace the damage of use and decay. The idea is held out in many economical treatises, that a community cannot have a surplus capital; that is, it cannot have more capital than it can make use of in its consumption and reproduction. As no grounds whatever are given for this doctrine, it seems to be hardly entitled to a consideration; for the position is certainly, at the first view, very improbable, since we know very well that men may accumulate; and why they may not, in any possible case, accumulate a surplus, does not appear by any plausible reason; and whether such surplus accumulation may be useful or not, will depend entirely upon the kind of articles of which such accumulation consists. If it consist in articles the value of which depends on the prices in foreign markets, the excess may be of no value at all; for it may so depress the foreign prices as to counteract all the indirect advantage arising from the cheaper supply, for a time, of the domestic demand.

_Fictitious capital generally means nothing more nor less than excessive credits, which throw the management and disposition of a great deal of property into the hands of persons who are not able to answer for the risks of loss from its bad management, or other causes. A whole community, in the aggregate, can have fictitious capital only in case of its members having an excessive credit in a foreign country. But the members may, among themselves, have a fictitious capital, by too great facility of credits in their dealings with each other, and the fiction, in this case, is in their false promises of payment.

_Capital, in geography; a city in which reside the highest authorities of a district, province, country, &c. Capitals, in the modern meaning of the word, can hardly be said to have existed in ancient times; at least, they were then only the seat of the sovereign, but not the centre of all the national activity. Rome only, perhaps, excepted; but this city was, for a very long time, the state itself, and, at a later period, the tyrant of the whole empire, rather than the head of a well-organized body. In Asia, there existed, indeed, in ancient times, capitals of very large empires; but they are not to be compared to the capitals of large modern empires, since the channels of communication and intercourse had not then reached that degree of perfection which enables them, in our days, to bring into close connexion all parts of a country. Each province was, therefore, left much more to itself. It would be difficult to determine whether the good or evil consequences of large capitals, in modern times, are greater, and such an examination would far exceed our limits; otherwise, it would be easy to point out, in every department of civilization, in science, social intercourse, politics, arts, &c., both salutary and pernicious effects, resulting from the influence of capitals. It seems to us a matter of little doubt, that it must be regarded as disadvantageous to any country, if the capital ceases to be the concentration of the skill, genius and strength of a nation, for the benefit of the whole, and by a disproportionate superiority destroys the importance of the rest of the country, as we find to be the case with Paris, which, as has been often observed, contains France. In Germany, the state of things is quite the reverse. There is no city which may boast of being the point of national concentration. The consequences
have been very advantageous to science, and somewhat disadvantageous to literature. In politics, this want of a central point has had melancholy consequences for Germany. London never exercised the same degree of influence over England which Paris has over France; one reason of which may be, that the two most extensive institutions for the diffusion of knowledge are not seated in the metropolises. The system of concentration has, in many countries, this fault is acknowledged, and a return to a more equitable system is perceptible. The great increase of wealth and consequence, which the capitals of large empires in Europe have acquired, in modern times, by the introduction of the bureau system (q. v.), which has brought together, in one place, the different departments of administration, has had much influence on military operations, having made the capture of the capital now far more important than formerly.

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-In the U. States, the word capital is not used officially, but, instead of it, the phrase seat of government, which is, in most cases, not the largest place of the state. It is not here the place to discuss, whether it would be more beneficial to the whole country if the seat of the general government were in one of the largest cities of the U. States. As it is now, to use the words of a traveller, "Washington must by no means be considered as the capital of the nation, but only as the capital of governmental business. It is a camp of business."

Capital, in architecture. (See Architecture.)

Capital Offence. (See Crime.)

Capital Punishment. (See Death, punishment of.)

Capitanata; a province of Naples, bounded N. and E. by the Adriatic, S. by the country of Bari and Basilicata, and W. by the Molise. This was the ancient Apulia Daunica. The whole country is a vast plain, and the soil generally sandy, with few trees, and scarcely any springs or rivers of fresh water; yet the land produces a great deal of corn, and feeds a great number of cattle. Salt is made along the coast. The Gargano is the only mountain; on the sides are plantations of oranges. The coasts are defended by 23 towers. The principal towns are Lecce, Foggia, St. Severo and Volturara.

Population, 254,800. Square miles, 3289. Manfredonia is the principal seaport. Capitanata forms what is generally called the spur of Italy.

Capitani, or Capitans; the hereditary chiefs who have taken possession of the district of Malta, the mountainous country of the ancient Messenia. They exercised, under the Turkish government, an arbitrary jurisdiction, without any kind of responsibility. With the bey, whom they chose from among themselves, they formed a kind of great council. The bey took care that the korettek, or poll-tax, was paid to the Turks, and was the agent in all dealings with the pacha. Generally, the capitani were robber chieftains, who lived retired in rocky fastnesses, and defied the Turks and their neighbors. They united only if resistance against the Turks became necessary. At other times, they lived at war amongst themselves. From this wild oligarchy most of the generals of the modern Greeks have sprung up; their Colocotroni, Odysseus, Niketas (called Turcoplagus) and others. The palikates, or the Greek warriors, also called klephtes (i. e., robbers), followed the orders of the capitani as long as they had confidence in them, and met with good success. The French colonel Voutier has given us interesting information concerning them.

Captive cenii were the Roman citizens, of the lowest class, who possessed no property. They had this name because they were counted by their heads, not by their property, in the divisions of the centuries.

Capitol, now Campidoglio; the citadel of ancient Rome, standing on the Capitoline hill, the smallest of the seven hills of Rome, anciently called the Saturnine and the Turkish rock. It was begun A. C. 514, by Tarquinus Priscus, but not completed till after the expulsion of the kings. At the time of the civil commotions under Sylla, it was burnt down, and rebuilt by the senate. It again suffered the same fate twice, and was restored by Vespasian and Domitian. The latter caused it to be built with great splendor, and instituted there the Capitoline games. Dionysius says the temple, with the exterior pillars, was 100 feet long and 185 broad. The whole building consisted of three temples, which were dedicated to Jupiter, Juno and Minerva, and separated from one another by walls. In the wide portico, triumphal banquets were given to the people. The statue of Jupiter, in the capitol, represented him sitting...
on a throne of ivory and gold, and consisted, in the earliest times, of clay, painted red. Under Trojan, it was formed of gold. The roof of the temple was made of bronze; it was gilded by Q. Catulus. The doors were of the same metal. Splendor and expense were lavished upon the whole edifice. The gilding alone cost 12,000 talents (about 9,000,000 dollars), for which reason the Romans called it the golden capitol. On the pediment stood a chariot, drawn by four horses, at first of clay, and afterwards of gilded brass. The temple itself contained an immense quantity of the most magnificient presents. The most important state papers, and particularly the Sibylline books, were preserved in it. The present capitol (Capitologio), standing near, and partly on the site of the old one, is a modern edifice, after the design of Michael Angelo. The principal entrance to it commands a most splendid prospect, but the buildings, as connoisseurs tell us, are among Michael Angelo’s inferior works. The modern capitol consists of three buildings (in the principal one resides the senator of Rome), which do not, however, cover the whole Capitoline rock. On the ruins of the former temple of Jupiter Capitolinus, of which some pillars are still to be found, a Franciscan church is now erected. The present capitol is one of the most interesting spots in Rome. From the summit of the middle building, the spectator has a splendid view of one of the most remarkable regions in the world—the Campagna up to the mountains. The museums contain some of the finest collections of statues and paintings. The stairs leading up to the equestrian statue of Marcus Aurelius are beautiful. Every thing contributes to render the capitol venerable and interesting. The name of capitol is also given to the edifice in Washington, where congress assembles. Some of the states of North America also call their state-houses capitols.

CAPITULARY. The word capitulary is generic, and denotes every kind of literary composition divided into chapters. Laws of this description were promulgated by Childbert, Clothaire, Carloman and Pepin, kings of France; but no sovereign seems to have put forth so many of them as the emperor Charlemagne, who appears to have wished to effect, in a certain degree, a uniformity of law throughout his extensive dominions. With this view, it is supposed, he added to the existing codes of feudal laws many other laws, divided into capitularies, or small chapters or heads, sometimes to explain, sometimes to amend, and sometimes to reconcile or remove the difference between them. They were generally promulgated in public assemblies, composed of the sovereign and the chief men of the nation, both ecclesiastical and secular. They regulated equally the spiritual and temporal administration of the kingdom; and the execution of them was intrusted to the bishops, the courts and the missi regii, officers so called because they were sent, by the French kings of the first and second race, to dispense law and justice in the provinces. Many copies of capitularies were made, one of which was generally preserved in the royal archives. The authority of the capitularies was very extensive. It prevailed in every kingdom under the dominion of the Franks, and was submitted to in many parts of Italy and Germany. The earliest collection of the capitularies is that of Angesise, abbot of Fontenelles. It was adopted by Louis the Debonnaire and Charles the Bald, and was publicly approved of in many councils of France and Germany. But, as Angesise had omitted many capitularies in his collection, Benedict, the Levite or deacon of the church of Mentz, added three books to them. Each of the collections was considered to be authentic, and of course was appealed to as law. Subsequent additions have been made to them. The best edition of them is that of Baluze, in 1697. The capitularies remained in force in Italy longer than in Germany, and in France longer than in Italy. The incursions of the Normans, the intestine confusion and weakness of the government under the successors of Charlemagne, and, above all, the publication of the epitome of canon law, termed the Decretum of Gratian, in the year 1150, which totally superseded them in all religious concerns, put an end to their authority in France. (Butler’s Histoire Juridique Subseci- e, p. 128—131.)

CAPITULATION formerly signified a writing drawn up in heads; now commonly used, in military language, to signify the act of surrendering to an enemy upon stipulated terms, in opposition to surrender at discretion. In the 15th century, capitulations, as they were called, were presented by the ecclesiastical establishments in Germany to their newly chosen abbots and bishops, who were obliged to swear to observe them as laws and conditions for their future rule. The ecclesiastical electors obtained, after the
full of the Hohenstaufen family, certain advantageous promises from the new emperors, which were called capitulations. When Charles V was proposed as emperor, and it was apprehended, on account of his foreign education, that he would disregard the German constitution, he was obliged to make oath, that he would not reside without the German empire, nor appoint foreigners to office in the empire, &c. This was called his election capitulation. Such a Wahlcapitulation was afterwards presented to every new emperor, as a fundamental law of the empire, and shook the constitution of the German government to its very foundations, since the electors, at the choice of every new emperor, made some new infringement on the imperial privileges. The Wahlcapitulationen were acknowledged bargains, certainly unique in history.

Captain, or Kaphrist, Wassil Wassilje-witsch, Russian counsellor of state, member of the academy of St. Petersbourg and other learned societies, one of the first lyric poets of Russia, born in 1756, was the rival of his friend and relation, the celebrated poet Derschavin. (q. v.) He translated Horace with applause. The collection of his works appeared at Petersbourg, in 1806 (Lyric Poems, by Wassil Kaphrist). He wrote a comedy, called Jabeda, in 1799, and a tragedy, called Antigone, in 1815. His critique on Homer’s Odyssey, published in Russian and French, is more acute than profound. His odes have not the easy and bold character by which those of Derschavin are distinguished, but they have a charm of another kind. Purity of style, richness of thought, and a sound philosophy, connected with deep and genuine feeling, are Kaphrist’s characteristic traits. Some years ago, he retired to Ossechouka, his country-seat, in Little Russia, where he lived devoted to the muse till his death, which took place Oct. 28, 1823, in his 67th year.

Capo d’Istria, John, count of, formerly Russian secretary of state, now president of Greece, was born at Corfu, 1760, where his father was a physician, and studied medicine at Venice. When the Russian troops occupied the Ionian islands, in 1799, Anthony Maria de Capo d’Istria, his father, was at the head of the government. But, after the islands were again made dependent on France, in 1807, in consequence of the peace of Tilsit, he entered into the Russian service. He afterwards returned to Corfu, became a senator there, and died, April 17, 1821, aged 80 years. The son still continued in Russia, where he was first employed in the office of count Rumzanoff, and afterwards went as Russian ambassador to Vienna. In 1812, he conducted the diplomatic business of the army of the Danube, of which admiral Tschuschagoff was commander-in-chief. When this army was united with the great Russian army, after the retreat of the French, Capo d’Istria managed the diplomatic correspondence at head-quarters, under the emperor’s direction, and soon gained the confidence of his monarch to such a degree, that he was afterwards engaged in the most important public business, and appointed secretary of state for the department of foreign affairs. He was made grand-cross of the Vladimir order, knight of St. Ann, grand-cross of the royal Austrian Leopold order, and of the Russian order of the red eagle. In 1813, he was Russian ambassador to Switzerland, negotiated with the Austrian ambassadors the new relations of this republic, and, in Sept., 1814, was present at the congress of Vienna as Russian-plenipotentiary, from which the downfall of Napoleon, in 1815, recalled him to the head-quarters of the allies at Paris. As imperial Russian plenipotentiary, he subscribed the treaty of Paris, Nov. 20, 1815, and returned with his monarch to Petersburg, where he took a very active part in the business of the council of state. His endeavors for the restoration of the republic of the Ionian islands, for the support of the established religion in Russia against the intrigues of the Jesuits, and for the deliverance of the Greeks from the Turkish yoke, are well known. But, as Russia disapproved of the attempts of the Greeks, and Stroganoff (q. v.) returned from his mission to Constantinople, in 1822 count Capo d’Istria left the public service, and retired, as a private man, to Germany and Switzerland, living chiefly at Geneva, till the year 1827, when he was elected president of the Greek republic. He stands now at the head of this government; but his means have been as yet so feeble, and the whole state of Greece such, that we are not able to judge of his talents for administration. So much, however, is certain, that he immediately brought Greece into closer connexion with the other governments of Europe, and has thus exerted a salutary influence.

Capo d’Istria (the ancient Zegida); a seaport of Austria, on the gulf of Trieste, 8 miles south of Trieste; lon. 16° 39’ E.; lat. 43° 31’ N.; population 5,119;
is a bishop's see, and the capital of a district, containing 65,150 inhabitants. The town is two miles in circumference, has, besides the cathedral, 39 other churches, six convents, hospitals, &c.

1. A ssort of cotton, so short and fine, that it cannot be spun. It is used, in the East Indies, to line palanquins, to make beds, mattresses, &c.

2. CAPONIERE, in fortresses; a place which is covered against the fire of the enemy, on the sides, sometimes also above, and serves for the connexion of two works, or for maintaining an important point. In particular—

3. A passage secured by two parapets, in the form of glacis, which leads through the dry ditch, from one work to another; for the convenience of the chief wall to the ravelin. If danger is to be apprehended only from one side, and consequently only one parapet is made, it is called a demi-caponniere; if it is covered above with hurdles or with wood, it is called a coffr: but this word is often used indifferently for caponniere.——2. Small block-houses in the covered way, for its defence. Coehorn laid out similar, but less useful demi-caponnieres, for the salient angles of field-fortifications.

CAPPADOCIA, in antiquity; one of the most important provinces of Asia, once a famous kingdom; bounded W. by Lycaonia, S. by Cilicia and Syria, E. by Armenia, and N. by the Pontus Euxinus. In the period of the Persian government, Cappadocia comprehended all the country between the Halys and Euphrates. By the former river, it was separated from Phrygia and Paphlagonia; by the latter, from Armenia; therefore the region afterwards called Pontus was comprehended in this territory. The Persians divided it, according to Strabo, into two satrapies, which bore the name of Cappadocia Magna (afterwards Cappadocia Proper) and Cappadocia Minor (afterwards Pontus). This division, however, was not always strictly observed. The Persian satraps governed, at a later time, under the title of kings, and sometimes made themselves independent. At the time of the famous retreat of the 10,000 Greeks, both the Cappadocians seem to have been under the rule of Mithridates, who had participated in the conspiracy of Cyrus the Younger, but retained his government, and became, after the defeat of Cyrus, again dependent upon the kings of Persia. Cappadocia Magna was a poorly-cultivated country, little favored by nature, the plains of which were only fit for breeding sheep. The climate was rough, and, wood being scarce, the habitations of the people were low and mean. Even the capital, Mazaca, was more like a camp than a city. The Cappadocians, also called Leukosyri (the White Syrians), because they had a language resembling the Syrian, were considered stupid and ill-tempered.

CAREA, or CAPRESE. (See Capri.)

CAPRI; an island in the beautiful gulf of Naples, which contributes not a little to the charm of this favorite scene of nature. Capri, five miles long and two broad, lies at the entrance of the gulf, and consists of two mountains of limestone, remarkable for their picturesque shape, and a well-cultivated valley. The inhabitants, amounting to 3000, are occupied in the production of oil and wine, in fishing and in catching quails, which come in immense numbers from Africa to the shores of Italy. Every spot on the island, which can be made productive, is cultivated. In fact, agriculture all round Naples is in the highest state of perfection. The town of Capri (lon. 14° 8' E.; lat. 40° 11'/N.) is the seat of a bishop, to whom all the quails belong. A high rock separates Capri from Anacapri, 1000 feet high, with 3300 inhabitants, to which a stairway in the rock, of 322 steps, leads from the lower part of the island. With the Romans, Capri was called Caprea. Augustus obtained it by exchange from the Neapolitans, and made it a place of agreeable retreat, but never made use of it. Tiberius spent here the last seven years of his life in degrading voluptuousness and infamous cruelty. The ruins of his palace are still extant, and other ruins are scattered over the island.

CAPPRESE. Caprice is the name applied to a sort of musical composition, in which the composer follows the bent of his humor. The capriccio may be used with propriety in pieces for exercise, in which the strangest and most difficult figures may be introduced, if they are not at variance with the nature of the instrument of the voice.

CAPPASCIAIN. Cayenne pepper contains a peculiar substance, discovered by Forchhammer, and called capsicin by doctor C. Convell, which, according to the latter, when perfectly pure, is tasteless, and has no effects, and crystallizes in angular fragments. It is neither acid nor alkaline.

CAPSTAN, in shipping (in French, cabestan; Dutch, kapstam); a strong, massy
column of timber, in the form of a truncated cone, and having its upper extremity divided into several squares, with holes in them, to receive bars or levers. It is let down perpendicularly through the deck of a ship, and is fixed in such a manner, that the men, by turning it horizontally with their bars, are able to weigh the anchors, and to perform other work requiring great exertion.

Captain. This is one of those many words derived from the Latin of the middle ages, and now to be found in all the different idioms of Europe. Captain comes from the Latin caputanes, from capit_, head, and signified, first, a governor of a province, who, in the first half of the middle ages, was generally a military man. Thus the word captain soon came to be used chiefly to denote a high, or rather the highest, military officer. Opitz, an early German poet, calls God, Lord, Master, Captain; and, in English, Christ is called the Captain of our salvation. Like many other words, however, this has, in the course of time, lost much of its dignity, and, in military technology, now signifies the commander of a small body—a company—and, in maritime language, the master of a vessel. In the United States of America, the master of the smallest craft, and even the chief man on a raft, is styled captain. In the latter part of the middle ages, when armies were not yet so regularly divided and subdivided as at the present time, captains were the commanders of those small bodies of which the armies consisted. These were generally collected by their commander, who entered, with his company, into the service where most pay or most booty could be obtained. The practice of carrying on wars, by troops collected in this manner, prevailed to the greatest extent in Italy, where the continual quarrels of the numerous small states afforded ample employment to the unsettled and the dissolute. These companies play an important part in the history of the middle ages, particularly that of the two centuries preceding the reformation, and had a very important influence on the manners and morals of the south of Europe. They are further interesting to the student of history, because they are so unlike any thing at present existing. We refer the reader, for some further remarks on this subject, to an able article on Machiavelli, in the Edinburgh Review, March, 1827.

Captain, in modern armies, is the commander of a company of foot, or a troop of horse. In the English army, he appoints the serjeants, corporals and lance-corpsals of his company—a right which belongs, in other armies, to the commander of the regiment. In the horse and foot-guards, the captains have the rank of lieutenant-colonels in the army. In the French army, besides the commanders of the companies of the line, commanders of certain detached bodies of guards, &c., are called captain, and have, sometimes, a very high rank in the army.—Captain-lieutenant is, in the English army, a lieutenant, who, with the rank of captain, commands a troop or company in the name of some other person. Thus the colonel being usually captain of the first company of his regiment, that company is commanded by his deputy as captain-lieutenant.—Captain of a merchant ship; he who has the direction of the ship, her crew, navigating, &c. In small vessels, he is more ordinarily called master. In the Mediterranean, he is called patrono.—Post-captain; an English officer commanding any man-of-war, from a ship of the line down to a ship-rigged sloop. Formerly, a twenty-gun ship was the smallest that gave post-rank; but, by a late regulation, the largest class of ship-ships has been added to the list of post-ships; and post-captains, under three years' standing, are now appointed to them, unless they happen to be selected as flag-captains to admirals' ships. After being three years posted, they are appointed to frigates, which they may continue to command till they are of 10 years' standing, when they are generally removed to 50 or 64 gun-ships, preparatory to their taking the command of ships of the line.—Captain-general signifies, in England, the first military rank, power and authority in the realm; therefore the king is, by the constitution, captain-general, or generalissimo, of all the forces in the United Kingdom. In 1799, the king delegated this rank, with the powers annexed to it, to the duke of York. In France, it is an ancient title, which conferred an almost unlimited power on the person who possessed it, in the district where he commanded. But it never corresponded to that of generalissimo, except in the case of the duke of Savoy, in 1635, in the time of Louis XIII. The count de Tassis was French captain-general in Italy in 1702. The title is not in use at present, nor would it agree with the existing organization of the administration. In Spain, the rank of a captain-general corresponds with that of a marshal of France, who has the command of an army. This title was also given to the
CAPTAIN—CARACALLA.

head of a province, in the Spanish colonies in South America, which was divided into vicereinalties and captain-generalships (capitanias-generales); thus Chili was a captain-generalship. The captain-generals were not placed under the viceroys, but accountable only to the king, through the council of the Indies. The captain-general of Venezuela, for instance, had no connexion with the viceroy of New Granada. They deemed, in the last instance, on all legislative, judicial and military affairs, and presided in the real audiencia. The time during which these governors remained in power was limited to a few years, probably in order to prevent them from becoming too powerful. The consequence was, that the colonies were oppressed the more to enrich the governors, for rich everybody was when he left his office.

CAPTURE. (See Prize.)

CAPUA; a fortified place in the Terra di Lavoro, in the kingdom of Naples, on the Volturno; the see of an archbishop; contains a military school, and 7300 inhabitants; one league distant from the ancient Capua, out of the ruins of which it was partly built, in the 9th century; lon. 14° 5' E. lat. 41° 5' N.; 13 miles north of Naples. There are 12 convents in this city. Jan 11, 1797, it was taken by the French, and, in 1820, it did not resist the Austrians. The ancient Capua, one of the finest and most agreeable cities of Italy, was so important, that it was compared to Rome and Carthage. Hannibal went into quarters here, after the battle of Cannae, and promised to make the city the capital of Italy. Capua therefore formed an alliance with him, but was reconquered after five years. The Vandals laid it waste. Nursci restored it, but the Lombards devastated it again. There are still many ruins here. Around Capua lie the fertile Campanian fields, which produced three crops a year. Living was cheap here, and the climate healthy, so that it was a favorite place of resort of the Romans. (See Francicena.)

CAPUT-MORTUM (dead head); a technical expression, in chemistry, for the deposit in the retort, arising from dry distillation; because, if the operation is continued, volatile substances cease to be given off.

CAQUITA; a large river in South America, which rises about 60 miles south of Popayan. Being enlarged by the addition of several streams, it takes a course due east about 300 miles, when it divides into three branches, one of which falls into the Ica; another takes the name of Yupura, and the third forms the principal stream of the Negro.

CARABINE; formerly, a kind of guns, which are now out of use. At present, short guns, used by the cavalry, have this name. Tacticians entertain very different opinions respecting this kind of arms. Some think that they are of no use whatever, as the aim from on horseback is extremely uncertain. In some armies, every third man of certain regiments of cavalry is armed with a carabine. The word carabine is found in all European languages, with different endings only. Many derive the word from Catalina, which, for a long time, was famous for a certain light cavalry. The transformation of the l into r would not be extraordinary. Du Fresne derives the word from a kind of arms called chabarrina, of which mention is made in the 14th century.

CARABOBO; a province of Colombia, forming, according to the law of June 23, 1821, with the province Caracas, the department of Venezuela. The residence of the governor of Carabobo is Valencia. This name has been rendered famous by the battle of Carabobo, which was decisive of the independence of Colombia. It was fought June 24, 1821, soon after the armistice concluded between Bolivar and Morillo had expired. Bolivar, having formed a junction with Paez in Varinas, advanced to attack the Spanish general La Torre, who had taken a strong position upon the heights commanding the only pass by which his army could be approached. The battle was commenced by Paez, who led on his division in person, and, by the valor and impetuosity of himself and his followers, drove the Spaniards from their intrenchments, and thus gained a complete victory, before the second division, under general Cedeno, came up. All of the troops, the English, in the service of the republic, distinguished themselves most: they chiefly decided the day, and suffered most severely. The battalion in which most of the English and Irish served received the name of battalion of Carabobo. Caracas, La Guaym, Carthagena and Cumanar, and all that portion of Venezuela which is dependent upon them, were permanently secured to the patriots by this victory. (See Columbia ii., 495, 724.)

CARACALLA, Antoninus Bassianus, eldest son of the emperor Severus, was born at Lyons, A. D. 188, and appointed by his father his colleague in the government, at the age of 13 years. Nevertheless, he attempted his life. Severus died A. D. 211.
He was succeeded by Caracalla and Geta. The two brothers, from their earliest years, hated each other inveterately. After a campaign against the Caledonians, they concluded a disgraceful peace. They then wished to divide the empire between them; but their designs were opposed by their mother, Julia, and by the principal men of the state. Caracalla now resolved to get rid of his brother, by causing him to be assassinated. After many unsuccessful attempts, he prevailed to desire a reconciliation, and requested his mother to procure him an interview with his brother in private in her chamber. Geta appeared, and was stabbed in his mother’s arms, A. D. 212, by several centurions, who had received orders to this effect.

The praetorian guards were prevailed upon, by rich donations, to proclaim Caracalla sole emperor, and to declare Geta an enemy to the state. The tyrant caused Geta’s children and friends to be put to death. (See Papinian.) Dion estimates the number of victims at 20,000. He afterwards executed many of the numbers of his brother, and caused him to be placed among the gods. His pattern was Sylla, whose tomb he restored and adorned. Like this dictator, he enriched his soldiers with the most extravagant largesses, which extortion enabled him to furnish. Cruel as Caligula and Nero, but weaker than either, he regarded the senate and the people with equal contempt and hatred. From motives of avarice, he gave all the free men of the empire the right of citizenship, and was the first who received Egyptians into the senate. Alexander, whose habits he imitated, and Achilles, were the objects of his deepest veneration. He went to Ilium to visit the grave of Homer’s hero, and poisoned his favorite freedman, named Festus, to imitate Achilles, in his grief for Patroclus. His conduct in his campaigns in Gaul, where he committed all sorts of cruelties, was still more degrading. He marched over the Rhine to the countries of the Catti and Alemani. The Catti defeated him, and permitted him to repass the river only on condition of paying them a large sum of money. He marched through the land of the Alemani as an ally, and built several fortifications. He then called together the young men of the tribe, as if he intended to take them into his service, and caused his own troops to surround them, and cut them in pieces. For this barbarous exploit, he assumed the name Alennanicus. In Dacia he gained some advantages over the Goths. He signed a treaty of peace at Antioch with Artabanus, the Parthian king, who submitted to all his demands. He invited to Antioch Abgar, the king of Edessa, an ally of the Romans, loaded him with chains, and took possession of his states. He exercised the same treachery towards Vologeses, king of Armenia; but the Armenians flew to arms, and repulsed the Romans. After this, Caracalla went to Alexandria, to punish the people of the city for ridiculing him. While preparations were making for a great massacre, he offered human sacrifices to Serapis, and visited the tomb of Alexander, on which he left his imperial ornaments, by way of offering. He afterwards devoted the inhabitants, for several days and nights, to plunder and butchery, and sealed himself, in order to have a view of the bloody spectacle, on the top of the temple of Serapis, where he consecrated the dagger which he had drawn, some years before, against his brother. His desire to triumph over the Parthians induced him to violate the peace, under the pretence that Artabanus had refused him his daughter in marriage. He found the country undefended, ravaged it, marched through Media, and approached the capital. The Parthians, who had retired beyond the Tigris to the mountains, were preparing to attack the Romans, the following year, with all their forces. Caracalla returned without delay to Mesopotamia, without having even seen the Parthians. When the senate received from him information of the submission of the East, they decreed him a triumph, and the surname Parthicus. Being informed of the warlike preparations of the Parthians, he prepared to renew the contest; but Macrinus, the pretorian prefect, whom he had offended, assassinated him at Edessa, A. D. 217, on his way to the temple of Lyimus. Caracalla erected at Rome some splendid monuments, magnificent statues, which bear his name, and a triumphal arch, in commemoration of the achievements of Severus.

Caracas; a province, which, with the province of Carabobo, constitutes, according to the law of June 23, 1824, the department of Venezuela, one of the 12 departments of Colombia. (See Venezuela.) The city of Caracas, or Leon de Caracas, is the capital of the department of Venezuela, formerly a captain-generalship, lon. 67° 31’ W.; lat. 10° 31’ N. In 1924, the population was estimated at 50,000. March 30 of that year, the city was partly destroyed by an earthquake, and nearly 12,000 persons were buried in the ruins.
By the political events which followed this catastrophe, the population of this ill-fated city was reduced, in four or five years, to less than 25,000. The city is situated five leagues from the sea, from which it is separated by a chain of mountains, at an elevation of 3000 feet above the ocean. A good road traverses the mountains to the port La Guayra. Caracas carries on a considerable trade. The cocoa, coffee, indigo, cotton, sarsaparilla, and the Varinas tobacco, is brought here for sale, or to be exchanged for European manufactures and productions. The temperature is generally between 72° and 90° Fahr. in the day, and between 68° and 72° at night; but this general mildness is connected with great fluctuations in the weather. Humboldt, among the vapors of November and December, could sometimes hardly fancy himself in one of the temperate valleys of the torrid zone, the weather rather resembling that of the north of Germany. Caracas is the seat of the intendant of Venezuela, and has a college, a court of justice, nine churches, and five convents. The streets are straight and well built, intersecting each other at right-angles, at a distance of about 300 feet. The inhabitants consist of whites, descendants of Spaniards, free colored people, a few slaves, and Indians. The first are either merchants, planters, professional or military men, very proud, and disdaining all kinds of labor. The women are considered very handsome, having large black eyes, full of expression, jet-black hair, and fine complexions; but they are careless of their figures. They seldom leave their houses except to go to mass, when they wear the long veils called mantillas, covering nearly the whole body. They possess considerable natural talent and vivacity, but little or no accomplishments. Caracas, as is well known, has been conspicuous throughout the revolution of Venezuela and New Grenada against Spain.

CARACAS-CARAMANIA.

CARACAS. (See Caracci.)

Caraccioli, Louis Antoine de; born in 1721, at Paris, of an ancient and distinguished Neapolitan family. His talents for conversation procured him a distinguished reception, in Rome, from Benedict XIV and Clement XIII. He afterwards went to Germany and Poland. After having educated the children of prince Rzewuski, in the latter country, he returned to Paris, and wrote his Lettres du Pepe Clément XIV (Ganganelli), which display a kind spirit, a benevolent philosophy, and fine taste. They also contain intelligent observations on many situations of life. For a long time, they were thought to be the genuine productions of the pope, and excited the greatest interest in France, and throughout Europe. He died in 1803.

Caraccioli, marquis de, the friend of Marmontel and D'Alembert, born in 1711, was, about the middle of the 18th century, Neapolitan ambassador in London and Paris. He was esteemed one of the first ornaments of the accomplished society of the capital of France. He died in 1799, in the office of viceroy of Sicily.

CARACCIOLI, Francisco, brother of the duke of Roccaromana, was distinguished as Neapolitan admiral, in 1793, at Toulon; but, being treated by his court with contempt, he entered the service of the Pari­thenopolian republic, and repelled, with a few vessels, an attempt of the Sicilian-English fleet to effect a landing. When Ruffo took Naples, in 1799, Caraccioli was arrested, contrary to the terms of the capitulation, was condemned to death by the junta (see Speciale), was hung at the mast of his frigate, and thrown into the sea. His death is a blot on the fame of Nelson.

Caractacus; a king of the ancient British people called Silures, inhabiting South Wales. He defended his country seven years against the Romans, but was, at last, defeated, and led in triumph to the emperor Claudius, then at York, where his noble behavior and pathetic speech obtained him liberty. A. D. 52. Buchanan, Monpenny, and the other ancient Scottish historians, make this heroic prince one of the Scotch monarchs.

Carafa, or Caraffa, Michael; one of the most popular Italian composers now living. He was born at Naples, 1787, studied under Fenaroli, at the conservatoire of Naples, and enjoyed the advantages of an acquaintance with Cherubini during his residence at Paris. He has composed some agreeable and characteristic melodies, and is an imitator of Rosini. Among his operas, the opera seria "Gabriele de Vergy" has gained the most applause. Carafa is also an excellent composer of music for songs.

CARAITES, or CARRANTS, among the Jews; those who reject the tradition of the Talmud, and hold merely to the letter of Scripture, in opposition to the Rabbinists. (See Rabbi.)

CARAMANIA: an interior province of Asiatic Turkey, east of Natalia, comprising about 35,000 square miles. It is intersected by the Kisil Jermak, which, af-
CARAVAN—CARAVANSARIES.

A trading caravan is to be found in the travels of Niebuhr, who made many journeys with them, and describes them, as it is well known, minutely and faithfully. (For an account of some of the most important routes pursued by the caravans in Africa, see the article Africa, p. 90, vol. i.)

CARAVAN TEA. (See Tea.)

CARAVANSARIES, in the East; a sort of inn, situated in countries where there are no cities or villages for a considerable extent, to furnish travellers with a shelter. Some of them are built with much splendor, though they are generally unfurnished, and the traveller is obliged to bring with him his bed and carpet. In many, the hospitality is gratuitous. It is common for a pious Mohammedan to establish, during his life, or by will, one or several of such caravansaries. This kind of benevolence is considered peculiarly
CARAVANSARIES—CARBON.

agreeable to the Deity, and promotive of
the eternal happiness of the founder.
Sometimes persons are kept in these
establishments to show the way to the
caravans for some distance. (See Khan.)

Caraway seeds (fructus carvi) are a
stimulant and excitant, the fruit of a bi­
nnual plant (carum carvi, Linn.), a native of Europe, growing particularly in
the south of France.

Carbon. Charcoal, as we are familiar
with it in common life, contains hydrogen and carbon. Accordingly, it became necessary to intro­
duce a peculiar term for its pure base, and the one adopted by chemists was carbon. This element, besides forming
the inflammable matter of charcoal, ex­
lsts largely in animal substances, and is
distributed in the mineral kingdom.—The only body in which carbon has been found to exist in a state of
absolute purity, is the diamond. This
precious stone has always been esteemed
as the most valuable of the gems—a su­
periority which it owes to its hardness,
lustre and high refractive power. Dia­
monds are brought from India and from
Brazil. Those of India, which have been
the longest known, are principally found
in the kingdoms of Golconda and of Visia­
pon. The first were discovered at the
commencement of the 17th century, be­
tween the district of Serro-do-Frio. The
situations in which they occur are such
as to favor the idea of their recent forma­
tion; since they exist disseminated
through a loose, ferruginous sandstone, or
quartz detached in a sandy soil; and, in
both cases, are situated at no great depth
below the surface. In Brazil, the con­
glomerate in which they exist is called
escallio; from which they are extracted
by washing, in the same manner as gold.
The diamond uniformly occurs crystal­
ized, and presents a great variety of forms; all of which yield readily to me­
chanical division parallel to all the planes
of the regular octahedron, which, there­
fore, is the form of the primary crystal,
and under which figure it is sometimes
found in nature. The faces of its crys­
tals are very frequently curved, so as to
communicate to them a rounded appear­
ance. They are commonly limpid; and
are either colorless, or of a yellowish,
bluish, yellowish-brown, black-brown,
Prussian blue or rose-red color. Specific
gravity, 3.5. Its hardness is extreme; so
that it can be worn down only by rubbing
one diamond against another, and is pol­
ished only by the finer diamond powder.
—The weight, and, consequently, the
value of diamonds, are estimated in carats,
one of which is equal to four grains; and
the price of one diamond, compared with
that of another of equal color, transpa­
rency and purity, is as the squares of the
respective weights. The average price of
rough diamonds, that are worth work­
ing, is about £2 for the first carat. The
value of a cut diamond is equal to that of
a rough diamond of double weight, ex­
clusive of the price of workmanship; and
the whole cost of a wrought diamond of
1 carat may be about £56, or £ 8
2 carats = 2 £8 = 22
3 do. = 3 £8 = 72
4 do. = 4 £8 = 128
100 do. = 100 £8 = 8000

This rule, however, is not extended to
diamonds of more than 30 carats. The
larger ones are disposed of at prices infe­
terior to their value by that computation.
The snow-white diamond is most prized
by the jeweller. When transparent, and
free from cracks, it is said to be of the
first water. The following are some of
the most extraordinary diamonds known:
—one in the possession of the rajah of
Mattan, in the island of Borneo, where it
was found about a century ago: it is
shaped like an egg, and is of the finest
water; its weight is 367 carats, or 2 oz,
169 grs. Troy. Another is the celehrated
Pitt diamond, now among the crown
jewels of France, weighing 136 carats;
another in the sceptre of the emperor of
Russia, of the size of a pigeon’s egg; and
another in the possession of the Great
Mogul, which is said to weigh 280, and
which, in a rough state, weighed 793
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which, in a rough state, weighed 793

43*
caused them to disappear by the heat of a burning-glass, examined the air in the vessels. He found it to exhibit precisely the same properties as the air which results from the combustion of charcoal. This experiment was also performed by Abercrombie, who demonstrated the nature of the diamond by still another arrangement. A diamond was enclosed in a cavity made in a piece of pure, soft iron; a stopper of the same metal was driven into it, and the mass was put into a small crucible, which was covered, and this into a second; the space between them being filled with pure silicious sand. The whole was exposed, for some time, to an intense heat. When examined, the diamond had disappeared, and the iron, with which it had been in contact, was converted into steel. Now steel is a compound of iron and carbon; and, as the diamond was not visible, and as there was no source from which the carbon could have been obtained, the conclusion was unavoidable, that the diamond was pure carbon. Yet so different is this mineral from charcoal, that it was, for a time, imagined that it contained some other element than carbon; but the numerous and delicate experiments of Sir H. Davy, and several other chemists, failed of detecting any thing else in its composition; and, although there exists so great a difference between the diamond and charcoal, in their external properties, we are forced to believe that they are identical in the same nature. The diamond is, therefore, pure carbon, and differs from charcoal (leaving out of question its minute division, and is prepared for the demands of trade from the dregs which remain after the eliquoration of pitch, or else from small pieces of fir-wood, which are burned in furnaces of a peculiar construction, the smoke of which is made to pass through a long horizontal flue, terminating in a close, boarded chamber. The roof of this chamber is made of coarse cloth, through which the current of air escapes, while the soot, or lampblack, remains behind.—

**Coke** is a peculiar kind of charcoal, which remains in the retort, after the heating of coal to procure the coal gas.—**Ivory-black** or **animal charcoal**, is obtained from bones made red-hot in a covered crucible, and consists of charcoal mixed with the cartilaginous matters of the bone.—Wood charcoal, well prepared, is of a deep-black color, brittle and porous, tasteless and insipid. It is insinuous in any heat a furnace can raise; but, by the intense heat of a powerful galvanic apparatus, it is hardened, and at length is volatilized, presenting a surface with a distinct appearance of having undergone fusion. The density of charcoal, according to Mr. Leslie, is little short of that of the diamond itself, although its specific gravity has usually been considered as low as 2.00. Charcoal is insoluble in water, and is not affected by it at low temperatures; hence wooden stakes, which are to be immersed in water, are often charred to preserve them.—Owing to its peculiarly porous texture, charcoal possesses the property of absorbing a large quantity of air, or other gases, at common temperatures, and of yielding the greater part of them when heated. It appears, from the researches of Sausure, that different gases are absorbed by it in different proportions. He found that charcoal prepared from box-wood absorbs, during the space of 24 or 36 hours, of

<table>
<thead>
<tr>
<th>Gas</th>
<th>Amount absorbed in Charcoal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammoniacal gas</td>
<td>90 times its volume</td>
</tr>
<tr>
<td>Muriatic acid</td>
<td>85 do.</td>
</tr>
<tr>
<td>Carbonic acid</td>
<td>35 do.</td>
</tr>
<tr>
<td>Oxygen</td>
<td>9.25 do.</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>1.75 do.</td>
</tr>
</tbody>
</table>

Charcoal likewise absorbs the odoriferous and coloring principles of most animal and vegetable substances. Thus, all saline substances, which, from the resemblance of vegetable or animal extractive matter, are of a brown color,—as crude tartar, crude nitre, impure carbonate of ammonia, and other salts,—may, after being digested through the medium of water with charcoal, be obtained white
by a second crystallization. Resins, gum-resins, asphaltic, opium, balsams, essential oils, and many other substances, even those that have the strongest smell, are rendered nearly inodorous when they are rubbed with charcoal and water, or when solutions of them in alcohol are macerated with the charcoal, or filtrated repeatedly through it. A number of the vegetable tinctures and infusions also lose their color, smell, and much of their taste, by the same process. Common vinegar, on being boiled with charcoal powder, becomes colorless. Malt spirit, by distillation with charcoal, is freed from its disagreeable flavor. In the same manner wines, also, become colorless, and distilled waters lose their odors. Water, which, from having been long kept in wooden vessels, as during long voyages, has acquired an offensive smell, is deprived of it by filtration through charcoal powder, or even by agitation with it for a few minutes, especially when a few drops of sulphureous acid have also been added. Hence, also, it has been found that, by charring the inside of casks for keeping water, it may be preserved a long time without spoiling. Charcoal can even remove or prevent the presence of animal matter. If a piece of fish has become tainted, the taste and smell may, in a great measure, be removed, by rubbing it with charcoal powder; and it may be preserved fresh for some time by burying it in the same substance.

To produce these effects, however, it is necessary that the charcoal should have been well calcined and newly prepared.—The uses of charcoal are extensive. It is used as fuel in various arts, where a strong heat is required without smoke, as in dyeing, and in various metallurgical operations. By cementation with charcoal, iron is converted into steel. It is used in the manufacture of gunpowder, in its finer state of aggregation, under the form of ivory-black, lamp-black, &c. It is the basis of black paint; and, mixed with fats and resinous matter, to give a due consistence, it forms the composition of printing ink. It is used to destroy color and odor, particularly in sirups; to purify honey; to resist putrefaction; to confine hogs, and for a number of other important purposes.—When charcoal is heated to a certain degree in the open air, or in oxygen gas, it takes fire, and burns with the production of an elastic vapor, which has been called carbonic acid gas. It is usually obtained, however, by other processes. It exists, combined with lime, in the different varieties of limestone, marble and chalk; and, if any of these substances be exposed to a strong heat, the affinity of the acid to the lime is so far weakened, that it assumes the elastic form, and may be collected. An easier mode is also practised for effecting its division, through the diffusion of one of the more powerful acids.—From the experiment of the direct formation of this acid, by the combustion of charcoal in oxygen gas, its composition has been determined to be 27.4 carbon and 72.6 oxygen. Tennant illustrated its nature analytically, by passing the vapor of phosphorus over charcoal, or the carbonate of lime, heated to redness in a glass tube. The phosphorus took oxygen from the carbonic acid, charcoal, in the form of a light, black powder, was deposited, and the phosphoric acid, which was formed, united with the lime.—Carbonic acid is a colorless, odorless, elastic fluid, which possesses all the physical properties of the gases in an eminent degree, and requires a pressure of 60 atmospheres to condense it into a liquid. Its specific gravity, compared with common air, is 1.5277. It extinguishes burning substances of all kinds, and is incapable of supporting the respiration of animals, its presence, even in a moderate proportion, being soon fatal. An animal cannot live in air which contains sufficient carbonic acid for extinguishing a lighted candle; and hence the practical rule of letting down a burning taper into old wells or pits, before any one ventures to descend. When an attempt is made to inspire pure carbonic acid, a violent spasm of the glottis takes place, which prevents the gas from entering the lungs. If it be so much diluted with air, as to admit of its passing the glottis, it then acts as a narcotic poison on the system. It is this gas which so often proves destructive to persons sleeping in a confined room with a pan of burning charcoal. Lime-water becomes turbid when brought into contact with carbonic acid, from the union of the lime with the gas, and the insoluble nature of the compound thus formed. Hence, lime-water is not only a valuable test of the presence of carbonic acid, but is frequently used to withdraw it altogether from any gaseous mixture that contains it. Carbonic acid is absorbed by water. Recently-boiled water dissolves its own volume of carbonic acid, at the common temperature and pressure; but it will take up much more if the pressure be increased. Water and other liquids, which have been charged with carbonic...
Cider, or brisk champaign, is owing to acid under great pressure, lose the greater part of the gas when the pressure is removed. The effervescence which takes place on opening a bottle of ginger beer, cider, or brisk champagne, is owing to the escape of carbonic acid gas. Water which is fully saturated with carbonic acid gas sparkles when it is poured from one vessel to another. The solution has an agreeably acidulous taste, and gives to litmus paper a red stain, which is lost on exposure to the air. On the addition of lime-water to it, a cloudiness is produced, which at first disappears, because the carbonate of lime is soluble in an excess of carbonic acid; but a permanent precipitate ensues, when the free acid is neutralized by an additional quantity of lime-water. The water which contains carbonic acid in solution is wholly deprived of the gas by boiling. The agreeable pungency of beer, porter and ale is, in a great measure, owing to the presence of carbonic acid; by the loss of which, on exposure to the air, they become stale. Great kinds of spring and well-water contain carbonic acid, which they absorb from the atmosphere, and to which they are partly indebted for their agreeable flavor. Boiled water has an insipid taste, from the absence of carbonic acid. Carbonic acid is always present in the atmosphere, even at the summit of the highest mountains. Its origin is obvious. Besides being formed abundantly by the combustion of all substances which contain carbon, the respiration of animals is a fruitful source of it, as may be proved by breathing a few minutes into lime-water. It is also generated in all spontaneous changes, to which dead animal and vegetable matters are subject. The carbonic acid proceeding from such sources is commonly diffused equally through the air; but, when any of these processes occur in low, confined situations, as in the galleries of mines or in wells, the gas is then apt to accumulate there, and form an atmosphere called choke damp, which proves fatal to any animals that are placed in it. These accumulations take place only where there is some local origin for the carbonic acid; for example, when it is generated by fermentative processes going on at the surface of the ground, or when it issues directly from the earth, as happens at the grotto del Cane, in Italy, and at Pyrmont, in Westphalia. — Though carbonic acid is the product of many natural operations, no increase of its quantity in the atmosphere is discoverable. Such an increase appears to be prevented by the process of vegetation. Growing plants purify the air by withdrawing carbonic acid, and yielding an equal volume of pure oxygen in return; but whether a full compensation for the deterioration of the air by respiration is produced in this way, has not, as yet, been satisfactorily determined.

— Carbonic acid abounds in mineral springs, such as those of Tunbridge, Carlsbad and Saratoga. In combination with lime, it forms extensive masses of rock, which occur in all countries, and in every formation. It unites with alkaline substances, and the salts so produced are called carbonates. Its acid properties are feeble, so that it is unable to neutralize completely the alkaline properties of potash, soda and lilia. For the same reason, all the carbonates, without exception, are decomposed by the muriatic and all the stronger acids; the carbonic acid is displaced, and escapes in the form of gas.

— Another gaseous compound of carbon with oxygen, called carbonic oxide, exists, or may be obtained by heating powdered chalk, or any carbonate which can bear a red heat without decomposition, with iron filings in a gun-barrel. It is evolved together with carbonic acid gas, from which it may be freed by agitating the mixed gases with lime-water, when the carbonic acid is absorbed, and the gas in question is left in a state of purity. It is colorless and insipid. Lime-water does not absorb it, nor is its transparency affected by it. When a lighted taper is introduced into a jar of carbonic oxide, it takes fire, and burns calmly at its surface with a lam­bent, blue flame. It is incapable of supporting respiration. A mixture of 100 measures of carbonic oxide, and rather more than 50 of oxygen, on being exploded in Volta's cudiometer by electricity, disappear, and 100 measures of carbonic acid gas occupy their place; from which the exact composition of carbonic oxide is easily deduced. For carbonic acid contains its own bulk of oxygen; and, since 100 measures of carbonic oxide, with 50 of oxygen, form 150 measures of carbonic acid, it follows that 100 of carbonic oxide are composed of 50 of oxygen, united with precisely the same quantity of carbon as is contained in 100 measures of carbonic acid. Consequently, the composition of carbonic acid being:

By volume,

Vapor of carbon, 100
Oxygen gas, . . . 100
100 carbonic acid gas.
By weight,
Carbon, ...... 6
Oxygen, ...... 16
22 carbonic acid,
that of carbonic oxyde must be,

By volume,
Vapor of carbon, 100
Oxygen gas, ...... 50
100 carbonic oxyde gas,

By weight,
Carbon, ...... 6
Oxygen, ...... 8
14 carbonic oxyde.

Its specific gravity is 0.721.—The process for generating carbonic oxyde will now be intelligible. The principle of the method is to bring carbonic acid, at a red heat, in contact with some substance which has a strong affinity for oxygen. This condition is fulfilled by igniting chalk, or any of the carbonates, with half its weight of iron filings, or of charcoal. The carbonate is reduced to its caustic state, and the carbonic acid is converted into carbonic oxyde by yielding oxygen to the iron or the charcoal. When the first is used, an oxyde of iron is the product; when charcoal is employed, the charcoal itself is converted into carbonic oxyde.

CARBONARI (colliers); the name of a large political secret society in Italy. According to the Memoirs of the Secret Societies of the South of Italy, particularly the Carbonari, translated from the Original Manuscript (London, 1821), it emerged from its former obscurity in 1818. It has published instructions, catechisms of the different degrees, statutes, rituals, and so on, which give, however, only a partial view of the subject, without entering into the secret motives of the leaders, and the real spirit of the whole society. They have a tradition, that they were founded by Francis I of France, translated from the colliery. Clearing the wood of wolves (opposition to tyranny) is the basis of their symbols. By this, they are said to have meant, at first, only deliverance from foreign dominion; but, in later times, democratic and antimonarchical principles have sprung up, which were probably discussed chiefly among the higher degrees of the order. They call one another good cousins. Those of the second degree to the recesses of the Abruzzi, inspired with an equal hatred of the French and of Ferdinand. They formed a secret confraternity, and called themselves colliers. Their chief, Capobianco, possessed great talents as an orator. The war cry—"Revenge for the land crushed by the wolf!"—revealed the objects of the society. Ferdinand and Caroline endeavored to obtain their assistance against the French. Prince Moltzerini himself, a republican at heart, was sent to them for this purpose. Count Orloff, in his work on Naples, ascribes the foundation or revival of the Carbonari to queen Caroline of Naples: others assert that Magiola, the former minister of police, gave this society its present importance. Magiola, a native Genoese, was made minister of police in the time of the Bourbon rule, and, after it was united with France, director of the tobacco monopoly. When Murat ascended the throne of Naples, he employed him in the department of police, and, after the lapse of some time, appointed him minister. All his efforts were directed to the union and independence of Italy; and, for this purpose, he made use of the society of the Carbonari, which he reformed and extended. In 1812, he urged his sovereign to make himself independent of Napoleon, and to raise the standard of liberty and independence in Italy. Murat was supported by the Carbonari (who desired a constitution) only during the short intervals in which it was hoped that he would act according to these suggestions. In the sequel, he informed his brother-in-law, Napoleon, of the designs of Magiola, and delivered him, as a native Genoese, to France, where he lived, for some time, under the superintendence of the police. In 1815, he returned to Italy, and exerted his influence chiefly in the States of the Church, then occupied by Murat. After the expulsion of Murat by the Austrian armies, he was first carried to a Hungarian fortress, afterwards delivered to the king of Sardinia, imprisoned for a year in Fenestrelles, and then set at liberty. The ritual of the Carbonari is taken from the colliery. Clearing the wood of wolves (opposition to tyranny) is the basis of their symbols. By this, they are said to have meant, at first, only deliverance from foreign dominion; but, in later times, democratic and antimonarchical principles have sprung up, which were probably discussed chiefly among the higher degrees of the order. They call one another good cousins. Those of the second degree
are called Pythagoreans, and the oath of admission is, “Hatred to all tyrants!” Of the third degree, whose existence cannot be doubted, little is known. There are even traces of a fourth degree. A general union of the order under a common head seems not to have been effected. The separate societies in the small towns entered into a connexion with each other; but this union extended no farther than the province. The place of assembly is called the hut (baracca); the exterior parts are called the scud; the interior of the hut is called the edillery (vendita). The constitution of all the huts of the province is called the republic, generally bearing the ancient name of the province; for instance, the republic of West Lucania, in Principato Citra, which consisted of 182 huts, and had its seat at Salerno; the East Lucanian republic, in the province of Basilicata; chief seat at Potenza; the republics of Hirpinia, Daunia, &c. The chief huts (alta vendita) at Naples and at Salerno endeavored to effect a general union of the order, at least for the kingdom; but the attempt appears to have been unsuccessful. To what degree, however, the feelings of the nation were prepared for the object, appears from the fact, that the order, soon after its foundation, contained from 24,000 to 30,000 members, and increased so rapidly, that it spread through all Italy. In 1820, in the month of March alone, about 650,000 new members are said to have been admitted. Whole cities joined it; the little town Lucanian, in Abruzzo Citra, in March, 1814, contained 1300 armed members of the order. The terms of admission could not, of course, have been difficult; even notorious robbers became Carbonari; and the assurance, that their admission effected an immediate reformation of their life, will not meet with much credit. The clergy, and the military, in particular, seem to have thronged for admission. The religious character of the order appears from its statutes: “Every carbonaro has the natural and inalienable right to worship the Almighty according to his own opinions and the dictates of his conscience,” and this spirit shows most clearly the importance of the order; for it is far more difficult to be suppressed than the political spirit, and indicates a more universal and profound excitement. The Carbonari seem to have borrowed many forms from the freemasons, but did not, probably, originate from them. Even in Italy, freemasonry is considered distinct. Besides the Carbonari, several other secret societies have been formed—the European Patriots; the Resolute (Decisi), at whose head was a famous robber, Giro Annichino (formerly a clergyman), who, in 1817, was taken prisoner and executed by general Church. With him his troop, consisting of a few members, was extin­guished. (On the tendency and the constitution of the Carbonari, during the reign of Napoleon, see Hermes, xix.) After the suppression of the Neapolitan and Piedmontese revolution, in 1821, the Carbonari, throughout Italy, were declared guilty of high treason, and punished as such by the laws. Some interesting facts concerning them are contained in De Wit’s Fragments from my Life and Time (Brunswick, 1827); but the book is such a mixture of presumption and exaggeration, that it is of little value to any reader who is not sufficiently acquainted with the political affairs of that time to distinguish the false from the true. The Carbonari have added one more to the attempts of Italy to realize a wish as old as its misfortunes; that is, to attain deliverance from a foreign yoke, and to become united under one government. There has not existed one Italian of talent, from Dante, who called his country di dolor ostello (mansion of pain), down to the latest times, poet or politician, who has not lamented the divided state of his country, and subscribed the sentiment of Petrarca, Italia mia, ben che sia indarno, &c.

CARBONIC Acid. (See Carbon.)

CARBONIC OXIDE. (See Carbon.)

CARBUNCLE. (See Garnet.)

CARBUNCLE, in surgery; a roundish, hard, livid and painful tumor, quickly tending to mortification, and (when it is malignant) connected with extreme disability of the constitution. When this complaint is symptomatic of the plague, a pustential bubo usually attends it. (See Pustule.) The carbuncle is seated deeply, in parts provided with cellular membrane, and therefore does not soon discover its whole dimensions, nor the ill digested matter it contains.

Carcass (in French, carcasse), in military language; an iron case filled with combustible materials, which is discharged from a mortar, like a bomb. There were formerly two kinds, oblong and round ones, but they are now out of use.—In architecture, carcass signifies the timberwork of a house, before it is either lathed or plastered.

Carcinoma. (See Cancer.)

Card. Playing-cards are, probably,
an invention of the East, as appears from the name which cards originally bore in Italy (naibi), and still bear in Spain and Portugal (naipes), which word, in the Oriental languages, signifies divination or prognostication. If it could be proved that the Gipsies first made cards known in Asia and Africa, this supposition would be placed beyond doubt. It is asserted, that the Arabs or Saracens learned the use of cards from the Gipsies, and spread the use of them in Europe. The course that card-playing took, in its diffusion through Europe, shows that it must have come from the East, for it was found in the eastern and southern countries before it was in the western. The historical traces of the use of cards are found earliest in Italy, then in Germany, France and Spain. The first cards were painted, and the Italian cards of 1290 are acknowledged to have been so. The art of printing cards was discovered by the Germans, between 1450 and 1460. The Germans have, moreover, made many changes in cards, both in the figures and the names. The landknechstspiel, which is regarded as the first German game with cards, is a German invention. Of this game we find an imitation in France, in 1392, under the name of la sansonnet, which continued to be played there till the time of Molière and Regnard, and, perhaps, still longer. The first certain trace of card-playing in France occurs in the year 1361, and Charles VI is said to have amused himself with it during his sickness, at the end of the 14th century. The modern French figures are said to have been invented in France between 1430 and 1461. It has been said that cards were known in Spain as early as 1335, but this opinion is supported by no evidence. The earliest indication of card-playing in Spain is its prohibition by the king of Castile, John I, in 1357, when it must, consequently, have been very prevalent. One of the best works on divination at cards is the well-known treatise of Hoyle. (For the different games, see the respective articles.)

Cardamon, small (cardamonum minus; anomum cardamomum, Linn.) a perennial plant growing in the East Indies. The fruit is used as a stimulant and excitant. Triangular capsules, from four to five lines in length, of a yellowish-white, contain the seeds, which are of a brown color, a pleasant, aromatic smell, a warm, pepper-like taste, weaker, however, than that of the various peppers. In France, it is much less used than in England and the U. States.—The great and middle cardamoms are furnished by other species of anomum, as yet undescribed and undescribed. They may be only varieties of the preceding. Their properties are not so energetic.

Cardan, or Cardano, Geronimo (Hieronymus Cardanus). This famous philosopher, physician and mathematician was born in 1501, at Pavia, and was educated, from his fourth year, very carefully, in the house of his father, a physician and lawyer in Milan, distinguished for his learning and integrity. In his 26th year, he went to Pavia to complete his studies; and, after two years, he began to explain Euclid. He was, subsequently, professor of mathematics and medicine in Milan. He then returned for 10 years, again visited Milan, taught, for some time, at Bologna, and, meeting with some difficulties there, went to Rome. Here he was received into the medical college, and was allowed a pension by the pope. He declined the invitations of the king of Denmark, on account of the climate and of the religion of that country. The latter reason for his refusal appears strange from a man who was accused of irreligion; but his biographers differ with regard to his religious opinions. Contradictory passages are cited from his works, which cannot surprise us in one who was lost in cabalistic dreams and paradoxes, and pretended to have a familiar demon (daemonfamiliaris), from whom he received warnings, &c. All this excited the theologians against him, who attacked his orthodoxy, and even accused him of atheism, but certainly without foundation. The truth is, that Cardan was superstitious, but his chimeras were in opposition to the reigning superstitions of the age. He believed so implicitly in astrology, that he drew his own horoscope several times, and ascribed the falsehood of his predictions, not to the uncertainty of the art, but to his own ignorance. His two works, De Subtilitate and De Rerum Varietate, contain the whole of his natural philosophy and metaphysics, and are curious as an instance of a strange mixture of wisdom and folly. Cardan wrote, also, on medicine. His writings on this subject, amid much trash, contain some sound ideas. His fame as a physician was so great, that the primates of Scotland, who had been sick for 10 years, and had consulted the physicians of the king of France and of the emperor of Germany without success, invited him to Scotland, and was restored to health by his
prescriptions. His highest claims to the
gratitude of the learned rest on his mathe-

tatical discoveries. Algebra, which,
from the time of its origin, had been cul-
tivated almost exclusively in Italy, ex-
cited, at that time, much rivalry among
the mathematicians, who carefully kept
their discoveries secret, in order to tri-
umph over each other in their public dis-

A violent dispute arose, which cannot
now be decided with certainty. The
honor of giving his name to the invention
has remained to him who first made it
known, and it is still called the formula
of Cardan. It is universally believed
that Cardan discovered some new cases,
which were not comprehended in the rule
of Tartalea; that he discovered the multi-
plicity of the roots of the higher equa-
tions, and, finally, the existence of nega-
tive roots, the use of which he did not,
however, understand. His tranquility
was disturbed, not only by the attacks of
his enemies, but also by his own extrava-
gances, which are related in his work
De Vita propria, with much exaggeration.
They are exposed with so
much frankness, that those who have
judged him with indulgence have been
obliged to suppose him subject to fits of
insanity. He died, probably, in 1576,
according to some accounts, by voluntary
starvation, that he might not survive
the year in which he had predicted that his
death would occur. All his works, to
the number of more than 50, are contain-
ed in the edition of Lyons, 1633, in 10
vols., fol.

CARDINAL; a clergyman of the Catho-
lic church, who has a right to a vote in
the choice of the pope. The cardinals
are next in dignity to the pope, enjoy the
rank of princes, and, since 1631, have
borne the title of eminence. The
origin of the dignity of cardinals is uncer-

The name is derived from cardinatis (dis-
tinguished.) The same name was given,
under the emperor Theodosius, to the
highest civil officers in the state. Till the
11th century, the title of cardinal was
soon reserved, by

way of eminence; and, under Alexander
III, in 1163, they obtained the exclusive
right of choosing the pope, with much
opposition, however, on the part of
the other Roman clergy, and much scandal.
Innocent IV (1243—1254) gave them a
rank above the bishops, together with the
red hat, and Boniface VIII assigned to
them the princely mantle. Urban VIII
gave them the title eminence, instead of il-
trissimatus, which they had enjoyed til
then. With the pope, they form the sa-
cred college, and are divided into three
ranks—14 cardinal-deacons, 50 cardinal-
priests, and 6 cardinal-bishops, who take
their names from the ancient bishoprics
Osia (which is added that of St. Ru-
fin), Porto, Sabina, Palestina, Frascati,
and Asla. In 1526, their number was
fixed at 70 by Sixtus V; but it is by no
means necessary that this number should
be always full, and, in modern times, it
generally not been so. The number
of bishops only is always complete. The
choice of the cardinals depends solely on
the pope. He causes the names of those
appointed to be read in the consistory,
with the formula "Fratres habebatis" (Ye
shall receive as brethren, &c.). The red
cardinal’s hat is sent to those elected, to
inform them of their election. Their
dress consists of a surplice, with a short
purple mantle, and a small cap, over
which they wear a hat, with silk strings
and tassels at the end. The color is either
red or violet. The prerogatives of cardi-

nals, in different countries, are different.
(For those which they enjoy in France,
see the article Cardinal in the Diction-
naire de Theologie, Toulouse, 1817.)
The king of France gives a cardinal the title
of cousin. A cardinal, sent to a prince in
a diplomatic character from the pope, is
called legatus a latere or de latere. A
province, the governor of which is a car-
dinal, takes the title of legation. The
income of the cardinals is, at present, not
large, and, compared to that of some of
the rich clergy in England, is small. The
importance and authority of the cardinals
has, of course, sunk very much in mod-
ern times, like those of the other dignities
of the Catholic church, the pope
himself included. Formerly, they pre-
ceded the princes of the blood, sat at the
right of kings, on or near the throne, and
were considered equal to kings in rank.
(For the manner in which they choose
the pope, see Conclave.)

CARDINAL POINTS; the four intersec-
tions of the horizon with the meridian
and the prime vertical circle. They co-
CAREW, Thomas, an English poet, supposed to have been born in 1589, was educated at Corpus Christi College, Oxford. Cultivating polite literature in the midst of a life of affluence and gaiety, he was the subject of much eulogy to Ben Jonson, Davenant, and other writers of the period. He seems to have died in 1653, having, in the mean time, exhibited the not unusual transformation of the courtly and libertine fine gentleman into the repentant devotee. Carew is coupled with Waller, as one of the improvers of English versification. It does not appear that any edition of his poems was published during his life-time; but Odes, in his notes on Langhame, asserts that his sonnets were in more request than those of any poet of his time. The first collection of his poems was printed in 1640, 12mo.; the last, in 1772. His elegant masque of Caelum Britannicum was printed, both in the early editions and separately, in 1651, and the whole are now included in Chalmers's British Poets. Carew was much studied by Pope; and doctor Percy also assisted to restore him to a portion of the favor with which he has lately been regarded. Specimens both of the sublime and the pathetic may be found in his works; the former in his admirable masque, and the latter in his epistle on lady Mary Villiers.

CAREWENING (in French, faire abattre, caréner); heaving the vessel down on one side, by applying a strong purchase to the main, so that the vessel may be cleansed from any filth which adheres to it by browning. A half careen takes place when it is not possible to come at the bottom of the ship; so that only half of it can be careened.

CARDINAL POINTS—CARIATI.

incide with the four cardinal regions of the heavens, and are, of course, 90° distant from each other. The intermediate points are called collateral points.

CARIBBEAN VIRTUES, or principal virtues, in morals; a name applied to those virtues to which all the rest are subordinate, or which comprehend all the others. The distribution of the virtues, which lies at the foundation of this notion, had its origin in the old Grecian philosophy; and the same number is found here as in the elements of nature. These principal virtues, as enumerated by Plato, are, prudence, temperance, fortitude and justice. The three first seem to relate to the duties of man towards himself, and to correspond with the triple division of the soul into the intellectual, the irrational (the seat of the sensual desires), and the seat of the affections, which connects the two first. Justice either relates to our duties to others (God and men), or is the union of the three first virtues. This division appears to be peculiar to the old Pythagoreans. Aristotle divided them still further. The Stoics, too, made the same division in their system of morals, and Plutarch reduced it into his Ethices. Plutarch and many New-Platonists divide the virtues into four classes—civil or political, philosophical or purifying, religious, and, lastly, divine or pattern virtues; a division coinciding with the rest of his philosophical views. The influence of the ancient philosophers has made the preceding cardinal virtues also a part of the Christian code. Some add to them the three Christian virtues, so called—faith, charity and hope—and call the former philosophical. The imagination of artists has represented the cardinal virtues under sensible images. In modern times, this division is regarded as useless in treating of ethics; and, in order to judge of it correctly, we must form a just notion of the idea which the ancients attached to the words virtus and virtutem (virtue).

CARDING; a preparation of wool, cotton, hair or flax, by passing it between the iron points, or teeth, of two instruments, called cards, to comb, disentangle and arrange the hair or fibers thereof for spinning, &c. Before the wool is carded, it is smeared with oil, whereof one fourth of the weight of the wool is required for wool destined for the woof of stuffs, and one eighth for that of the warp.

CAREERING (in French, faire abattre, caréner); heaving the vessel down on one side, by applying a strong purchase to the main, so that the vessel may be cleansed...
allowed the prince to retain the rank of a field-marshal, and, in 1820, the government intrusted him, under the direction of general Nugent, minister of war, with the command of the troops sent against the rebels in the province of Avellino; but he was unsuccessful. He was now commissioned to declare at Paris, and afterwards at Laybach, the king's acceptance of the Spanish constitution; but he was refused an audience. He then left his native country for England, where he has since lived.

CARIATIDES. (See Caryatides, also Architecture, volume 1, page 340, near the bottom.)

CARIBBEAN SEA; that part of the Atlantic ocean, which is bounded N. by the islands of Jamaica, St. Domingo, Porto Rico, and the Virgin islands, E. by the Caribbean islands, S. by Colombia, and W. by Guatemala.

CARIBBEAN ISLANDS; the West India islands, so called, which lie in a line from Anguilla N. to Tobago S., and form the eastern boundary of the sea called Caribbean sea. The name has been loosely applied to the whole of the West India islands, but is more particularly understood of that archipelago which lies between the 35th and 88th W. lon., and the 11th and 12th N. lat. The principal are St. Christopher's, Guadalupe, Antigua, Montserrat, Martinique, St. Lucia, St. Vincent's, called Windward islands (q. v.); Grenada, Tobago, Barbados, &c.

CARIBBE or ST. LUCIA BARK. Under the general denomination of cinchona, several barks have been comprehended which are not the products of the real cinchona (q. v.), and which, in fact, neither contain cinchona nor quinia, and cannot, consequently, be substituted for the true cinchona. One of the principal substances of this kind is the Caribbee or St. Lucia bark, which is procured from the exostema Caryabea (Persoon), a tree growing in the West Indies. This bark in convex fragments, covered with a yellow epidermis, commonly thin, but sometimes hard and spongy, with deep fissures, of a yellow, red or brown tint internally, of a fibrous texture, offering here and there small, shining and crystalline points, of a very bitter taste, and very faint smell.

CARIBS; the original inhabitants of the Caribbean islands (q. v.), who, in consequence of domestic broils, emigrated from North America, in the neighborhood of Florida, to these islands, and to Guiana, in South America, where they live independent, and have been joined by many runaway Negroes. They often engage in wars against the European colonists. They were almost entirely expelled from the islands in the 18th century. On St. Vincent, there are only 100, and on Dominica, only 30 families of red Caribees. They are of an olive-brown color, but they paint themselves with arnottos, as a defence against insects.

On the island of St. Vincent, there are black Caribees, sprung from the intercourse of black slaves and Caribbean women. Their number amounts to 2000 families. They are of a dark-brown color, and, notwithstanding all the efforts of the English, they maintain the independence of their quarter of the island. The red Caribees are distinguished for their activity and courage. They inhabit villages governed by an elective chief, whom the Europeans call captain. They assemble for battle at the sound of a conch. Next to the Patagonians, they are perhaps the most robust nation with which we are acquainted. They devour the flesh of their enemies with great voracity. Their language, one of the most sonorous, and one of the softest in the world, contains nearly 20 dialects.

CARICATURE. (See the preceding article.)

Caricature (from the Italian caricare, to load, to overcharge; charger, with the French). - A caricature is therefore an exaggerated representation of the qualities and peculiarities of an object; but in such a way that the likeness is preserved, or even made more striking. The effect of such a representation need not be always ridiculous; it may also be terrible. Ben David says, "A child of the usual size, with the head and arms of a giant, is a horrid caricature, whilst a large man, with a diminutive nose, with a little mouth, and a small voice, is a ridiculous one." Considered in reference to the fine arts, external deformities, which do not spring from the fault of the persons afflicted, and therefore excite compassion rather than disgust, can never be the proper subjects of caricature; for, besides that the moral sense is offended, the arts are not permitted to idealize deformities, unless for the purpose of imbodying and representing character. Such corporeal disfigurements, however, as arise from moral defects, and all disagreeable peculiarities of manner and appearance which spring from the same cause, are fair subjects of caricature. These caricatures are to be considered as poetical representations of moral and in-
sects, &c.; as dramatic pictures, which acquire interest from the moral views with which they are composed by the painter, and understood by the spectator. With this object, Leonardo da Vinci has drawn his caricatures. He represents the quarrelsome, the peevish, the stout, the lSizePolicy., the feeble, the awkward clown, the laughing fool, &c., all with fidelity, but with exaggeration. Caricatures may be tragic or comic. To the former belong illustrations of moral depravity; to the latter, those of intellectual deficiencies, arising from self-neglect. They were in use even among the ancients, who had among their masks a number of caricatures. Hogarth (q. v.) is an unrivalled master of caricature. Leonardo da Vinci, Annibale Caracci, Ghezzi, Collot and Ramberg (q. v.) were also distinguished in this branch of art. The political caricatures of the English are of a striking and peculiar kind, often exhibiting a greater sensibility for political liberty than for dignity and beauty, but abounding in wit and bold humor. Gilray and Rowlandson may be considered as the chief masters in this kind of caricature. The French caricatures are rather exaggerated representations of life than satirical idears. The Italians have too strong a sense for the beautiful to relish caricatures, and the Germans are too grave to excel in these sportive productions. Grose, in London (1788), published rules for the drawing of caricatures, with an essay on comic painting; and Malcolm, a Historical Sketch of the Art of Caricaturing, with Graphic Illustrations (London, 1813, 4to).

CARIGNANO, Charles Amadeus Albert, prince of Savoy, was born Dec. 28, 1786, and, in 1817, married Maria Theresa, daughter of the grand-duke Ferdinand of Tuscany, heir apparent to the crown of Sardinia, as the king, Charles Felix Joseph, had no male heir. Until the insurrection of a part of the Sardinian army, in the night of March 11 and 12, 1821, the prince had taken no part in state affairs; and, when he at length came forward, he showed himself extremely irreconcilable, and destitute alike of sound views and manly character. The leaders of the insurrection well knew how to make the prince, who had no knowledge of the political condition of the state, approve the steps of the insurgents, which he did by a public proclamation of March 12. March 21, the prince travelled to Novara, without giving instructions to the provisional junta; and from Novara he proceeded, March 31, to the Austrian head-quarters, and, subsequently, to France, as he was not allowed to return to Turin. In 1823, under the duke of Angoulême, he made a campaign in Spain, distinguished himself somewhat before Cadiz, and, since 1824, has lived again in Turin. The founder of the line of Savoy-Carignano was Thomas Francis, youngest son of Charles Emanuel I, duke of Savoy, who married Maria de Bourbon, countess of Soissons, in 1624. This line possesses considerable private estates, both in France and Piedmont. The French caricatures are rather exaggerated representations of life than satirical ideals. The Italians have too strong a sense for the beautiful to relish caricatures, and the Germans are too grave to excel in these sportive productions. Grose, in London (1788), published rules for the drawing of caricatures, with an essay on comic painting; and Malcolm, a Historical Sketch of the Art of Caricaturing, with Graphic Illustrations (London, 1813, 4to).

CARILLONS. (See Chimes.)
CARINTIIA; a duchy of the Austrian monarchy. (See Austria.)

CARISSIMO, Giacomo; a famous Italian musical composer of the 17th century. He was born at Padua, and was living as late as 1722. He wrote many oratorios, cantatas and motets, and his contemporaries praised him for his characteristic expression of feeling, and his easy, flowing style. He deserves the most honor for the improvement of the recitative, having given it a more expressive and natural language. He wrote, also, it is said, the first church cantatas.

CARITA (Italian, from the Latin caritas); a name, in the fine arts, applied to the representation of Christian love. It is exhibited under the figure of a tender mother, in the midst of her children, manifesting her kindness and affection for them. In this way, for instance, Andrea del Sarto has represented it in a picture which was formerly in the Napoleon museum. A careful and tender mother, holding two children, whom one lays upon her breast, and the other is refreshing itself with sweet fruits, while a third, on whom her eyes are fixed, slumbers softly near her, are the prominent parts of the picture. This representation of loveliness and tenderness united was unknown to ancient art.

CARLETON, sir Guy, lord Dorchester, was born at Strabane, in Ireland, in 1724, and, entering the army, became lieutenant-colonel in the guards in 1748. In 1753, he accompanied general Amherst to America, where he distinguished himself at the siege of Quebec. He was promoted to the rank of colonel in the army in 1752, and, at the siege of the Havannah, signalized himself by his bravery. In 1772, he was appointed governor of Quebec, and created major-general. By his great exertions, he saved the whole of Canada, the capital of which was besieged by the American generals Montgomery and Arnold. The inhabitants joined the British troops, and, after an obstinate resistance, the Americans were repulsed, and Montgomery was killed at the head of his army. In consequence of this exploit, he was knighted, and, the next year, became a lieutenant-general. In 1781, he was appointed to succeed sir Henry Clinton, as commander-in-chief in America, where he remained until the conclusion of the war. In 1786, he was again created governor of Quebec, Nova Scotia and New Brunswick; and, as a reward for his long services, was raised to the peerage, by the title of lord Dorchester, of Dorchester in the county of Oxford. He died in 1808, aged 85.

CARLI (Giovanni Rinaldo), count, called sometimes Carli-Rubbi, from the title of his wife, was born in 1720, at Capo d'Is- tria, of an ancient noble family, and early manifested an inclination for the study of the middle ages, with which he connected the study of belles-lettres and of poetry. In his 21st year, the senate of Venice made him professor of astronomy and naval science. On account of a ridiculous controversy between him and the abbe Tartarotti, on witches and witchcraft, he was accused of heresy. MaFFEI put an end to the controversy by his La Magia Animitata. The care which his large estates required compelled Carli to resign his professorship and retire to Istria, where he spent his time in the study of antiquities, on which he has written some valuable treatises. He was afterwards appointed, by the emperor, president of the highest commercial court at Milan, and, subsequently, president of the college of finance in the same city. He published his works, 1784-1794, complete in 15 volumes, under the title Opere del Sig. Commendatore D. Gio. Rinaldo, Conte Carli, Presidente, &c.; but, in this edition, his American letters are not contained, which form a work of five volumes. He died in 1795.

CARLIN; the most celebrated harlequin of the French stage. Some writers consider the word harlequin as derived from his name. He was born at Turin in 1713. His true name was Carlo Antinio Bertinazzi, and Carlin is the abbreviation of Carlino, the Italian diminutive of Carlo. In 1744, he went to Paris, took part in the Italian comedy there, and performed, for 42 years, in the character of harlequin, with constant applause. GOLDoni praises him not only as one of the best comic actors, but also for his excellent manners and elegant appearance in society. He enjoyed the greatest favor with the parterre, and addressed the audience with a familiarity not allowed to any other actor. He was still more successful in improvisation than in the performance of written parts, and has performed a whole piece of five acts (Les vingt-six Infortunes d'Harlequin) in this manner. The union of mirth and benevolence, the grace of his figure and manners, and the respectability of his private character, made him so beloved, that it was said of him,—

Dans ses gestes, ses tons, c'est la nature même,
Sous la masque en l'uniforme, à divorcer en l'âme.
CARLIN—CARLOS.

Many bon-mots and witty sayings by him were long current in Paris. The melancholy temper of his latter years formed a remarkable contrast with his mirth on the stage. He was the author of a piece in five acts—Les nouvelles Mélanorrhées d'Eleazar (1763).

Carlisle (anciently, Larguallum, and Lugubalum); a city of England, and capital of Cumberland; 300 miles N. of London; lon. 2° 50' W.; lat. 54° 54' N. Population, 12,531. It is a bishop's see. It is surrounded with a wall, and defended by a castle and citadel. The wall and citadel are in a ruinous state, but the castle is kept in repair. It contains two churches, with several other places of religious worship. It sends two members to parliament. It is situated at the confluence of the rivers Eden, Petterell, and Cambre; which soon after fall into the sea, in Solway Firth. The principal manufactures in Carlisle are cotton-yarn, cotton and linen checks, grey cottons, serauts, coarse linen, drills, pocketing, worsted shag, silk and cotton fancy pieces, stamped cottons, hats, chamois and tanned leather, linsey, nails, coarse knives, stockings, dressed flax, soap, candles, naikeens and ropes.

Carlisle; a post-town and capital of Cumberland county, Pennsylvania; 10 miles W. of Harrisburg, 114 W. Philadelphia; lon. 77° 10' W.; lat. 40° 12' N. Population in 1820, 2,108. It is pleasantly situated, regularly laid out, built chiefly of stone and brick, and has considerable trade. It contains a court-house, a jail, a market-house, and seven houses of public worship—Dickinson college was founded in this town, in 1783, and continued a respectable and flourishing institution till about 1816, when its operations were suspended. It has been reorganized, and its operations were resumed in January, 1822. The principal officers are a president and three professors. There is a grammar-school connected with the college. In the United States and in Canada, there are several other places called Carlisle.

Carlos, don; infante of Spain; son of Philip II and Maria of Portugal; born at Valladolid, 1545. His mother died four days after his birth. He himself was sickly; and one of his legs was shorter than the other. The extreme indulgence with which he was educated by Joan, sister of the king, confirmed his violent, obstinate, and vindictive disposition. In 1560, Philip caused him to be acknowledged heir of the throne by the estates assembled at Toledo, and, in 1562, he sent him to the university of Alcala de Henares, in hopes that the study of the sciences would soften his turbulent character. An unlucky fall threw him into a burning fever, and the physicians lost all hopes of his recovery. The king immediately hastened to his son, and, as it was recollected that the prince had a very great veneration for St. Dacias, who was not yet canonized, Philip commanded the corpse of the saint to be brought in a procession. It was laid upon the bed of the sick prince, and his hot face covered with the cold shroud. He fell asleep: when he awoke, the fever had left him: he demanded food, and recovered. All believed a miracle had been wrought, and Philip requested the canonization of Dacias. Contemporary historians differ in the description of the prince. According to some, he had a thirst for glory, an elevated courage, pride, and a love of power. According to others, he was fond of whatever was strange and uncommon; an accident or opposition irritated him to frenzy; address and submission softened him. He is also represented as a favore of the insurgents in the Netherlands, and, in particular, as an enemy of the inquisition; yet he possessed neither knowledge nor principles, nor even sufficient understanding to be capable of liberal views. With him, all was passionate excitement, which resistance converted into fury. Llorcante has corrected the accounts of the character and fate of this prince, from authentic sources, in his work on the Spanish Inquisition. (q.v.) According to him, don Carlos was arrogant, brutal, ignorant and ill-educated. Thus much is certain, that, at the congress of Chauchat Cambreis (1559), the marriage of don Carlos with Elizabeth, daughter of Henry II of France, was proposed; but Philip, being left a widower by the death of Mary of England, took the place of his son. Don Carlos is said to have loved Elizabeth, and to have never forgiven his father for having deprived him of her. Llorcante proves, however, that don Carlos never had fallen in love with the queen; and that she was never too intimate with him. In 1563, Philip, who had no other heir than don Carlos, considering him unfit for the throne, sent for his nephews, the archdukes Rodolph and Ernestus, to secure to them the succession to his dominions. Don Carlos, who lived in continual misunderstanding with his father, resolved, in 1563, to leave Spain, and was on the point of embark,
ing, when Ruy Gomez de Silva, a con-
dictant both of Philip and Carlos, dissuaded
him from his resolution. In 1567, when
the rebellion in the Low Countries dis-
Quot Jefferson appealed to several
grandees of the kingdom, that he had
the intention of going to Germany. He
disclosed his plan to his uncle, don Juan
of Austria, who mildly dissuaded him
from it, and represented to him, that most
of the grandees to whom he had written
would not omit to inform the king. This
was, in fact, done; and, indeed, don Juan
himself told Philip what don Carlos had
confided to him. It is believed that he
was touched by the sufferings of the peo-
ple of the Netherlands; that he had been
invited by them to place himself at their
head, and that this plan, from its bold
and extravagant character, had gained his
approbation. Philip himself seemed to
believe that his son intended to go to the
Netherlands. The baron Montigny lost
his head on this account. The infant
had often shown a vehement desire to par-
ticipate in the government. But Philip,
jealous of his own authority, treated his
son coolly and with reserve, whilst he
gave his confidence to the duke of Alva,
to Ruy Gomez de Silva, don Juan of
Austria, and Spinola. Don Carlos con-
ceived an invincible aversion to them.
He could not bear that Alva should have
received the government of Flanders,
which he had requested for himself. The
architect of the Escorial, Louis de Foix,
gives the following facts relating to don
Carlos, which have been preserved to us
by De Thou. The prince had always
under his pillow two naked swords, two
loaded pistols, and, at the side of his bed,
several guns, and a chest full of other fire-
arms. He was often heard to complain,
that his father had deprived him of his
authority, and an unfortunate father, im-
pelled by hatred or fear, by policy or
superstition, resolved on the destruction
of his only son, in whom he saw only a
criminal, unworthy of the crown. On
the night of Jan. 18, 1568, while don
Carlos was buried in a deep sleep, count
Lerma entered his chamber, and removed
his arms. Then appeared the king, pre-
ceded by Ruy Gomez of Silva, the duke
of Feria, the grand prior of the order of
St. John, brother of the duke of Alva, and
several officers of the guard, and state
counsellors. Don Carlos still slept. They
awaked him: he beheld the king, his fa-
ther, and exclaimed, “I am a dead man.”
Then, addressing Philip, he said, “Does
your majesty wish to kill me? I am not
nail, but reduced to despair by my suf-
ferrings.” He conjured, with tears, those
who were present to put him to death.
“I am not come,” answered the king, “to
put you to death, but to punish you as a
father, and to bring you back to your
duty.” He then commanded him to rise,
deprived him of his domestics, ordered a
box of papers under his bed to be seized,
and committed him to the care of the
duke of Feria and six noblemen, enjoin-
ing them not to permit him to write, nor
to speak with any one. These guards
clothed don Carlos in a mourning dress,
took from his chamber the tapestry, the
furniture, and even his bed, leaving him
nothing but a mattress. Don Carlos, full
of rage and despair, caused a large fire to
be kindled, under pretext of the extreme
cold of the winter, and threw himself
suddenly into the flames, for the pur-
purpose of suffocating himself. It was with
dificulty that he was rescued. He attempt-
bet, by turns, to finish his life by thirst, by
hunger, by eating to excess; he also at-
tempted to choke himself, by swallowing
a diamond. After Philip had endeavored
to justify his measures to the pope, and
the principal sovereigns of Europe, and
had also given notice to the superior
clergy, to the courts of justice, and to the
cities of his empire, of what had passed,
he referred the case of the prince, not to
the inquisition, but to the council of state,
under the direction of cardinal Escobos,
who was state counsellor, grand inquisi-
tor, and president of the junta of Castile.
This court is said, after a minute exami-
nation, and hearing many witnesses, to
have condemned him to death. But it is
a mistake to suppose that the sentence
was executed by means of a poisoned
soup, or that his arteries were opened in
a bath, or that he was strangled. Ferre-
rus and other Spanish historians report,
that he died of a malignant fever, after
having taken the sacrament with much
devotion, and having asked his father’s
pardon. According to Llorente, the king

522 CARLOS.
signed, March 2, the judicial order for the formal arrest of the prince, for whom the pope, and all the princes to whom Philip had written, in particular the emperor Maximilian II, had interposed in vain. The execution of the order of imprisonment was committed, by Philip, to Ruy Gonzales de Santa, prince of Evoli. The prince displayed all the violence of his passionate disposition. He obstinately refused to confess, lived irregularly, and his fury inflamed his blood to such a degree, that even ice-water, which he used daily, could not refresh him. He ordered a great quantity of ice to be laid round his bed, went naked and barefoot upon the stone floor, and, for 11 days in June, took no food but ice. The king then visited him, and addressed to him some words of consolation; after which, the prince cat to great excess. This brought on a malignant fever. Meanwhile, don Diego de Mungastones, member of the council of Castile, conducted the trial. The prince had not the slightest official notice of it. In July, Mungastones drew up a report to the king, from the testimony of the witnesses, and from the papers of the prince, which had been seized, stating that don Carlos was guilty of treason, in having plotted against the life of his father, and in having attempted to make himself master of the government of Flanders by a civil war; but that it must depend on the king whether he would have the infante judged according to the common laws of the kingdom. Philip declared that, as king, his conscience did not permit him to make any exception from the laws in favor of a prince who had shown himself so unworthy of the throne. He believed that the recovery of the prince's health was not to be expected; and that, therefore, he ought to be permitted to take food without any restraint, which would cause his death; that he ought, however, to be convinced, that his death was inevitable, in order to induce him to confess, and secure his eternal welfare. The judicial records make no mention of this resolution of the king; no judgment was written or signed; and the secretary Pedro del Poyo observes, in a note, “that the judicial process had proceeded thus far, that the prince was carried off by sickness, and that, therefore, no judgment was rendered.” With this the written accounts of other persons, who were employed in the palace of the king, agree. In consequence of the declaration of the king, the cardinal Escuissas and the prince of Evoli thought it advisable to leave the death of the prince to the progress of the disease. To the physician of the king, Olivarez, who had the care of the prince, this purpose of the prince of Evoli was communicated. On the 20th of July, he administered a medicine to the patient, after which the disease appeared to become fatal, and advised the infante to prepare himself for his approaching death by taking the sacrament. This don Carlos did, July 21, and asked pardon of the king, his father, through his confessor. Philip granted it, and also his blessing. Upon this, don Carlos received the sacrament, and made his will. The struggle lasted during the 22d and 23d of July. The prince listened, during that time, with calmness, to the prayers of the clergyman. On the night of the 23d, the king visited him, gave him his blessing, without being recognised by the prince, and withdrew weeping. Soon afterwards, at 4 o'clock in the morning of the 24th of July, 1568, don Carlos expired. He was buried, as became his rank, yet without any funeral sermon, in the convent of the Dominican nuns, El Real, at Madrid. The virtuous queen Elizabeth died, Oct. 23 of the same year, in child-bed, and not by poison, as the enemies of Philip asserted. Philip II, in 1522, ordered the judicial acts to be locked in a box, and to be deposited in the royal archives at Siene. The melancholy fate of don Carlos has served as a subject for several tragedies—those of Schiller, Alferi, Otway and Cumpston. Carlowitz, or Carlowitz, or Karlowitz; a town of Austrian Slavonia, on the Danube; 7 miles So. E. Peterwardein; population, 5880. It is the see of a Greek archbishop. Here is a Greek gymnasium, which had, in 1817, 164 students. This town is remarkable for a Greek gymnasium, which had, in 1817, 164 students. This town is remarkable for a Greek Church, which had, in 1817, 164 students. This town is remarkable for a Greek Church, which had, in 1817, 164 students. This town is remarkable for a Greek Church, which had, in 1817, 164 students. This town is remarkable for a Greek Church, which had, in 1817, 164 students.
to use them, to obtain relief for a disease of his foot. The application proved most effectual; and, in consequence of this, the emperor is said to have built a castle here, and houses gradually accumulated round it. Carlsbad signifies, in German, Charles' bath. The town has 450 houses, with 2510 inhabitants. Ample provision has been made for the amusement of the visitors of this place. Fine buildings have been erected, and beautiful promenades laid out. A great number of strangers are attracted here every year.

Carlscrona is the principal depot of the Swedish navy.

Carlscrona (German, which means the rest of Charles), the capital of the grand-duchy of Baden, was laid out in 1715, and is one of the most regularly-built towns in Europe. The castle of the grand-duke stands in the centre of the city, from which nine streets run at regular distances from each other, to the circumference of a circle enclosing the area of the city, and thus forming a star. Other streets intersect these in parallel circles. The roads leading to the city correspond to this regular disposition, which, as is often the case in strictly regular cities, often leaves upon the traveller the impression of monotony, rather than that of agreeable order. The city contains 17,791 inhabitants and 1170 houses. It is ornamented with several beautiful public buildings. The court library contains 70,000 volumes; the botanical garden, 6600 species of plants. There are also here several valuable museums and cabinets, several institutions for the promotion of literature and the fine arts, one for the deaf and dumb, and some manufactories. Lon. 20° 45' E.; lat. 49° N.

Carlstadt (so called from his native town, Carlstadt, in Franconia; his proper name was Andrew Bodenstein) is celebrated, in the history of the reformation, for his fanaticism as well as his moderation. He was professor of theology at Wittenberg. His learning enabled him to render great support to Luther in his first steps for the introduction of a reformation. In 1520, he was included in the bull which condemned Luther; and his spirited appeal from the pope to a general council, of which he gave the first example, as well as his opinion, openly expressed, in favor of the marriage of the priesthood, which soon gained ground, was among the many proofs which he gave of his zeal for the reformation.

Whilst Luther was at Wartburg, Carlstadt's zeal urged him to acts of violence. He even instigated the people and students to the destruction of the altars and
the images of the saints, greatly to the
displeasure of Luther, who lost the friend-
ship of Carlstadt by his opposition to his
outrages. In 1524, he declared himself
publicly the opponent of Luther, who had
preached at Jena, and the disturbances
which he had excited, so that the elector
Frederic banished him from the country,
in September, 1524. Carlstadt, upon this,
commenced the controversy respecting
the sacrament, denying, in opposition to
Luther, the bodily presence of Christ in
the sacrament. This controversy was
carried on with the bitterest animosity;
and, Zwinglius having declared himself
in favor of Carlstadt's doctrine, a dispute
commenced between the Swiss and Wit-
tenbourg theologians, which ended in the
separation of the Calvinists and Luther-
ans. Carlstadt, in the mean time, being
suspected, not without reason, of having
taken part in the revolt of the peasants in
Franconia, was obliged to wander through
Germany, and, being ultimately reduced
to extreme distress, sought relief of Lu-
ther, who procured him an asylum at
Kemberg, on condition that he should
refrain from the expression of his opin-
ions. Here he lived nearly three years.
He had, however, soon led him to
break his promise, by the publication
of some writings, in 1528; and he even
went so far as to plot against Luther's
person. To escape from the conse-
quences of his conduct, he repaired to
Switzerland, at the end of the same year,
where he was appointed vicar of Altstadt,
in the valley of the Rhine; in 1530, den-
ounced as first used at the time of the
revolution. The carmag.

The appellation originaled, probably, from
of the national assembly. The carmag.

CARMAGNOLA; a name applied, in the
early times of the French republic, to a
dance, and a song connected with it.
The appellation originated, probably, from
the city of Carmagnola, in Piedmont.
The dance was first used at the time of
the indignation of the people on account of the
nolo allowed to the king on the resolves
of the national assembly. The car-
magnole was commonly sung and danced at
popular festivals, executions, and erup-
tions of popular discontent. Afterwards
the name was also applied to the national
guards, who wore a dress of a peculiar
cut, and to the enthusiastic supporters
of the revolution. Several members of
the national convention,—Barresi, for in-
stance,—by way of jest, gave this name to
their communications to the assembly.—
Petits carmagnoles is a name given, by the
people in Paris, to boys who sweep chim-
neys and black boots, chiefly Savoyards; probably
taken from the name of the city
before mentioned.
CARLSTADT; a mountain in Palestine, con-
sisting of several rich, woody
heights, separated by fertile and habitable
valleys, within a circuit of about 28 miles,
and terminates, at the mouth of the Kish-
chen, in a lovely plain, which forms the
southern coast of the gulf of Galilea or
Acca, on the Mediterranean. Upon dif-
ferent parts of this mountain there are
ruins of churches and monasteries from
the time of the Christian kingdom of Je-
rusalem, and the cave which, according
to tradition, was inhabited by the prophet
Elias. From the 4th century, Christian
hermits have chosen this mountain for
their abode. It was not, however, till
about the middle of the 13th century, that
pilgrims, under the direction of Berthold
of Calabria, established an association for
the purpose of leading a secluded life
upon this mountain, which received its
rules from Albert, the patriarch of Jeru-
salem, in 1220, and the papal confirm-
ation from Honorius III, in 1224. Their
rules coincide nearly with those of the
ancient Basilians. This is the origin of
the order of Our Lady of mount Carmel.
The Carmelites enumerate among their
members all the prophets and holy men
mentioned in the Scriptures, from Elias to
Jesus; also Pythagoras, the Gallic Dru-
ids, the holy women of the New Testa-
ment, and the hermits of Christian an-
tiquity. Christ they consider as their
particular protector, and his apostles as
missionaries from mount Carmel. The Jesuit
Papebroch has shown how utterly
unfounded their pretensions are, and no
well-informed man believes their account
of their origin. Yet they were allowed,
as late as in the 15th century, by Benedict
III, to erect the statue of the prophet
Elias, as the founder of their order, in St.
Peter's church in Rome. Being driven
by the Saracens to Europe, they adopted,
in 1247, a milder rule, and the forms of
monastic life. They also became divided
into four independent bodies:—1. the ob-
servers, who wore simple garments; 2. the con-
gregation of Mantua; 3. the bare-footed
friars, and bare-footed or Theresian nuns,
in Spain; 4. the bare-footed friars in
Italy. The two latter classes observe the
elder and stricter rule. The knightly or-
der of Our Lady of mount Carmel, estab-
lished by Henry IV in France, is con-
ected with the Carmelites only by the
name. As their mode of life precludes all useful exertion, governments, in modern times, have taken measures to prevent the extension of their order, and the admission of novices has been forbidden, except in Spain, Portugal and America. In Paris, a monastery of this order was established in 1817, under the royal protection.

CARMER (John Henry Casimir) count of; high chancellor and minister of justice in Prussia. He rendered the greatest service to Prussian jurisprudence by the assistance which he afforded in the preparation of the Prussian code, and still more by the improvements which he introduced into the civil process of that country. (See Prussian Code.) He was born in 1721, entered the Prussian service early, and was soon noticed by Frederic the Great. After 30 years' service, he retired from official life, and died, in 1801, near Glogau, in Silesia.

CARMINO, the most splendid of all the red colors, is made from the cochineal insect, or coccus cacti. It is deposited from a decoction of powdered cochineal in water, to which alum, carbonate of soda, or oxide of tin, is added. As the beauty of this valuable color is affected, not only by the mode of applying it, but also by the quantity of the ingredients mixed with it, we find various recipes for the preparation of it. The manufactories which prepare the best carmine carefully conceal the method. The best natural cochineal is found in Mexico.

CARMONTE, a French poet, known by his Proverbes dramatiques (10 vols.), born in 1717, at Paris, died there 1806. These little pieces are without much connection in themselves, being, in fact, only a series of dramatic sentences, but are well adapted for private theatres. The fertility of Carmonette was as extraordinary as his ease in writing. He is said to have left, besides his printed works and his pieces for the theatre, more than a hundred volumes of manuscripts.

CARNATIc: a country in Hindostan, lying along the coast of Coromandel, from Cape Comorin, in lat. 8°, to 16° N.; 500 miles in length, and from 40 to 100 in breadth. The Carnatic or Carnada, anciently called Naurasih, in early periods, was subject to the king of Bisnagar. Since the year 1757, the whole country has been under the authority or absolute control of the English East India company. The soil is generally sandy, and the climate one of the hottest in India. The country of Ongole, Madura and Tinevelly is included in the Carnatic. The principal towns are Arcot, Madras, Ongole, Pondicherry, Cuddalore, Tanjore, Trichinopoly, Madura and Tinevelly. The principal rivers are the Penumar, the Pular and the Cauvery.

CARNEADES, the most splendid of all the red colors, is made from the cochineal insect, or coccus cacti. It is deposited from a decoction of powdered cochineal in water, to which alum, carbonate of soda, or oxide of tin, is added. As the beauty of this valuable color is affected, not only by the mode of applying it, but also by the quantity of the ingredients mixed with it, we find various recipes for the preparation of it. The manufactories which prepare the best carmine carefully conceal the method. The best natural cochineal is found in Mexico.

Carneades, an eminent Greek philosopher, founder of the third or new academy, was a native of Cyrene, in Africa, and is supposed to have been born in the third year of the 11th Olympiad. He studied first under Diogenes the Stoic, but subsequently attended the lectures of Egeasus, who explained the doctrines of Aresius; and, succeeding his master in the chair of the academy, he restored its reputation by softening the prevailing pyrrhonism, and admitting practical probabilities. The doctrine of Carneades specifically was, that, "as the senses, by understanding and the imagination frequently deceive us, they cannot be the infallible judges of truth, but that from the impression made by the senses we infer appearances of truth, which, with respect to the conduct of life, are a sufficient guide." He was a strenuous opposer of Chrysippus, and attacked, with great vigor, the system of theology of the Stoics. He was an advocate of free-will against the fate of the same sect, and urged just the same difficulties in reconciling divine prescience with the freedom of human actions, as have divided some contending sects of Christianity. One of
the most distinguished events of his life
was his being joined in an embassy to
Rome with Dogogenes the Stoic and Cri-
toine the Peripatetic, in order to gain the
mitigation of a fine levied by the Roman
senate on the Athenians. This extraor-
dinary embassy was successful, and Car-
neades so captivated the people by his
elocution, that Cato the censor, fearful
of its effect on the Roman youth, per-
suaded the senate to send the philoso-
phers back to their schools without delay.
C. died in the ninetyeth year of his age,
of life, and lamenting that the same na-
dominions. (See
could dissolve it.
continually complaining of the shortu-
cure which composed the human frame
493.)
tions, also introduced fasts, abstinence
from pleasure, and penances. By
led men to propitiate the higher invisible
powers by gifts, sacrifices and purifica-
tion. The historical origin is in the religious
and customs of the East, where the priests
were originally the physicians of the peo-
ple, and prescribed these fasts as a part
of the regimen necessary in this warm
region, as well as from religious views.
Fasts are observed to this day in the East.
The religions of the Persians and the Hin-
doos, those of Mohammed and Moses, and
of the worshippers of the Lamps, insist
much on fasts. Few traces of them are
found in the religion of the ancient people
of the North. The earliest Christians
fasted on the vigils. (q. v.) The fasts on
the 'fatma quatuor temperation', which
continued for three days every quarter of
the year, were penances, as was that of
the period of 40 days (before Easter, or
rather before Good Friday, Quadragesi-
m), which was called, by way of excel-
lence, the fast, and which commemorated
the 40 days' fast of Jesus in the wilderness.
With regard to the origin of fasts, opinions differ. The most common is,
that Telephorus, bishop of Rome, in the
middle of the 2d century, first instituted
the 40 days' fast as a rule of the church.
By pope Gregory the Great, about 600,
Ash Wednesday was made the beginning
of the fast, and the day before was called
fast-eve, because in the night of this day, at
12 o'clock, the fast began. This fast was
preceded by a feast of three days, very ob-
tious to the strict zealots. "Christians,"

Carniv al. The same views which
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CARNIVAL—CARNOT.

presents. Encouraged by this success, the company grew stronger, their fables and speeches became longer by degrees, until they attained to regular representations of human life." It was in Nuremberg, renowned for its wares and its wit, that the first fast-eve's play was produced, coarse and frolicsome, to suit the taste of the citizens. These pieces have a near relationship to the masques of the English and the farces of the French, as have the spiritual fast-eve's plays, religious burlesques, to the Mysteries and Morals. According to the ancient custom, these plays were opened and closed by a crier or herald. The carnival is celebrated, in modern times, with the greatest show and spirit at Venice and Rome. In the former place, it begins after Christmas. The diversions of it are shows, masquerades, the amusements of the place of St. Mark, and sometimes, in case of the visits of great princes, a regatta, or boat-race. After this, there was a second carnival in Venice, the Venetian mass, called also the festival of the Ascension, and the Bucentaur festival, because it commonly began on Ascension-day, and because the celebration of the marriage of the doge with the Adriatic sea was connected with it. It continued 14 days. No character-masks were worn there, however, except Venetian dominoes. The carnival at Rome (see Gode's excellent description, Das Römische Carneval, and that of lady Morgan) continues but eight days, and is occupied mostly in masquerades and races. Since the return of peace, the carnival has been celebrated again in Cologne, on the Rhine, under the direction of the committee of fools, to the great satisfaction of all who were present. In Spain, the carnival is called carnestolendas.

Carnot, Lazare Nicholas Marguerite; born at Nolay, in Burgundy, 1753; the son of an advocate. From his youth, he exhibited an uncommon talent for the mathematical and military sciences, entered the corps of engineers, and rose in office by the favor of the prince of Condé. He published, afterwards, Mathematical Essays, which caused him to be elected a member of several learned societies. His essay on Vauban received the prize of the academy at Dijon. At the beginning of the revolution, he was captain in the corps of engineers. In 1791, he was appointed deputy to the constituent assembly, but at first took part only in military affairs. At his proposal, the officers of the nobility were removed from the army, and others substituted from the citizens. As a member of the convention, he voted for the death of Louis. In the following March, he was sent to the army of the north, where he deprived the cowardly general Gratien of his command on the field, put himself at the head of the army, and repulsed the enemy. On his return to the convention, he was made a member of the committee of public safety. (q. v.) The influence of Carnot in the military operations now began to be more deeply felt. In possession of all the plans deposited in the archives of Louis XIV, he organized and directed the French armies; and his direction undoubtedly contributed very much to their success. After the fall of Robespierre, he was often accused, but always acquitted, because his duty had been to take care of the defence of the country, and he could not be made answerable for the cruel decrees of Robespierre, in which Carnot's name, as he was a member of the committee, of course, was to be found. At the establishment of the directory, in 1795, Carnot was chosen a member, and, for some time, maintained an important influence. Barras at length succeeded him in the department of war, and was, ever after, his enemy. His plan for the overthrow of Barras was unsuccessful, and, with some others, he was sentenced to transportation on the 18th Fructidor (Sept. 4), 1797. He fled to Germany, and published a defence, which was eagerly read in Paris, and, by the exposure of the conduct of his former colleagues, hastened their overthrow on the 30th Fructidor (June 18), 1799. After the 18th Brumaire, Carnot was recalled and appointed inspecteur aux regiments, and, two months later, in April, 1800, minister of war. He soon after retired into the bosom of his family, but was called to the tribunate, March 5, 1802. The same inflexible integrity and republican principle, which had hitherto distinguished him, did not now desert him. He often opposed the views of the government, voted alone against the conscription for life, and resisted strenuously the proposal for the imperial dignity. He remained, however, a member of the tribunate till it was abolished, passed the next seven years of his life in retirement, and published several valuable military works. In 1814, Napoleon gave him the chief command at Antwerp. He conducted a vigorous defence with a careful regard for the interest of the city, which, by the command of Louis XVIII, he afterwards surrendered to the English gen-
eral Graham. He still retained his titles and his honors, but, as a firm republican, he could never expect the favor of the court; particularly as, in his memorial to the king, he openly and severely censured the measures of government, in consequence of which he was passed over in the new organization of the academy of sciences. When Napoleon was once more at the helm of state, in 1815, he made Carnot count and peer of the empire, and pressed upon him the ministry of the interior. Carnot discharged the difficult duties of this office with his usual integrity. After the emperor's second fall, he was made a member of the provisional government of France, and was afterwards the only one of the members of the empire agree on one general measure. The baron John von Schwarz­enberg, a man of talent and a patron of science of the family of the present emperors, took him to death without regular process, gave occasion to this law. From the beginning of the peace of the land, the necessity of such a law was felt throughout the country; but it was difficult, in this, as in all other cases, to make the different members of the empire agree on one general measure. The baron John von Schwarz­enberg, a man of talent and a patron of science (of the family of the present princes of Schwarz­enberg), was chiefly instrumental in introducing this ordinance. He was born in 1463, became minister of state of the prince-bishop of Bamberg to be drawn up and published in 1507. The same was also adopted, in 1510, by the margrave of Brandenburg and Franconia; and, at last, a law of criminal procedure for the empire at large was passed by the diet at Regensburg, in 1532, which, for that time, was a very great step, and had a salutary influence. Several German princes, as the elector of Saxony, the elector of Bran­denburg, and of the palatinate, protested against it, in order to protect the laws of their states and their own privileges against the legislative power of the emperor; but at last the Carolina was
established in almost every part of the empire. (See Malbunck's Geschidte der preussischen Gerichtsordnung Kaiser Karls V.; 1783.)

CAROLINA MARIA, wife of Ferdinand I, king of the Two Sicilies, daughter of the emperor Francis I and of Maria Theresa, born 23rd August, 1732; an ambitious and intelligent woman, but, unfortunately, without firmness of character. According to the terms of her marriage contract, the young queen, after the birth of a male heir, was to have a seat in the council of state; but her impatience to participate in the government would not allow her to wait for this event, previous to which she procured the removal of the old minister, Tencucci, who possessed the confidence of the king and of the nation, and raised a Frenchman named Acton (q. v.) to the post of prime minister, who ruined the finances of the state by his profusion, and excited the hatred of all ranks by the introduction of a political inquisition. The queen, too, drew upon herself the dislike of the government. She died in 1874, without having seen the restoration of her family to the throne of Naples.

CAROLINA, North; one of the United States; bounded N. by Virginia, E. by the Atlantic, S. by South Carolina, and W. by Tennessee; lat. 78° 45' to 84° W.; lat. 33° 50' to 36° 30'; 420 miles long and 180 broad. Square miles, 50,000. Population in 1790, 393,751; in 1800, 475,103; in 1810, 555,500; 179,000 blacks. Population in 1820, 638,829; whites, 419,900; white males, 209,014; white females, 200,515; free colored, 14,912; persons engaged in agriculture, 174,106; in manufactures, 11,844; in commerce, 2,551. Militia in 1817, 50,387.—This state is divided into 13 counties. There are no large towns in this state. Raleigh is the seat of government. The other most considerable towns are Newbern, Fayetteville, Wilmington, Edenton, Washington, Hillsborough, Halifax, Tarboro, Salisbury, and Salem.—The legislative power is vested in a senate and house of commons, both chosen annually. One senator and two members of the house of commons are sent from each county, and one of the latter from each of the towns of Newbern, Wilmington, Edenton, Fayetteville, Hillsborough. The governor is chosen by a joint ballot of both houses, and is eligible three years in six.

—The principal denominations of Christians in North Carolina are Methodists, Baptists, Presbyterians, Quakers, Moravians, and Episcopalians.—There is a respectable institution, entitled the university of North Carolina, at Chapel Hill. Academies are established at various places, and an increasing attention has, of late, been paid to education.—The principal rivers are the Roanoke, Chowan, Neuse, Pamlico or Tar, Cape Fear, Yadkin and Catawba. Of these, the Cape Fear affords the best navigation, and is ascended by vessels of 300 tons burthen in N. Carolina and partly in Virgin[b.]a. Dismal or Alligator swamp is between Pamlico and Albemarle sounds.—There are three noted capes on the coast, viz., cape Hatteras, cape Lookout and cape Fear, which are all dangerous to seamen.

—North Carolina, in its whole width, for about 60 miles from the sea, is generally a dead level, varied only by occasional openings in the immense forest with which it is covered. After traversing this tedious plain, we are at length relieved by the appearance of hills and mountains, from the summits of which we behold a beautiful country, which stretches far beyond the range of vision, and is adorned with forests of lolly trees.—In
the level parts, the soil, generally, is but indifferent. On the banks of some of the rivers, however, and particularly the Roanoke, it is remarkably fertile; and in other parts of this champaign country, glades of rich swamp, and ridges of oak-land, of a black and fruitful soil, form an exception to its general sterility. The sea coasts, the sounds, inlets, and lower parts of the rivers, have, invariably, a soft, muddy bottom. That part of the state which lies west of the mountains is, for the most part, remarkably fertile, and abundant in trees of various kinds, wild cherry, oak, elm, pine and cherry-trees; the last of which not unfrequently attains the size of 3 feet in diameter. The soil and productions, in the hilly country, are nearly the same as in the Northern States. Wheat, rye, barley, oats and flax are the crops most generally cultivated, and seem to suit well the nature of the soil. Throughout the whole state, Indian corn and pulse of all kinds are abundant. Cotton is raised in considerable quantities. North Carolina abounds in iron ore; and it is the only one of the U. S. States in which gold has been found in any considerable quantities. The gold mines, which have lately excited a good deal of interest, though they have not yet proved very productive, are found on the Yadkin and its branches, and extend over a district comprising about 1000 square miles. In almost any part of this territory, gold may be found in greater or less abundance, mixed with the soil. It exists in minute grains or particles, and is also sometimes found in lumps of one or two pounds weight. Of the plains in the low country, the large natural growth is, almost universally, pitch pine, a tall and beautiful tree, which grows low to a size far superior to the pitch pine of the Northern States. This valuable tree affords pitch, tar, turpentine, and various kinds of lumber, which, together, constitute about one half of the exports of North Carolina. It is of two kinds, the common and the long-leaved. The latter differs from other pines, not in shape, but in the length of its leaves, which are nearly half a yard long, and hang in large clusters. The trees in the low country, both of North and South Carolina, are loaded with quantities of a long, spongy moss, which, hanging in clusters from the limbs, gives the tree a singular appearance. The mistletoe frequently engulfs itself upon the trees in the back country. In this part, plums, grapes, blackberries and strawberries grow spontaneously; also several valuable medicinal plants, as ginseng, Virginia snakeroot, Seneca snakeroot, and some others. The rich bottoms are overgrown with canes, the leaves of which continue green through the winter, and afford good pasture for cattle.—North Carolina is far removed from that perfection of culture, which is necessary to give it the full advantage of the natural richness of its soil and the value of its productions. One great cause of its backwardness, in agricultural improvement, is the want of inland navigation, and of good harbors. It has several large rivers, but their mouths are blocked up with bars of hard sand. The best of the indifferents harbors in this state are those of Wilmington, Newbern and Edenton. The most of the produce of the upper country, consisting of tobacco, wheat, maize, &c., has hitherto been carried to Charleston, S. C., and to Lynchburg, and Petersburg, Va. Since 1815, the state has been zealously engaged in an extensive system of internal improvements. These improvements relate to the navigation of the sound, inlets, and the rivers Roanoke, Tar, Neuse, Cape Fear, Yadkin, Catawba, &c.; the construction of canals and roads, and the draining of marshes and swamps.—Like all the Southern States, North Carolina has a considerable diversity of climate, occasioned by the physical peculiarities of its different parts. In the level part of the country, intermittent fevers are frequent during the summer and autumn. During these sickly seasons, the countenances of the inhabitants have a pale-ylowish hue, occasioned by the prevalence of bilious affections. Many fall victims, during the winter, to pleurisies and peripneumonies. In the western and hilly parts, the air is as pure and salubrious as in any part of America, and the inhabitants live to a great age. The heat of the summer's day is succeeded in the evening by a grateful and refreshing coolness. Autumn is temperate and serene, and, in some years, the winters are so mild, that autumn may be said to continue till spring. The wheat harvest commences in the beginning of June, and that of Indian corn early in September.—In 1827, merchandise to the value of $276,791 was imported into North Carolina, and $449,237 worth exported. (For similar accounts of preceding years, see Watters and Zandt's Tabular Statistical Vices, Washington, Jan. 1820.)

Historical Sketch of North Carolina. In 1584, the first attempt was made by the English to colonize North America, under
a patent to sir Francis Drake. A small colony was left on the Roanoke in 1587, but was never again to be found; all attempts to ascertain their fate were fruitless. Some emigrants from Virginia penetrated into the country about 1653, and made the first actual settlement of whites. On the early Spanish maps, what is now called Carolina had been marked as part of Florida. The French had given it the name of Carolina in honor of king Charles IX, when they made the disastrous attempt to colonize the North American coast, noticed under the head of Florida. The name Carolina prevailed. In 1661, a second English colony from Massachusetts arrived, and established themselves at Cape Fear river. In 1667, after many vexations struggles, the infant colony obtained a representative government. Two years later, the fanciful constitution, so famous under the name of Locke's scheme of government, was introduced. This wild project was soon abandoned; and, like other English colonies, Carolina advanced but slowly, and experienced the horrors of Indian warfare as late as 1712. Previous to 1717, Carolina had been a proprietary government, but, in that year, became a royal one by purchase, and continued such until the revolution in 1775. In 1764, the two Carolinas were separated into North and South Carolina. The inaccessible coast of North Carolina gave it very great advantages in the revolutionary war. Those destructive inroads, from which other states along the Atlantic suffered so much, were here impracticable. Though, however, less exposed, the people of this state evinced their full share of sympathy with the residue of the American people. A convention was assembled at Halifax, where, on Dec. 18, 1776, the existing constitution was adopted. Since that auspicious event, it may be doubted whether any other community ever passed 52 years with less disturbance. (Darby's View of the U. States. See Carey and Lea's American Atlas.)

Carolina, South; one of the U. States; bounded N. by North Carolina, E. by the Atlantic, S. W. and W. by Georgia; lat. 35° 24' to 33° 37' N.; long. 75° 24' to 80° 29' W.; lat. 33° to 36° 8' N.; 260 miles long, 125 broad; containing 30,000 square miles. Population in 1790, 240,000; in 1800, 345,921; in 1810, 415,115; 200,913 blacks; in 1820, 512,741; whites, 258,475; white males, 130,391; white females, 116,500; slaves, 235,475; free colored, 6,286. Militia in 1821, 23,729.

Columbia is the seat of government, but Charleston is the largest town. The legislature consists of a senate and house of representatives. The senate consists of 43 members, chosen every 4 years by districts. The representatives are chosen every 2 years. The governor and lieutenant-governor are chosen biennially, by a joint ballot of both houses. The principal denominations of Christians in South Carolina are Presbyterians, Episcopalians, Baptists and Methodists. Education is liberally patronized by the state government. The two literary institutions are the college of South Carolina at Columbia, and Charleston college, in the city of Charleston. The distinguishing virtues of the Carolinians are hospitality to strangers, and charity to the indigent and distressed. The planters in the low country, who, in general, have large incomes, live in a luxurious and splendid style, devoting much of their time to the pursuit of pleasure, and possessing much of that pride and dignity of spirit, which characterize an independent country gentleman. The virtues of the farmers of the upper country are less brilliant, but more substantial. They have finer views, are of more frugal and industrious habits, and exhibit greater fortune in the reverses of fortune. In the low or alluvial country, labor in the field is performed almost wholly by slaves, who, in this part of the state, exceed the free inhabitants in the ratio of more than three to one. This division, comprising less than one third of the territory of South Carolina, contains more than half of the slaves, and only about one fifth of the whites. The principal rivers are the Waccamaw, Pee Dee, Black river, Santee, Cooper, Ashley, Edisto, Ashepoo, Comalulie, Coosaw, Broad and Savannah. South Carolina is divided by nature into two parts, which, from their physical situation, have been called Upper and Lower Carolina. The latter is supposed to have once been under the ocean. Towards the coast, the country is a level plain, extending more than 100 miles westward from the sea. Here the eye finds no relief from the dull uniformity of boundless forests, swamps, and level fields. This fatiguing plain is succeeded by a curious range of little sand hills, resembling the waves of an agitated sea. This singular country occupies an extent of about 40 miles. It is extremely barren, enlivened here and there by spots of verdure, or by some straggling pines; and its few inhabitants earn a scanty subsistence by the
cultivation of corn and sweet potatoes. After passing these sand hills, we come next to a remarkable tract of ground, called the Ridge, which, on its approach from the sea, is lofty and bold, but on the north-west is level from its summit. This is a fine belt of land, extending from the Savannah to Broad river, fertile, well cultivated, and watered by considerable streams. The country beyond this ridge resembles, in its scenery, the most interesting of the Northern States. The traveller is gratified by the pleasant alternation of hill and dale. The lovely verdure of the hills is contrasted with the deeper tints of the extensive forests, which decorate their sides; and, in the valleys, broad rivers roll their streams through the varied beauties of luxuriant and cultivated fields. From these delightful regions, the ground still continues to rise, till we reach the western limit of the state. Here 7 or 8 mountains run in regular direction, the most distinguished of which is Table mountain. Other mountains are Ashmore, Osnum, Paris's, Glascow, Hogback and King's. These are all in the districts of Pendleton, Greenville, Spartanburg and York. — The soil of South Carolina is divided into six classes: — 1. Terra limosa is composed of swamp; 2. high river swamp, or low grounds, distinguished by the name of second low grounds; 3. salt marsh; 4. oak and hickory high land; 5. pine barren. The first three classes are peculiarly adapted to the culture of rice and hemp; the third is most favorable to the growth of hemp, corn and indigo. The salt marsh has been much neglected. The oak and hickory land is remarkably fertile, and well adapted to the culture of corn, as well as indigo and cotton. The pine barren, though the least productive, is so much more salubrious than the other soils in the low country, that a proportion of pine barren is an appendage indispensable to every swamp plantation. — The staple commodities of this state are cotton and rice, of which great quantities are annually exported. These articles have so engrossed the attention of the planters, that the culture of wheat, barley, oats, and other crops equally useful, but less profitable, has been almost wholly neglected. So little wheat is raised throughout the state, that considerable quantities are annually imported. Cotton was not raised in any considerable quantities till as late as 1755. Before indigo was next to rice, the most important article of produce; but it is now neglected.

Tobacco thrives well. The fruits which flourish best are pears, pomegranates and water-melons: the latter, in particular, grow to an enormous size, and are superior, perhaps, to any in the world. Other fruits are figs, apricots, nectarines, apples, peaches, olives, almonds and oranges. — The period of vegetation comprehends, in favorable years, from 7 to 8 months, commencing in January or February, and terminating in October or November. The routes, generally, in the months of November, December, January and February, are too severe for the delicate productions of more southern latitudes. The low country is generally covered with snow, but the mountains near the western boundary often are. Frost sometimes begins up the earth, but seldom penetrates deeper than 2 inches, or lasts longer than 3 or 4 days. At some seasons, and particularly in February, the weather is very variable. The temperature has been known to vary 40 degrees in one day. In Charleston, for 7 years, the thermometer was not known to rise above 93° or to fall below 17° above 0. The number of extremely hot days in Charleston is seldom more than 30 in a year; and there are about as many sultry nights, in which the heat and moisture of the air are such as to prevent the enjoyment of sound sleep. — The low country is infested with all the diseases which spring from a warm, moist and unhealthy atmosphere. Of these the most frequent are fevers, from which the inhabitants suffer more than from any, or perhaps from all other diseases together. The districts of the upper country enjoy as salubrious a climate as any part of the U. States. — In 1727, merchandise to the value of $1,431,106 was imported into South Carolina, and $2,825,561 worth exported. (For similar accounts of preceding years, see Watterson and Zandt's Tabular Statistical Views, Washington, Jan. 1029.)

Historical Sketch of South Carolina. The first settlement of South Carolina by the whites appears to have been made at Port Royal, about 1670; but, until 1669, no permanent establishment was formed, when the few settlers then in the country fixed on Oyster point, between Ashley and Cooper rivers, and laid the foundation of the city of Charleston. A grant had, however, been made, in 1662, previous to the founding of Charleston, by Charles II, to lord Clarendon and seven others, of all that tract of North America from N. lat. 31° to 36°; and, two years afterwards, the boundaries were extended...
to N. lat. 30° 39'. The proprietary government of Carolina was, if possible, more complex than any other similar government in the English colonies. This confusion was augmented by Locke's scheme, and by religious contentions, and was terminated, in 1719, by a separation of the two Carolinas, and the establishment of a royal government. One of the events of most importance in the history of South Carolina was the cultivation of rice, introduced by governor Smith, in 1695; that of cotton followed; and the colony flourished until its progress was checked by war with the Indians, and, subsequently, by the revolution. South Carolina suffered severely in the latter contest, and was the theatre of some of the most remarkable events which it produced. The names of Marion, Sumter and Lee conferred honor on the state. The existing government or constitution of South Carolina was adopted June 3, 1770, amended Dec. 17, 1808, and again Dec. 19, 1816. (See Carey and Lee's Atlas.)

Caroline Amelia Elizabeth; wife of George IV, king of Great Britain and Hanover, second daughter of duke Charles William Ferdinand of Brunswick (who was mortally wounded in the battle at Auerstadt), and of the princess Augusta of England, sister of George III. She was born May 17, 1768. The young princess spent her youth in her father's court, under much constraint, till 1795, when she was married to the prince of Wales, now king of Great Britain. The next year she returned through the royal family and the British nation by the birth of a daughter, Charlotte Augusta. (Charlotte died Nov. 6, 1816, wife of prince Leopold of Saxe-Coburg.) She had scarcely recovered from her confinement, when her husband abandoned her, declaring that no one could force his inclinations. This was the beginning of the disgraceful dispute between the two parties, which lasted till the death of Caroline, and exposed her honor to repeated accusations from her husband; while George III, and all the British nation, favored the deserted bride. (See George IV.) The princess of Wales lived retired from the court, at a country-seat at Blackheath, where she devoted herself to the arts and sciences, to benevolence and the gratification of her taste, till 1808. Meanwhile, many reports were circulated, accusing her of illicit connexions with captain Manly, sir Sidney Smith and others, and of being the mother of a boy; on account of which the king instituted an inquiry into her conduct, by a ministerial committee. They examined a great number of witnesses, and acquitted the princess of the charge, declaring, at the same time, that she was guilty of some impieties, which had given rise to unfounded suspicions. The king confirmed this declaration of her innocence, and paid her a visit of ceremony. She afterwards received equal marks of esteem from the prince, her brothers-in-law. The duke of Cumberland attended the princess to court and to the opera. The reports also mentioned were caused by the adherents of the prince of Wales and the court of the reigning queen, who was very unfriendly disposed towards her daughter-in-law. On this occasion, as on many others, the nation manifested the most enthusiastic attachment to the princess. In 1813, the public contest was renewed between the two parties; the princess of Wales complaining, as a mother, of the difficulties opposed to her seeing her daughter. The prince of Wales, then regent, disregarded these complaints. Upon this, in July, 1814, the princess obtained permission to go to Brunswick, and, afterwards, to make the tour of Italy and Greece. She now began her celebrated journey through Germany, Italy, Greece, the Archipelago and Syria, to Jerusalem, in which the Italian Bergami was her confidant and attendant. Many infamous reports were afterwards circulated, relating to the connexion between the princess and Bergami. On her journey, she received grateful acknowledgments for her liberality, her kindness, and her generous efforts for the relief of the distressed. She afterwards lived in Italy a great part of the time, at a country-seat on lake Como. When the prince of Wales ascended the British throne, Jan. 29, 1820, lord Duckett offered her an income of £50,000 sterling, the name of queen of England, and every title appertaining to that dignity, on the condition that she would never return to England. She refused the proposal, and asserted her claims, more firmly than ever, to the rights of a British queen, complained of the ill treatment shown to her, and exposed the conspiracies against her, which had been contrived by a secret agent, the baron de Ompieda, of Milan. Attempts at a reconciliation led to no favorable result. She at length adopted the bold resolution to return to England, where she was neither expected nor wished for by the ministry, and, amid the loudest expressions of the public joy, arrived from Calais, June 5, and, the next day, entered London in triumph. The minist
ter, lord Liverpool, now accused the queen before the parliament, for the purpose of exposing her to universal contempt as an adulteress. Whatever the investigations of the parliament may have brought to light, the public voice was louder than ever in favor of the queen; and, after a protracted investigation, the bill of pains and penalties was passed to a third reading only by a majority of 123 to 95; and the ministers deemed it prudent to delay proceeding with the bill for six months, which was equivalent to withdrawing it. Thus ended this revolting process, which was, throughout, a flagrant outrage on public decency. In this trial, Mr. Burgi

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CAROLINE LAWS. (See Caroline.)

CAROLINE MATILDA, born 1751, daughter of Frederic Lewis, prince of Wales, married, 1766, king Christian VII of Denmark, and became mother of the present king of Denmark, Frederic VII, who was born 1768. Though young and beautiful, and universally esteemed by the nation, yet was she treated with hatred and neglect by the grandmother of her husband, queen Sophia Magdalena, as well as by his step-mother, Juliana Maria, which was equivalent to withdrawing it against her. Struensee (q. v.), by profession a physician, the favorite of the king, became her friend, and both, in union with Brandt, endeavored to gain the favor of the party opposed to the queen. The reins of government came into the hands of Struensee, but the party of the king's step-mother, prince Frederic, procured (1772) the imprisonment of the queen, the courts Struensee and Brandt, and all their friends. Struensee and Brandt were tried, and executed for high treason. Even the queen was at first in danger of being condemned to death. April 6, she was separated from her husband, and confined in Aalborg, but liberated by the interference of her brother, king George III. She died Aug. 7, 1821. The corpse, according to her last will, was removed to Brunswick, where it rests among the remains of her ancestors. Her tomb-stone is called the "unhappy queen of England." The removal and the entombing of her mortal remains gave rise to many disturbances, first in London, and afterwards in Brunswick. These were founded more in opposition to the arbitrary measures of the ministry than in respect for the memory of the queen. Two causes operated much in favor of the queen—the unpopularity of the ministry and the general feeling that the king was perhaps the last man in the whole kingdom, who had a right to complain of the incontinencies of his wife, which many, even of her friends, undoubtedly believed.

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CAROLINE—CARP. 535

CARP (Cyprinus, L.); a genus of soft-finned abdominal fish, which Cuvier makes the fourth family of the order. This is a very natural genus, containing very numerous species. It is easily distinguishable by the small mouth, toothless jaws, gills of three flat rays. The tongue and palate are smooth, but the gullet is admirably constructed for mastication, having large teeth attached to the interior pharyngeal bones, which press the food between themselves and a gelatinous knob, connected with a bony plate that is united with the first vertebra, commonly called the carp's tongue. They have but one dorsal fin, and the body is covered with scales, generally of large size. They frequent fresh and quiet waters, feeding on herbs, grains, and even mud, being, perhaps, the least carnivorous of the finny race. Some of the species have a beard of small, fleshy threads at the angles of
the upper jaw.—The most noted of the species are the common carp (C. carpio, L.), which, in many parts of the world, are bred in ponds, for the use of the table, and the goldfish (C. auratus), believed to be originally from China, very commonly bred in ponds, for the use of the table, and in greater numbers. The most noted of the species of carp, which, in many parts of the world, are bred in ponds and vases as an ornament, on account of its beautiful colors. In his memoir on American Ichthyology, Dr. Mitchill enumerates four species of carp, none of which, in many parts of the world, are bred in ponds and vases as an ornament, on account of its beautiful colors. In his memoir on American Ichthyology, Dr. Mitchill enumerates four species of carp, under the names of C. teres, fresh-water sucker; C. oblongus, club of New York; C. chrysoleucas, New York shiner; and C. atrovenus, brook minnow.—The common carp of Europe is esteemed very highly for stocking ponds, being of quick growth, spawning thrice a year. As the females do not commence breeding until eight or nine years old, it is necessary to keep up a supply of carp of that age by avoiding to destroy the females. The proportion of males to be preserved is four for every twelve females. Under common circumstances, the carp grows two or three inches in length in a year; but, where the ponds are exceedingly well supplied with food, they have been known to grow from five to eighteen inches in the same time. They thrive best in ponds having clayey or marly sides, and well provided with aquatic vegetables. In order to furnish them with fresh vegetable food, it is usual to rake the sides of the pond, left dry by evaporation, with an iron rake, and then to sow grass-seed, so that, when the pond is again filled up by the rains, there may be a growth of tender herbage for the fish. Grains of various sorts, and garbage, are frequently thrown into the pond, with a view to aid in fattening carp. A pond of one acre in extent is said to be sufficient to feed 300 carp of two or three years, or 400 of one year old. Carp, in their native condition, frequent the deepest places of ponds or rivers, where there is the least current. It is a fish which requires much patience and address in the angler. They seldom bite well, for a few days previous, to have some brewer's grains or other food thrown into the water, by which the fish will be induced to collect at any particular place in greater numbers.

Carpets are thick textures, composed wholly or partly of wool, and wrought by several dissimilar methods. The simplest mode is that used in weaving Venetian carpets, the texture of which is plain, composed of a striped woollen warp on a thick woof of linen thread. Kidderminster carpet is composed of two woollen webs, which intersect each other in such a manner as to produce defmite figures. Brussels carpeting has a basis composed of a warp and woof of strong linen thread. But to every two threads of linen in the warp, there is added a parcel of about ten threads of woollen of different colors. The linen thread never appears on the upper surface, but parts of the woollen threads are, from time to time, drawn up in loops, so as to constitute ornamental figures, the proper color being each time selected from the parcel to which it belongs. A sufficient number of these loops is raised to produce a uniform surface. To render them equal, each row passes over a wire, which is subsequently withdrawn. In some cases, the loops are cut through with the end of the wire, which is sharpened for the pur-
pose, so as to cut off the thread as it passes out. In forming the figure, the weaver is guided by a pattern, which is drawn in squares upon a paper. Turkey carpets are fabricated upon the same general principles as the Brussels, except that the texture is all woollen, and the loops larger, and always cut. There are several carpet manufactories in New England, which make handsome goods. The English and Americans are the only nations among whom carpets are articles of general use.

CARPI, Ugo da, a painter and engraver, flourished in the beginning of the 16th century. He is generally considered as the inventor of that species of engraving denominated chiaro-oscuro, which was afterwards carried to such perfection by Baldassar Peruzzi.

CARPI, Girolamo da, a painter of the 16th century, a native of Ferrara, painted many pictures for the churches there and at Bologna. He was a great admirer of Correggio and Parmigianino, whose works he copied with great success. He died in 1566.

CARRACCI; the name of a celebrated family of painters.—Ludovico Carracci, son of a butcher, born 1555, at Bologna, appeared, at first, to be more fit for grinding colors than for transferring them to canvas. But his slowness did not, in fact, arise from deficiency of talent, but from zeal for excellence. He detested all that was called ideal, and studied only nature, which he imitated with great care. At Florence, he studied under Andrea del Sarto, and enjoyed the instruction of Pasignano. He went to Parma for the purpose of studying Correggio, who was then imitated by almost all the Florentine painters. At Bologna, he endeavored to obtain popularity for his new principles among the young artists, and united himself with his cousins, Agostino and Annibale Carracci, whom he sent, in 1580, to Parma and Venice. On their return to Bologna, the three artists began to acquire reputation, but met with the most violent opposition. Annibale, the most resolute of them, was of opinion, that they should refute the slanders in circulation by the excellence of their productions. Ludovico resolved to establish an academy for painters at Bologna, which he called the accademia degli incamerati (from incamminare, to put in the way). His first principle was, that the study of nature must be united with the imitation of the best masters. He soon gave an example of this principle in the Prophecy of John the Baptist, in the monastery of the Carthusians, imitating, in single figures, the style of Raphael, Titian and Tintoretto. The finest works of Ludovico are at Bologna; for instance, those which adorn the hall in the monastery of St. Michael, in Bologna, and the Annunciation, in the cathedral at Bologna. He excelled in architectural views and in drawing, and, in general, was very thorough in all the branches of his art. After having enjoyed his fame for a long time, at least as long as his cousins were alive, Ludovico died, in 1613, almost in poverty. His brother, the death of Agostino, and 16 after that of Annibale. The chief reproach to which he is liable is, that he did not unite the study of the antiques with that of nature. His coloring has also been blamed.—Paulo Carracci, a brother of Ludovico, is of no importance.—Agostino Carracci, mentioned above, was born in 1558, at Bologna. He soon became one of the most accomplished disciples of Ludovico, and excelled particularly in invention. He engraved more pieces than he painted, in order to please his brother Annibale, who became jealous of his fame, after a picture of Agostino had obtained a prize in preference to one of his own, and another excellent picture—the Communion of St. Jerome—had gained his brother universal admiration. Subsequently, Agostino accompanied Annibale to Rome, and assisted him in painting the Farnesian gallery. As many persons said that the engraver worked better than the painter, Annibale removed his brother, under pretext that his style, though elegant, was not grand enough. Agostino went then to the court of the duke of Parma, and painted there a picture representing the heavenly, the earthly and the venal love. There was only one figure wanting, when, exhausted by labor and mortification, he died, in 1601. He wrote a treatise on perspective and architecture. As an engraver, he deserves great praise, and often corrected the imperfect outlines of his originals. Among his engravings are many obscene ones, which have become rare.—Annibale Carracci, his brother, born 1560, at Bologna, worked, at first, with his father, who was a tailor. By the advice of his cousin Ludovico, he learnt drawing, and made the most astounding progress, copying first the pieces of Correggio, Titian and Paul Veronese, and painting, like them, small pictures before he undertook large ones. In the academy founded by the Carracci, he taught the rules of arrange-
ment and distribution of figures. He is one of the greatest imitators of Correggio. His St. Roque distributing Alms, now in Dresden, was the first painting which gave him reputation. His Genius of Glory is likewise celebrated. In the Farnesian gallery, which he painted, there breathes an antique elegance, and all the grace of Raphael. You find there imitations of Tibaldi (who painted at Bologna, about 1550, with Nicolo del Abate), of Michael Angelo (the style, indeed, somewhat softened), and the excellences of the Venetian and Lombard schools. Out of Bologna, he is acknowledged as the greatest of the Carracci. In that city, however, Ludovico is more admired. Agostino, perhaps, had more invention, and Ludovico more talent for teaching; but Annibale had a loftier spirit, and his style is more elegant and noble. He died of grief (1609), at the ingratitude of cardinal Farnese, who paid him for 20 years' labor with 500 gold scudi. He was another brother, is unimportant.—Antonio Carracci, a natural son of Agostino, born, 1559, at Venice, has more merit. Among the many well-known disciples of the Carracci, Domenichino deserves to be particularly named.

Carreras; three brothers, distinguished in the revolution of Chile. José Miguel Carrera, Juan José Carrera, and Luis Carrera, were the sons of a rich landholder in Santiago, don Ignacio Carrera. One of them served in Europe until 1814, and attained the rank of lieutenant-colonel and commandant of a regiment of hussars. The three brothers took an active part in the revolution from its commencement, and, in November, 1811, obtained the control of the revolutionary government; don José Miguel, the eldest, being a member of the junta, and colonel in the army, and the two younger brothers being also colonels in different corps, and the military being strongly in their favor. They continued in the possession of power until 1813, when they were taken prisoners by the Spaniards, and confined at Talca. During their confinement, O'Higgins placed himself at the head of affairs. But they soon regained their liberty, and, by means of their popularity with the army, were enabled to discharge O'Higgins, and resume their former influence, although not without a conflict with their antagonist. They became reconciled to him, however, and acted in concert with him at the battle of Rancagua, in October, 1814, in which the patriots were defeated, and in consequence of which the Carreras and their associates fled across the Andes. Don José Miguel left South America for the U. S., seeking supplies of men and money. Meanwhile, don Juan José and don Luis remained in Buenos Ayres, where they were detained, on their parole, by Pueyrredon, and not allowed to join the army sent for the liberation of Chile, commanded by their personal enemy, O'Higgins, and his bosom friend, general San Martin. Don José Miguel found them in this condition upon his return in 1817, and was himself arrested at Buenos Ayres, but made his escape. His brothers fled from Buenos Ayres, but were apprehended, Aug. 17, 1817, near Mendoza, and thrown into prison. Upon learning this, general San Martin despatched his secretary, Monteguido, to bring them to trial, and, if possible, invent some plausible cause for their execution, so as to prevent their return to Chile. Accordingly, a false accusation of having murdered some obscure person in 1814 was brought against don Juan José; but, as this did not inculpate don Luis, a plot was contrived with the soldiers, and the brothers were induced to attempt their escape; after which the proceedings were resumed, and they were condemned, on the 8th of March, 1818, to be shot on the same day. They heard their sentence at three o'clock in the afternoon, and were slaughtered at six. They walked arm in arm to the place of execution, gave the word to the soldiers to fire, and embraced each other in death. So causeless were these legal murders, that public opinion charges them upon San Martin, who, finding the friends of the Carreras numerous in Chile, employed his creature Monteguido to procure their death. With brutal cruelty, San Martin sent their aged father an account of the expenses of their execution, with an order for its immediate payment. He paid the bloody charge, and, two days afterwards, expired of a broken heart. Don José Miguel resolved to avenge their death. He raised a small body of troops, natives and foreigners, and marched across the pampas, having found means to correspond with his friends in Santiago. His progress was viewed with great uneasiness by O'Higgins, then supreme director of Chile; for the people cherished the fondest recollections of the Carreras, whose wisdom in government, and personal condensation, affability and munificence, had won all
hearts. A conspiracy in favor of Carrera, unfortunately, was detected by O'Higgins, and suppressed. Don José Miguel arrived near Mendoza in January, 1822, and was there unexpectedly met by a superior force, and surrounded and taken prisoner, after a brave resistance. Being conducted to Mendoza, he was hurried through a brief form of trial, and executed on the very spot where his brothers suffered. Thus, by a singularly adverse fortune, perished a family of brothers, who left not their equals in patriotism, talents and purity of character in Chile.

Their friend and adviser, Rodriguez, also perished, a victim of the same enemies. — In testimony of their respect for the memory of the Carreras, the government of Chile have recently ordered the removal of their remains from Mendoza to their native country. (Stevenson's South America, vol. iii; North American Review, vol. xxiv, p. 313; Miller's Mem., l. p. 323.)

CARRIER, common. (See Common Carrier.)

Carreras, John Baptist, born in 1756, at Voloi, near Aurillac, in Upper Auvergne, an obscure attorney at the beginning of the revolution, was a member of the national convention, in 1792, and exhibited the wildest rage for persecution. He voted for the death of Louis XVI, demanded the arrest of the duke of Orleans, April 6, 1793, and contributed greatly to the establishment of the revolutionary tribunal, March 10, 1793, and exhibited the wildest rage for persecution. He voted for the death of Louis XVI, demanded the arrest of the duke of Orleans, April 6, 1793, and contributed greatly to the revolution of May 31. Oct. 8, 1793, he was sent to Nantes with a commission to suppress the civil war by the exercise of greater severity than had yet been used. The prisons were already full, while the defeat of the Vendéans near Savoyon increased the number of prisoners. Multitudes, informally and precipitately condemned, were executed daily; but Carrier found this process too slow. He resolved, therefore, to destroy the prisoners in a mass, and without a trial. He caused 94 priests to be conveyed to a boat with a perforated bottom, under pretense of transporting them, but, in reality, with a view of having them drowned by night. Every day this atrocity was repeated. In the evening, the destined victims, of every age and of both sexes, were brought to the boats. Two were tied together, and plunged into the water, at the point of the bayonet and the edge of the saber. The executioners sometimes amused themselves by tying together a young man and woman; and they called these noyades (republican marriages). Besides this, more than 500 prisoners were daily shot in the quarries at Gigan. For more than a month, these deeds of madness were perpetrated. It has been estimated that 15,000 individuals perished in this way. The banks of the Loire were strewed with the dead, and the water was so polluted, that it was prohibited to drink it. Some months before the fall of Robespierre, Carrier was recalled. The 9th Thermidor (July 27), 1794, he was apprehended, and brought before the revolutionary tribunal, which condemned him to death, Dec. 16, 1794.

CARRIER Pigeon (pazélette, columba tabellaria). This bird is a native of the East; and the practice of sending letters by pigeons belongs, therefore, principally to Eastern countries. The pigeons chosen for this service are called, in Arabic, hamahna. They have a ring of particolored feathers round the neck, red feet, covered with down, and build their nests in the neighborhood of human habitations. In the province of Irak (that is, Chaldan, Babylonina and Assyria), white pigeons are trained with the least difficulty. The first pigeon used as a messenger some consider to be that which Noah sent from the ark, and which returned with the leaf of the olive. An actual post-system, in which pigeons were the messengers, was established by the sultan Noureddin Mahomed, who died in 1174. It was improved and extended by the caliph Ahmed Alarzer-Lidiv-Aliah, of Bagdad, who died in 1225. The price of a well-trained pair of such pigeons was, at that time, 1000 dinars, that is, Arabic ducats. This flying post lasted till 1258, when Bagdad fell into the hands of the Mongols, and was destroyed by them. At present, only a few wealthy individuals in the East keep these pigeons. It requires much time and patience to train them. As soon as the young (a cock and a hen are preferred) are fledged, they are made as tame as possible, and accustomed to each other's society. They are then sent, in an uncovered cage, to the place whither they are usually to carry messages. If one of them is carried away, after having been well treated for some time, it will certainly return to its mate. A small letter is written on the finest silk-paper, sometimes on a particular kind called bird-paper. This is placed lengthwise under one wing, and fastened with a pin (point being turned from the body) to a feather. It needs not to be mentioned, that no part of the letter must hang loose, lest the wind should be collected in it.
the wing become tired, and the pigeon be
compelled to alight. A pigeon of this
kind can go a distance of upwards of 1000
parasangs (more than 2700 English miles)
in a day. There were similar posts in
Egypt, in 1450, for which columbaries
were prepared in towers, erected at cer-
tain distances for the public security.—
This custom is, however, not confined to
the nations of the East. Decius Brutus,
according to the elder Pliny's account,
sent despatches from Modena by pigeons;
and in modern times, they were made use of, during the Dutch war, by the in-
habitants of Haerlem, when besieged in
1573, and in Leyden, in 1574. It is also
well known, that some merchants in Paris
and Amsterdam employ carrier-pigeons,
in order that the course of exchange and
the prices of stocks, in Paris, may be
known as soon as possible in Amsterdam.
CARRO, Giovanni di; a physician of
Milan, who settled in Vienna. He is cel-
berated for his efforts in spreading inocu-
lation, as a protection from the small-pox,
in Germany, Poland, Hungary and Rus-
sia. He found means to overcome even
the prejudices of the Turks, by sending
to lord Elgin, at Constantinople, in 1800,
a quantity of virus, together with a work
of his, translated into Turkish, on inocu-
lation. All the attempts of the English
to introduce inoculation into India had
been hitherto unsuccessful, because the
virus had always been spoiled on the way.
Carro procured the matter from Lombardy
cows, for doctor Harford, at Bagdad. It
retained all its strength, and was the
means of imparting the benefits of kine-
peck inoculation to India, which the In-
dians consider as derived from a sacred
cow, and to which they have given the
name of Ÿroispoutom (immortality). Carro's
Observations et Expériences sur la Vaccin-
ation, avec une Planche colorée (Vienna,
1801 and 1802), and his translation (Vi-
enna, 1802) of an English work, by J. J.
Loy, on the origin of the kine-pock virus,
are very valuable works. In the Bibli-
thèque Britannique are some letters deserv-
ing of notice, written by him, particularly
one, dated Aug. 27, 1803, on the antipesti-
ential nature of the kine-pock matter.
CARROLL, John, first Catholic bishop
of the U. States, was born in Maryland, in
the year 1734. His parents were Catho-
lics of distinguished respectability, and
sent him, at the age of 15, to the college
of St. Omer's, in Flanders, where he re-
mained for six years, when he was trans-
ferred to the colleges of Liege and Bruges.
In 1763, he was ordained a priest, and
soon after became a Jesuit. In 1770, he
accompanied the present lord Stourton,
the son of an English Catholic nobleman,
on a tour through Europe, in the capacity
of private tutor; and, on his return to
Bruges, in 1773, accepted a professorship
in the college. Shortly afterwards, he
was on the point of going back to his na-
tive country; but his voyage was prevent-
ed by the intelligence of the entire sup-
pression of the Jesuits by the pope; and
he retired to England, where he resided
until 1775, when he returned to America.
His stay in Europe was prolonged in or-
der that he might assist his brethren in
procuring a mitigation of the severe sen-
tence that had been passed upon them.
He acted as secretary-general to the dis-
persed fathers in their remonstrances with
the courts, by which they had been per-
secuted. Upon his arrival in Maryland,
he entered upon the duties of a parish
priest. In 1773, at the solicitation of con-
gress, he accompanied doctor Franklin,
Charles Carroll of Carrollton, and Samuel
Chase, on a mission to Canada, designed
to induce the people of that province to
preserve a neutral attitude in the war be-
tween England and the colonies, but was
unsuccessful. The Roman Catholic cler-
gy of the U. States having requested from
the pope the establishment of a spiritual
hierarchy here, in preference to being
under the superintendence of one in Eng-
lond, Mr. Carroll was appointed vicar-
general in 1786, when he fixed his abode
in Baltimore. In 1789, he was named
first Catholic bishop of the U. States, and
gained to England, in the summer of 1790,
where he was consecrated. In the same
year, he returned to Baltimore, and, as
the seat of his episcopal see was estab-
lshed in that city, assumed the title of
bishop of Baltimore. He was universally
esteemed and beloved for the exemplary
manner in which he discharged his duties,
the mildness and courtesy of his manner,
and the sanctity of his life. He lived in
friendly communion with persons of oth-
er sects, his character being entirely devo-
ted of intolerance. A few years before his
demise, he was elevated to the archbis-
piscopal dignity. He died Dec. 8, 1815, in
the 81st year of his age.
CARRON; a village of Scotland, on the
banks of a stream of the same name, in
Stirlingshire, and about three miles from
the shore of the Forth. Its extensive
iron-foundery is one of the most noted
in Great Britain. This was established
in 1760, and now employs nearly 2000
men. There are about 20 furnaces,
many kinds of iron articles are made in great quantities, as heavy pieces of ordnance, cylinders for steam-engines, pumps, boilers, wheels, with all kinds of ponderous apparatus used in the arts. That species of ordnance called a **carronade**, used in the navy, derived its name from being first made here. Immense numbers of shot and shells, of all sizes, are annually sent from Carron. Carron is about 2 miles north-east of Falkirk, and about half a mile from the direction from Edinburgh. The banks of the river Carron were the boundary of the Roman empire in Britain for the wall of Antoninus stood within a short distance, and ran parallel to them for several miles. Two mountains, one of them 30 feet in height, called the **hills of Dunipail**, rise about the middle of its course. Tradition affirms that they were monuments of a peace between the Romans and Caledonians, and that they take their name from dun, a hill, and paz, peace. It is more probable that they are barrows.

**Carronades** (from the river **Carron**, in Scotland, where they were first made) were a sort of artillery, resembling howitzers. They are of very large caliber, and carry balls, shells or cartouches. They are much lighter than common cannon, and have a rammer, powder-box, and wads. They are mostly used on board of ships, in close engagements, from the poop and forecastle. Sometimes they are employed in fortifications. They have been cast from stone and copper. They were first used in the North American revolutionary war.

**Carrot** (daucus carota, Linnæus) is a biennial plant, a native of Britain. The leaves are pinnatifid, and much cut. The plant rises to the height of two feet, and produces white flowers, succeeded by rough, hispid seeds. The root of the plant, in its wild state, is small, dry, sticky, of a white color, and strong-flavored; but the root of the cultivated variety is large, succulent, and of a red-yellow or pale straw-color, and shows remarkably the improvement which may be effected by cultivation. Though long known as a garden plant, it is comparatively of recent introduction in agriculture. It appears to have been cultivated from an early period in Germany and Flanders, and introduced from the latter country to Krent and Suffolk early in the 16th century. The various uses of the carrot in cookery are well known. But, although it contains much nutrient, it is difficult of digestion, particularly if eaten raw or imperfectly boiled. Carrots are an excellent fodder for cattle and horses, either alone or mixed with hay; and, if given to cows in winter or the early part of spring, they are said to cause a great increase of milk, which will have a much less offensive taste and smell than when they are fed on turnips. Hogs thrive well upon carrots boiled with their wash. In some parts of England, this vegetable has been cultivated as a winter food for deer; and the tops have even been made into hay. Carrots contain a large proportion of saccharine matter, and various but unsuccessful experiments have been made to extract sugar from them. They have been more advantageously employed in distillation. Ten pounds weight of carrots will yield about half a pint of very strong ardent spirit; and the carrots produced by an acre of ground, amounting to 29 tons, have been known to yield 240 gallons of spirit. A sirup made of these roots, and clarified with the whites of eggs, has been found useful for several purposes. An infusion of the seeds, and the expressed juice of the roots, are said to afford relief in fits of the gravel. A marmalade of carrots has been used with success in sea-scurvy, and a poultice prepared from them is sometimes employed in cancerous ulcers. Crickets are so fond of these roots, that they may easily be destroyed by making a paste of flour, powdered arsenic and scraped carrots, and placing this near their habitation. Parkinson informs us that, in his day, ladies wore carrot leaves in the place of feathers. In winter, an elegant ornament is sometimes formed by cutting off a section from the head or thick end of a carrot, containing the bud, and placing it in a shallow vessel with water. Young and delicate leaves unfold themselves, forming a ruffled tuft of a very handsome appearance, heightened by contrast with the season of the year.

**CARRYING TRADE.** (See Commerce.)

**Carstares, William,** a Scotch divine of political eminence, was born in 1641, at Cathcart, near Glasgow, where his father was minister. He pursued his studies at the university of Edinburgh, whence he was removed to that of Utrecht, was introduced to the prince of Orange, and intrusted with all his views in regard to Britain. He, however, returned to Scotland, with the view of entering the ministry, but, after receiving a license to preach, resolved to return to Holland. As he was passing through London, he was employed by Argyle and his party to treat with the English exclusionists, and became privy
to the rye-house plot. On the discovery of that conspiracy, he was apprehended. After a rigorous confinement in irons, he was subjected to the torture, and endured this trial with great firmness; but, being afterwards deluded with the hopes of a full pardon, and assured that his answers should never be made evidence against any one, he submitted to make a judicial declaration. The privy council violated their engagement, by producing his evidence in court against his friend, Mr. Baillie, of Jerviswood. Being released, he returned to Holland, and was received by the prince of Orange as a sufferer in his cause. The prince made him one of his own chaplains, and procured his election to the office of minister of the English congregation at Leyden. He accompanied the prince in his expedition, and always remained about his person, both at home and abroad. During this reign, he was the chief agent between the church of Scotland and the court, and was very instrumental in the establishment of the presbytery, to which William was averse. On the death of William, he was no longer employed on public business; but Anne continued him her chaplain-royal, and made him principal of the university of Edinburgh. When the union of the two kingdoms was agitated, he took a decided part in its favor. He did not long survive this event, dying in 1715, at the age of 65. The memory of Carstairs is, for the most part, revered by his countrymen as that of an enlightened patriot; and few men of active power and influence have steer'd between parties more beneficially and ably.

**Carstares,** August Jacob, a distinguished painter, born at St. Jurgen, near Sleswig, in 1734, died at Rome in 1788. He studied at Copenhagen, where he produced his first picture—the Death of Eschylus. In 1783, he set out for Rome; but, after having seen some works of Julio Romani and Leonardo da Vinci, was obliged to return to Germany, from want of means, and ignorance of the Italian language. In Lübeck, he lived almost five years by painting likenesses. A piece, containing more than 200 figures—the Fall of the Angels—procured him the place of a professor in the academy at Berlin. In 1792, he went to Rome. His picture of Megapont was compared to the productions of Raphael and Michael Angelo. His subjects were almost all taken from Homer, Pindar, Sophocles, Eschylus, Shakespeare and Ossian. In Carstares' works, we find that effort to attain correctness of form and outline, gracefulness of attitude, and loftiness and vigor of expression, by which the works of the ancients are distinguished; but they frequently exhibit a certain hardness, arising from too close imitation. He was often defective in anatomy and perspective, and, having begun late to paint in oil, was unacquainted with the secrets of coloring. (See Fernow.)

**Carre, Thomas,** an English historian, was born at Dunmoor, Warwickshire, in 1686. He was admitted at University college, Oxford, in 1698, and was afterwards incorporated at Cambridge, where he took his degree of M.A. in 1706. His first publication was entitled the Irish Massacre set in a true Light, &c. Incurring suspicions during the rebellion of 1715, a warrant was issued for his apprehension, which he eluded by concealment in the house of a clergyman at Colwick. He subsequently acted as secretary to bishop Atterbury; and, as it was supposed that he was concerned in the conspiracy imputed to that intriguing prelate, he was charged with high treason, and a reward of £1000 was offered for his apprehension. He was again successful in making his escape, and, reaching France, he resided there several years under the name of Philips. Having obtained various introductions to persons of influence and learning, he obtained free access to the principal libraries, and employed himself in collecting materials for an English edition of the History of Thuanus. At length, Queen Caroline, the liberal patroness of literary merit of every party, procured leave for his return to England. His important work, the Life of James Duke of Ormond, was published in 3 vols, folio, 1735–6. This work gained him great reputation, especially with the Tory party, and led him to meditate a general history of England, as a counterbalance to the tendency of that of Rapin de Thoyras, which the Tories charged with error and partiality. In 1741, he was arrested, under a suspicion of the habeas corpus act, and examined, on a suspicion of being employed by the Pretender. Nothing, however, appearing against him, he was discharged. The first volume of his history, in folio, concluded with the death of king John and might have been very well received, had not the author materially injured the credit of his work, and his own reputation as a man of sense, by the unnecessary insertion of a note, containing the ridiculous story of the cure of one Christopher Lovel, who went from Somersetshire to Paris to
be touched for the king's evil by the Pretender. Still he proceeded with his work, and published two more volumes, in 1750 and 1752; the fourth, which brought down the history to 1654, not appearing until after his death. The character of this work is deservedly very high for useful and elaborate research, for which qualities it has risen greatly in esteem, since the obligations of Hume to it have been rendered apparent. In point of style, it is mean; and the prejudices of the author, who was utterly desirous of the philosophical impartiality requisite for a historian, are everywhere conspicuous: but its diligence and exactness, with regard to facts, and the intimate knowledge of original authors displayed by the writer, will add its value to it. Mr. Carter died in April, 1754. He is the author of several works besides those already mentioned. He was a man of indefatigable industry, cheerful and entertaining in conversation, but very slovenly and ungainly in his appearance.

Carret: an agreement for the delivery of prisoners or deserters: also, a written challenge to a duel.—Carret-Ship; a ship commissioned, in time of war, to exchange prisoners; also to carry any proposal between hostile powers. She must carry no cargo, ammunition, or implements of war, except a single gun for signals.

Cartes, Elizabeth, an English lady of great learning, was the daughter of doctor Nicholas Carter, a clergyman in Kent, and was born in 1717. She was educated by her father, and soon became mistress of Latin, Greek, French and German; to which she afterwards added Italian, Spanish, Portuguese, Hebrew, and even Arabic. Several of her poetical attempts appeared in the Gentleman's Magazine, before she attained her 17th year, and these procured her much celebrity. In 1738, she translated the critique of Crusus on Pope's Essay on Man; and, in the same year, gave a translation of Algarotti's explanation of Newton's philosophy, for ladies. In 1749, she commenced her translation of Epictetus. In 1710, Miss Carter had an interview with queen Charlotte, by the queen's own desire, and during the remainder of her life, occasionally received visits from different members of the royal family, who paid her particular attention. She died in 1804, in the 88th year of her age, and was interred in the burying-ground of Grosvenor chapel. The year following her death, her Memoirs were published, and a new edition of her poems; and, subsequently, her correspondent with Miss Talbot (in 2 vols., 4to.), and letters to Mrs. Montague and Mrs. Vesey (4 vols. 8vo.), all which are much esteemed.

Cartes, Des. (See Descartes.)

Carthage; the most famous city of Africa in antiquity, capital of a rich and powerful commercial republic. The Romans took advantage of these troubles to expel the Carthaginians from Sicily, although they had previously received assistance from them (in 275) in a war against Pyrrhus of Epirus, in Sicily and Lower Italy. Here begins the third period of Carthaginian history, embracing the three re-
Carthage.

peated struggle for dominion between Rome and Carthage, in the interval between 264 and 146 B.C. The first Punic war (see Punic) continued 23 years. The fleets and armies of Carthage were vanquished. By the peace (B.C. 241), the Carthaginians lost all their possessions in Sicily. Upon this, the mercenary forces, whose wages could not be paid by the exhausted treasury of the city, took up arms. Hamilcar Barca conquered them, and restored the Carthaginian power in Africa. Notwithstanding the peace with Carthage, the Romans took possession of Sardinia in 228, where the mercenary troops of Carthage had revolted. Hannibal, who was at the head of the democratic party, now undertook the conquest of Spain, whose rich mines tempted the Carthaginians. For the success of this enterprise, within 17 years, Carthage was indebted to the family of Barca, which could boast of the glorious names of Hamilcar, Asdrubal and Hannibal. To secure the possession of this acquisition, Asdrubal founded New Carthage (now Carthagena), the most powerful of all the Carthaginian colonies. The second Punic war (218–201 B.C.), notwithstanding the abilities of the general, ended with the subjugation of Carthage. Hannibal, neglected by his countrymen, and weakened by a victory that cost him much blood, was obliged to leave Italy, in order to hasten to the assistance of Carthage, which was threatened by the Romans. The battle at Zama, in the neighborhood of Carthage, resulted in favor of the Romans. Scipio granted the city peace under the severest conditions. Carthage ceded Spain, delivered up all her ships of war except 10, paid 10,000 talents (about $10,000,000), and promised to engage in no war without the consent of the Romans. Besides this, Masinissa, the ally of Rome, and implacable enemy of Carthage, was placed on the Numidian throne. This king, under the protection of Rome, deprived the Carthaginians of the best part of their possessions, and destroyed their trade in the interior of Africa. The third war with the Romans was a desperate contest. The disarmed Carthaginians were obliged to demolish their own walls. Then, taking up arms anew, they fought for death or life. After three years, the younger Scipio ended this war by the destruction of the city, B. C. 146. Augustus peopled it anew, and it regained some degree of renown. From A. D. 429 to 534, it was the residence of the Vandal kings. But the Arabsians destroy-
ed it a second time, and few traces now remain of it, except an aqueduct.

The government of Carthage, according to the common opinion, in its origin, was monarchical; afterwards, it is not known how nor when, it became republican. The Phoenician states, likewise, had kings, and their government, too, was republican. As no distinct period is mentioned when the government received its form, the constitution seems to have been gradually formed, mostly by and through domestic troubles. The government was composed of the suffetes, the senate, the tribunal of the hundred, and the freemen. The suffetes were at the head of affairs, and were commonly called kings, by the Greek authors, and consuls by the Romans. They were permanent officers, and not, like the Roman consuls, chosen for short periods. The Carthaginian senate seems to have been a permanent and numerous body, in which there was a smaller committee, composed, probably, of the elder members. As regards the power of the senate, and its relation to the people, we know that the former had the right of deliberating beforehand on all affairs that were to be referred to the people. If the suffetes agreed with the senate, the business might be referred to the people, or not, as these magistrates saw fit; but if they disagreed, it was always referred to the people; and every citizen had the right of expressing his opinions freely. War and peace, likewise, depended on the decision of the senate. The tribunal of the hundred was chosen from the most respectable families, and was the highest political tribunal. It seems, also, to have been in possession of supreme civil jurisdiction. A highly remarkable peculiarity of the Carthaginian government was, the separation of the civil and military power at so early a period. The suffetes were never their generals. The latter were chosen by the people, and, in time of war, had unlimited power in regard to military operations. Affairs of state, on the contrary, alliances, and the like, were administered by a committee of the senate, which was associated with the generals. In this respect, the Carthaginian constitution was superior to the Roman, in which the union of the two powers cost the state its freedom. The religion of Carthage was a branch of the worship of the stars and of fire, which prevailed in the East. Concerning Moloch (Baal or the Sun), the supreme god of the Phoenicians, the human sacrifices, and other peculiarities
of the Phoenician worship, the bishop of
Zealand, doctor Frederic Munster, has
published the result of his interesting in-
quiries, in his Religion of the Carthagi-
nians (Copenhagen, 1821, 2d edition, 4to.).

Carthage: an ancient town on the
cost of the kingdom of Morcia, with
considerable trade, one of the three great
naval harbors of Spain, and the best port
of the Mediterranean. The basin is
very deep, even quite close to the town.
The hills that surround it, with steep
ascents, and an island at the mouth of
the harbor, protect the vessels from all
winds. The town, with the citadel, is
situated on a peninsula in the harbor.
It contains 29,000 inhabitants, fine wharves,
a naval arsenal, a naval school, a mathe-
atical, nautical and pilot academy, an
observatory, a botanical garden, a silk-
and cotton manufactury, has some fisheries,
and hay is one of the best in the country.
It has many springs and salt mines in the neighbor-
hood. The town was built by the Cur-
tainsian general
Carthage

CARTHAGE

a province of Colombia,
forming with the provinces Santa Mar-
tha and Rio Hacha, the department Mag-
dalena (see Colombia), bordering on the
Caribbean sea and the gulf of Darien.
The country is composed of mountains
and valleys, covered with large and small
forests. The variety of plants and trees,
as well as fruits, is wonderful. The earth
is covered with perpetual verdure. Wheat
and other kinds of European grain do not
flourish well, but Indian corn and rice are
raised in sufficient quantity for the con-
sumption of the inhabitants. The cli-
nate is very hot. From May to Decem-
ber, there is a great deal of rain. The
variety and beauty of the birds is remark-
able. Poultry, pigeons, partridges and
geese, are good and plentiful. The fruits
of the country are pine-apples, papayas,
platanus, &c. The principal town is Carthage.

Carthage: a city and seaport of
Colombia, capital of the province of the
same name; lat. 10° 27' N.; lon. 77° 30'
W. The population is rated at 21,000.
It contains a handsome cathedral, several
churches, convents and monasteries. The
city is situated on a sandy island, which
forms a narrow passage on the E. W.
side of the best in the country.
It extends seven miles from N. to S., and
has a safe anchorage, though the many
shallows at the entrance make a careful
steerage necessary. There are among
the inhabitants of Cartagena very many
of Indian descent. The city, like the
whole province, is subjected to the incon-
vienience of periodical rains.

Carthusians: a religious order, insti-
tuted by St. Bruno (q. v.), who, in 1086,
built several hermitages in a desert sur-
ronded by hills and rocks, four leagues
from Grenoble, and, with six companions,
united the ascetic with the monastic life,
like the Camaldulians. The inhabitants
of this desert built a church, and, by in-
dustry and skill, converted into gardens
a place which seemed to have been des-
tined for the haunt of wild beasts only.
At the same time, they practised the
oldest abstinence, wore coarse gar-
ments, and eat only vegetables and the
coarsest bread. From their original seat
(La Chartreuse), they were called Carthu-
sians, and their monasteries, at first only
a few in number, were called Chartreuses.
Their fifth general, Guigues (died 1137),
prescribed, besides the usual monastic
vows, eternal silence and solitude, Me-
clinical labors and copying of books, to-
gather with religious worship, constituted
their occupation. They observed a strict
temperance, and submitted to bleeding
five times a year. In 1170, they were
confirmed by the pope. In the following
centuries, they received additional stat-
utes, which forbade altogether the eating
of flesh, and allowed them to speak only
during certain hours on Thursdays and
the days on which the chapter met.
With increasing wealth, however, many
embellishments were added to their soli-
tary life, as the great Chartreuse, near
Grenoble, and their elegant palace at Na-
ppes, prove. The monks were, in general,
well informed, hospitable, and remarkable
for their neatness. Excessive penance
was interdicted, but their laws were ex-
ceedingly severe against disobedience.
Their habit was entirely white within,
covered with a black mantle. The lay
brothers were distinguished by the beard
and a shorter scapulary. The Cartus-
ian pans originated in 1616. They were
dressed in white, like the monks, with a
black veil. They obtained permission to
dine in common, and to interrupt their
silence more frequently. The general of
the whole province was always the vicar of
the Chartreuse at Grenoble. In the mid-
dle of the 18th century, the Carthusian
monks occupied 173 monasteries, of which
75 were in France, the others mostly in
an erect position, the compression of these effects of concussion from jumping, from falls, &c., are weakened and destroyed before they can be propagated to the head. When the body has been long in weakening the support that is afforded to properties and appearance of cartilage of a peculiar substance, partaking of the great elasticity to the spine, by which the effects of concussion from jumping, from falls, &c., are weakened and destroyed before they can be propagated to the head. Hence a person is taller when he rises in the morning, than after sustaining the fatigues of the day, and the difference has sometimes amounted to an inch. Cartilages are sometimes interposed between the articular surfaces of bones, where they fill up irregularities that might otherwise impede the motions of the part, and increase the security of the joint by adapting the articular surfaces to each other. These surfaces are, in every instance, covered by a thin crest of cartilage, having its surface most exquisitely polished, by which all friction in the motions of the joint is avoided.

Cartilage has many significations. In painting, it denotes a sketch on thick paper, pasteboard, or other material, which is used as a model for a large picture, especially in fresco, oil, tapestry, and, formerly, in glass and mosaic. In fresco painting, cartoons are particularly useful; because, in this, a quick process is necessary, and a fault cannot easily be corrected. In applying cartoons, the artist commonly traces them through, covering the lack of the design with black lead or red chalk; then, laying the picture on the wall, or other matter, he passes lightly over each stroke of the design with a point, which leaves an impression of the color on the plate or wall; or the outlines of the figures are prickcd with a needle, and then, the cartoon being placed against the wall, a bag of coal-dust is drawn over the holes, in order to transfer the outlines to the wall. In fresco painting, the figures were formerly cut out, and fixed firmly on the moist plaster. The painter then traced their contour with a pencil of wood or iron; so that the outlines of the figures appeared on the fresh plaster, with a slight but distinct impression, on which the cartoon was taken away. In the manufacture of a certain kind of tapestry, the figures are still cut out, and laid behind or under the woof, by which the artist directs his operations. In this case, the cartoons must be colored. Of this kind are the cartoons which Raphael executed for pope Leo X, from which the famous tapestries of Raphael (see Tapestry and Raphael) in the Netherlands were woven. There were twelve of them, representing histories taken from the New Testament. Seven of them are still extant, and may be seen at Hampton court, near London. The best copy of them has been taken by Nicholas Dorigny, and the collection is called Pinacotheca Hamptoniana. (See Richardson's historical and critical description of them). Rubens bought these cartoons for Charles I, and king William built a gallery for them at Hampton court. The cartoon of the school of Athens, carried
to Paris by the French, and a fragment of the battle of Maxentius and Constantine, are preserved in the Ambrosian gallery at Milan. There are likewise cartoons by Giulio Romano in the Sala Borgia, by Domenichino and other Italian masters, who caused their pictures to be executed, in a great degree, by their scholars, after these cartoons. The value set upon cartoons by the old Italian masters may be seen by Giov. B. Armenini’s Precetti della Pittura (Venice, 1687, 4to.). In later times, large paintings, particularly in fresco, were not executed so frequently. The artists also labored with less care, and formed their great works more from small sketches. In modern times, some German artists have prepared accurate cartoons. Among them is Cornelius, whose cartoons, for his fresco-paintings in Munich, have acquired much celebrity. He prepared, too, a cartoon for the fresco picture representing Joseph interpreting the Dream. Overbeck, also, has made cartoons, from which he has painted the Seven Years of Famine, and the Selling of Joseph. The Seven Years of Plenty he executed, with the assistance of William Schadow and Phillip Veit. These representations of Joseph’s history, just mentioned, the late Prussian consul-general Bertholdy has caused to be executed in fresco, at his residence in Rome, by the above-named artists. For the villa Massini, near Rome, Overbeck has prepared cartoons representing scenes from Tasso’s Jerusalem Delivered; Julius Schnorr, illustrations of Ariosto, and Veit, scenes taken from Dante.

Cartoon, in architecture, sculpture, &c., denotes an ornament representing a scroll of paper, being usually in the form of a table, or flat member, with wavings, whereon is some inscription or device.—In heraldry; a name given to a sort of oval shields, much used by the popes and secular princes in Italy, and others, both clergy and laity, for painting or engraving their arms on.—In the military art; a wooden case, about three inches thick at bottom, and girt round with marine, holding 2, 3, or 400 musket balls, with 8 or 10 iron balls, weighing one pound each, to be fired from a mortar, gun or howitzer, for the defence of a pass, re- trenchedm, &c. It is also used for a cartridge-box, now employed mostly by the cavalry. The charge of a cannon is also sometimes called by this name.—Cartouche is likewise the name given by the French literati to that oval ring, or border, which includes, in the Egyptian hieroglyphics, the names of persons of high distinction, as M. Champollion has proved. This border was thought, at first, by Zoega, to include every proper name.

Cartouche, Louis Dominique. The pilfering propensities of this man, who was born at Paris, near the end of the 17th century, early showed themselves. Being expelled from school, and afterwards from his father’s house, for theft, he joined a band of rogues in Normandy, and then put himself at the head of a numerous company of bandits in Paris, over which he exercised the power of life and death. He was first apprehended in a tavern, in 1721, and brought to the Châtelet. On the rack, he named none of his accomplices. But when he arrived at the place of execution, where he was to be broken alive on the wheel, and found that his companions had not assembled to his rescue, he retracted, and named his accomplices, to gain a reprieve. His execution soon followed. Various authors have described his adventurous, and, in some respects, interesting life.

Cartridge; a case of paper, parchment, or parchment, fitted to the bore of firearms, and filled with gun-powder, to expedite the discharge of the piece. Cartridges are of two sorts, viz. ball-cartridges, used in firing balls, and blank-cartridges, used in firing without ball. Riflemen avoid the use of cartridges, because the cartridge injures the shot of a rifle. In most armies, a soldier carries 60 cartridges into battle.

Cartwright, Edmund, was born in 1743, in Nottinghamshire (brother of major John Cartwright, the well-known advocate of parliamentary reform), and studied at Oxford. His poems were very popular, especially a ballad entitled Armyn in and Elever, 1771. He was one of the principal contributors to the Monthly Review. He is also distinguished for his mechanical inventions. In 1783, he took out a patent for a weaving machine; for which he obtained from parliament a grant of £10,000, and was often rewarded with prizes for his inventions. For the last 30 years of his life, he was employed in plans for propelling carriages and boats by steam. He died in 1824.

Cartwright, John, an English gentleman, celebrated for his exertions in the cause of political reform, was born in 1740, at Marnham, Nottinghamshire, of an ancient family. His early education was rather deficient; but he made some progress in mechanics and practical mathematics. He entered the navy, and be-
CARTWRIGHT—CARVER.

came a first lieutenant in 1764. In 1774, his attention was turned to politics. In his Letters on American Independence, written in this year, he advocated a union between the colonies and the mother state, under separate legislatures, and argued this great question on the foundation of natural, inherent right; maintaining "that the liberty of man is not derived from charters, but from God, and that it is original in every one." In 1775, he was appointed major of the Nottinghamshire militia, and, after several ineffectual attempts, on the part of government, to remove him from that post, his dismission was finally accomplished, in 1792, in consequence of an act of parliament. In the course of having him with him in America; but major Cartwright, although always eager for promotion in the navy, refused the proposal, alleging that he could not fight in a cause which he disapproved.—From this time, he devoted himself to the two great objects of annual parliaments and universal suffrage. In 1779, he succeeded Constitutional Information, and was the author of a Declaration of Rights, distributed by the society, which, sir William Jones said, "ought to be written in letters of gold."—The French revolution was warmly welcomed by Cartwright, as by other friends of liberty. The alliance of the sovereigns, which soon followed, he considered equally irreconcilable with policy and national justice. The subsequent persecutions against the friends of reform, the fate of Muir and of Holt, occasioned no small dismay among the people. In the trials of Tooke, Hardy, Thewall and others, Cartwright took a great interest, was present as a witness, and displayed much openness, fearlessness and firmness. By his writings, public addresses, &c., he continued to promote the work of reform and constitutional liberty; and, as late as 1819, he was tried for conspiracy and sedition, for advising the inhabitants of Birmingham to send what he called their "legislatorial attorney" to the house; but he escaped with a fine of £100.—Major Cartwright was not a political reformer only. The plan of making the slave-trade piracy, is said to have been first developed in his Letters on the Slave-Trade. The information which he furnished to Daines Barrington respecting the possibility of approaching the north pole; his plan for a perpetual supply of English oak for the navy, which has since been partially adopted, and several other useful projects and inventions, are sufficient evidences of his enterprise, activity and diversified knowledge. He died in 1824, in the 84th year of his age. He has been described as alike just in all the relations of life, as a citizen, a politician, a husband and a friend; disinterested, firm and fearless; and Fox, upon presenting one of his petitions to the house, remarked, "He is one, whose enlightened mind and profound constitutional knowledge place him in the highest rank of public characters, and whose purity of principle, and consistency of conduct through life, command the most respectful attention to his opinions." The most prominent traits of his character are enterprise, firmness and perseverance. He was a fruitful writer, quick, ingenious, powerful in argument, and sometimes eloquent. His language is plain, pure and strong.

CARVER, Jonathan, was born in Connecticut, in 1732. He embraced a military career, and, in the French war, commanded with reputation a company of provincials, in the expedition across the lakes, against Canada. When peace was concluded, in 1763, captain Carver undertook to explore the vast territory which Great Britain had gained. His object was, to acquire a knowledge of the manners, customs, languages, soil, and natural productions of the nations and region beyond the Mississipp, and to ascertain the breadth of the continent by penetrating to the Pacific over its widest part, between N. lat. 43° and 46°. He accordingly set out from Boston in 1766, and, having reached Michillimackinac, the remotest English post, applied to Mr. Rogers, the governor, for an assortment of goods, as presents for the Indians dwelling in the parts through which his course was to be directed. Receiving a portion of the supply which he desired, and a promise that the residue should be sent to him at the falls of St. Anthony, he continued his journey. But, not obtaining the goods at the appointed place, in consequence of their having been disposed of elsewhere by those to whom the governor had intrusted them, he found it necessary to return to la Prairie du Chien. He then, in the beginning of the year 1767, directed his steps northward, with a view of finding a communication from the heads of the Mississippi into lake Superior, in order to meet, at the grand portage on the north-west side of that lake, the traders that usually come, about this season, from Michillimackinac, from whom...
he intended to purchase goods, and then
to pursue his journey. He reached Lake
Superior in good time; but, unfortunately,
the traders whom he met there could not
furnish him with any goods, as they had
barely enough for their own purposes;
and, in consequence, he was obliged to
return to the place whence he first de­
parted, which he did in October, 1768;
after remaining some months on the north
and east borders of Lake Superior, and
exploring the bays and rivers that empty
themselves into that body of water. He
soon after repaired to England, with the
view of publishing his journal and charts,
and of obtaining a reimbursement for the
expenses which he had incurred. Having
undergone a long examination before the
lords commissioners of trade and planta­
tions, he received permission to publish
his papers; but, when they were nearly
ready for the press, an order was issued
from the council-board, requiring him to
deliver immediately into the plantation­
office all his charts and journals. He
was, consequently, obliged to re-purchase
them, at a great expense, from the book­
seller to whom he had disposed of them­
a loss for which he received no indemni­
fication, but was forced to be satisfied
with that obtained for his other expenses.
He had fortunately kept copies of his pa­
ers, and he published them ten years
afterwards, in Boston, while in the situa­
tion of clerk of a lottery. Having sold
his name to a historical compilation,
which was published in 1773, in folio,
entitled The New Universal Traveller,
containing an account of all the empires,
kings and states in the known world,
he was abandoned by those whose duty
it was to support him, and died in want
of common necessaries of life, in
1780, aged 48 years. Besides his trav­
el to Charles I, but still chiefly
resided at his seat at Burford, near Ox­
ford, which made a kind of academy
of learned men, being continually sur­
rrounded by the most eminent men of the
neighboring universities. Here it was
that Chillingworth composed his famous
work against popery; and questions of
morals, theology and literature were dis­
cussed, in a congenial circle, with the
utmost freedom. Lord Falkland himself
was deeply read in works of controversy;
but in him they produced only strictness
of principle, and an aspiration after per­
fecion, without debasing the man in the
exaltation of the scholar. In 1683, he
joined the expedition against Scotland;
and, in 1640, his peerage being Scoto, he
was chosen member of the house of com­
mons for Newport, in the Isle of
Wight. In the first instance, like many
of the most honorable characters of the
day, he warmly supported parliament.
He spoke with severity against Finch and
Stradlond, and was so disgusted with the
proceedings of Laud, that he concurred
in the first bill for depriving the bishops
of a vote in the house of lords. A strong
attachment, however, to established forms,
and some doubts of the ultimate objects
of the parliamentary leaders, caused him
to retract; and he afterwards strongly op­
posed the same measure. He still, how­
ever, kept at a distance from the court;
but his high character rendered it so great
an object to gain him over to the king's
service, that at length he was induced to
accept a seat in the council, and the office
of secretary of state. While in office, he
refused to employ spies or open suspected
letters. He very decidedly embraced
the party of the king, when hostilities com­
cenced, and attended him at the battle
of Edge-hill, and the siege of Gloucester.
A view, however, of the evils impending
over the country, and, very probably, a
conviction of sinister objects on both
sides, broke his spirits. He would fre­
quently sit abstracted among his friends,
and, sighing deeply, exclaim, "Peace,
peace!" and exhibit every sign of grief
and anxiety. His closing scene almost
proved a determination to die in battle, as
he volunteered his services at the battle
of Newbury, without a command, and,
putting himself in the front rank of lord
Byron's regiment, was struck from his
horse by a musket-shot, and was found,
the next day, dead upon the field.—Such
was the fate of lord Falkland, at the age
of 34; and, while the universal praises
CARY—CASANOVA.

Much owing to the elaborate character
drawn of him by his friend Clarendon,
there can be no doubt of the strict integ­
rity of his character and intentions. As
a man of active talent, he claims little ad­
miration, and was evidently framed for
that life of studious retirement and men­
tal culture in which he so much delight­
ed. One of his sayings marks his taste
and character—"I pity unlearned gentle­
men on a rainy day." Lord Falkland
left behind him several published specu­
cles and pamphlets on political and theologi­
cal subjects, as also a few poems.

CARYATIDES; a kind of pillars, which
represent the upper part of female bodies.
The name is of Greek origin. The god­
ess Diana, who had a temple in Karyatis,
a Peloponnesian city, was, for this reason,
called Karyatis. In honor of her, virgins
danced in a festive procession, on the
feast of Karyatis, which suggested to
architects the idea of adopting the image
of virgins in a kind of column which
ornamented the Pantheon. Thus Lessing
explains the name and form of the Caryat­
dides. Another explanation of the origin
of Caryatides is the following: The in­
habitants of Carya, a city of Pelopon­
nesus, allied themselves with the barbar­
ians in the Persian war. The Greeks,
on the successful termination of that
struggle, exterminated the males of Carya,
and reduced all the women to slavery.
The captives, as a further mark of infamy,
were forbidden to lay aside the robes in
women in the servile office of support­
ing the male race. (See Architecture, i. 340.)

Casa, Giovanni della, an Italian poet
and orator, of an ancient and noble family
of Algola, near Florence, was born 1563.
studied at Bologna, Padua, Rome, and
entered, as an ecclesiastic, into the service
of the two cardinals Alessandro Farnese,
the first of whom, in 1534, ascended the
papal chair, under the name of Paul III. He
rose through various offices in the
church, till Paul IV made him his private
secretary. He died probably in 1536. His
most celebrated work is Galateo, ovvero
de Contenti, to which one, Degli uffizi
Communi tra gli Amici Superiori e Infe­
riori, forms a supplement. This last is
a translation of his Latin treatise, De Offi­
ciis talor Polentiarum et Tenatorum Amicis.
The best and most complete edition of
his works appeared at Venice, 1752, in 3
vols., 4to.

Casanova, Francis, a painter famous for
his battle-pieces, born at London, 1730,
going, while a boy, to Venice, where he
applied himself to the art of painting. He
afterwards obtained admission into the
academy in Dresden, and painted several
pieces for the prince Condé. The spirit
and liveliness of his coloring and execu­
tion cannot be surpassed. At the request
of Catharine of Russia, he painted, in Vi­
enna, a piece representing the victory of this
princess over the Turks, which she after­
wards put up in her palace. He was con­
stantly occupied with his art, and died at
Brühl, near Vienna, 1805. His brother
John, likewise a painter, was born 1729,
at London; died, 1785, at Dresden, where
he was professor and superintendent in
the academy of painting, and had instru­
ced many able pupils in his art. His work
on the Ancient Monuments of Art, pub­
lished in Italian, and also in German (Leip­
sic, 1771), is still in esteem.

Casa Nova, John James de Scingh; eldest brother of the preceding; born at Venice, 1725; known by his Memoirs as
an original and gay-tempered man, who
acted an interesting part in all situations,
amongst all classes of society, and in all
the large cities of Europe. His various
adventures are related by himself in a
most entertaining manner. They were
first published, in part, at Leipsic, 1726,
in a German translation. The French
original has since appeared. His father,
Cajetan John Casanova, a descendant of
the Spanish family of Palafox, falling in love
with a dancer, turned actor, but afterwards
united himself with the daughter of a
shoemaker, Fancini, who followed the pro­
cession of her husband. James Casanova,
their eldest son, received the rudiments of
his education in Padua, and made rapid
progress in the Latin language, as well as
in the other branches of learning. His
ardent temperament, early developed,
soon, however, involved him in many ad­
vventures, that served to sharpen his obser­
vation, and enlarge his knowledge of
human nature. He studied law, and, in
his 16th year, wrote two dissertations;
one, De Testamentis, the other on the
question, Utrum Hebrev possint constru­
cere voces Synagogae. His talent for
shining in society introduced him, at Ven­
ice, into the select circles, in which a re­
fined but frivolous tone of manners pre­
valied. The patriach of Venice gave
him the inferior ordination, and his first
sermon was received with general ap­
plause. But he failed in his second; and
from this period commences his restless
career, in which he became entangled in a series of love adventures, that can be understood only from his memoirs. He was arrested in Venice, comes into personal contact with pope Benedict XIV at Rome, goes to Constantinople, is in the military service at Corfu, and, in short, visits all the principal cities of Europe, being continually connected with the highest personages, is followed and caressed; till at last he accompanies the count of Waldstein to Dux, in Bohemia, where he becomes his librarian. He died at Vienna, in 1793. The escape of Casanova from the lead prisons of Venice was managed with admirable address and ingenuity. He has left several works in Italian and French, which give proof of his genius. His memoirs are a mirror of the manners of his time.}

Casas, Bartholomew de las, a Spanish prelate, was born at Seville in 1474, and, in his 26th year, accompanied his father, who sailed with Columbus, to the West Indies. Five years afterwards, he returned to Spain, and, pursuing his studies, entered the ecclesiastical order. He again accompanied Columbus in his second voyage to Hispaniola, and, on the conquest of Cuba, settled there, and distinguished himself by his humane conduct towards the oppressed natives, of whom he became, in a manner, the patron. He set at liberty the Indians who had fallen to his share in the division; and so much was he interested for them, that, in 1510, he went to Spain to lay a statement of their case before King Ferdinand, whose death, at that time, prevented any measures for their redress. The regent, cardinal Ximenes, however, appointed a commission to examine circumstances upon the spot, and, accordingly, Las Casas was to accompany them, with the title of protector of the Indians. The commissioners found that it was impossible to liberate the Indians, and therefore endeavored to secure them humane treatment; but Las Casas, still dissatisfied, demonstrated so warmly, that he was obliged to take refuge in a convent, from the rage of the planters. He again returned to Europe, and, on the accession of Charles V, in consequence of his representations, the council appointed a chief judge, to reexamine the points of controversy between the partisans of Indian liberty and the colonists. Las Casas, by a singular inconsistency, in his zeal for the Indians, became the author of the slave-trade, by proposing to purchase Negroes from the Portuguese in Africa, to supply the planters with laborers, of the want of whom they complained; and this was unfortunately put into execution. He next applied for a grant of an unoccupied tract, in order to try his own plan with a new colony. This he at length obtained, and, with 200 persons, whom he persuaded to accompany him, landed at Porto Rico in 1521, but found that an expedition was advancing to ravage this very tract, and convey its inhabitants to Hispaniola as slaves. He endeavored in vain to prevent the threatened danger, and, with the few who still adhered to him, returned to Hispaniola to solicit succor. During his absence, the natives attacked the colonists with such success, that, in a short time, not a Spaniard remained in that part of South America. Las Casas, in despair at the failure of his project, retired to the Dominican convent at St. Domingo, and assumed the habit of the order. Notwithstanding his retirement, his zeal in the cause of the Indians did not abate; and, being sent on a mission to Spain, by a chapter of his order at Chiapa, in 1542, he pleaded their cause with his proudest warmth, and composed his famous treatise Brevisima Relacion de la Destrucion des Indies, in which he exposed the cruelties practised by the Spaniards. His unceasing perseverance at length obtained a new set of laws and regulations, by which the natives were greatly relieved. In 1544, he returned to America as bishop of Chiapa, and continued there until 1551, when he resigned his bishopric, and again returned to Spain. He died at Madrid in 1556, in the 73d year of his age. Besides the treatise abovementioned, he was also the author of a treatise, in Latin, on the question—Whether sovereigns may in conscience, by virtue of any right, alienate their subjects from their crown, and transfer them to the dominion of any other lord? which difficult question he treats with great freedom, spirit and delicacy. He also composed...
several works which have never been
published, among which is a General
History of the Indies, which was a great
assistance to Antonio de Herrera in his
history. All his works evince profound
learning, and solid judgment and piety;
and, notwithstanding his great inconsist­
cency in regard to the Negroes, he must
be regarded as a very benevolent man,
and a lover of mankind.

Casaubon, Isaac de (commonly called
Casaubonius), born Feb. 18, 1551, at Ge­
neva, of a family from Dauphiny, was
educated by his father, a clergyman. In
his 9th year, he spoke Latin fluently. In
his 19th year, he entered the university at
Geneva, where he studied jurisprudence,
theology, and the Oriental languages, and,
in 1572, succeeded Portus as professor of
the Greek language. He here married
the daughter of Henry Stephens, and
published, every year, editions of Greek
and Latin authors, with critical notes and
translations. In 1576, he accepted a pro­
fessorship of Greek and belles-lettres at
Montpellier, but held it only two years.
Henry IV invited him to Paris. His re­
gious principles (the same as those for
which his father had left his country), the
jealousy of the other professors, and per­
haps his rather unyielding character, were
the occasion of many unpleasant occur­
rances, for which, however, he was in­
demnified by the office of royal librarian.
After the death of Henry IV, he followed
his father to the scaffold, deprived
of his income. Still he rejected the
proposal of Cromwell to write the history
of his time, as also the invitation of queen
Christina to live in Sweden. On the
return of the Stuarts, he was rewarded
for his loyalty by restoration to his place
in the church, which he held till his death,
1671. His learning was various and ex­
tensive, but not so profound as his fa­
ther's. He published, besides his theo­
logical works, observations on several clas­
cic authors; e. g., Terence, Epictetus,
Florus, Polybius, &c.

Casco Bay; a bay in Maine, between
cape Elizabeth on W. S. W. and cape
Small Point on E. N. E. Within these
capes, which are about 20 miles apart,
there are about 300 small islands; most
of which are cultivated, and are much
more productive than the main land on
the coast of Maine. Portland harbor is
on the W. side of the bay.

Case, Action upon the (Actio super
causam) is a general action, given for the
redress of a wrong done any man without
force, and not especially provided for by
law, in order to have satisfaction for dam­
age. This is called an action on the case,
because the whole cause or case is set
down in the writ; and there is no other
action given in the case, except where
the plaintiff has his choice to bring this
or another action. This action lies in a
variety of instances; as for words spoken
or written, which affect a person's life,
reputation, office or trade, or tend to his
loss of preferment in marriage or service,
or to his disinheritance, or which occa­
sion him any particular damage. Action
on the case likewise lies upon an as­
surance, (q. v.) It lies, also, in all in­
stances wherein no general action could
be framed; e. g., against carriers; against
a common innkeeper, for goods stolen in
his house; for deceit in contracts, bar­
gains and sales; for neglect or mal­
feasance; for injuries done in common
for malicious prosecution and false arrests;
against sheriffs, for default in executing
writs, permitting escapes, &c.; for con­
spiracy, nuisances, &c. &c.

Case, in grammar. (See Language.
Case-hardening is a process by which
iron is superficially converted into steel,
in such articles as require the toughness
of the former, conjointly with the hard­
ness of the latter substance. The articles
intended for case-hardening are first manu­
CASE-HARDENING—CASHMERE GOAT.

...coal in powder, to undergo cementation. Immersion of the heated pieces into water hardens the surface, which is afterwards polished. Coarse files and gun-barrels are among the articles most commonly case-hardened.

CASE-HARDENED (from the Spanish case, a house, and madre, to kill), in fortification; vaults which are proof against bombs, under the main wall, particularly in bastions, for the purpose of defending the mouth of a fortification, also for making countermines. They serve, at the same time, as a place for keeping the heavy ordnance, and, in case of necessity, as habitations for the garrison.

CASE-SHOT, in artillery, is formed by putting a quantity of small iron balls into a cylindrical tin box, called a canister, that just fits the bore of the gun. In case of necessity, a cylindrical tin box, called a canister, is filled with broken pieces of iron, nails, stones, &c. The case is closed at both ends by wood. Shot of this sort are thrown from cannons and howitzers. In sieges, sometimes, instead of cases, bags are used. This kind of shot is very injurious to the enemy, because the balls contained in the canister spread, diverging in proportion to the distance. The amount of divergence is, to the distance which the shot reaches, generally in the proportion of 1 to 10; thus, at the distance of 600 paces, they make a circle of 60 paces diameter. The canister used in the Prussian army contain balls of 1, 3, 4, 6, 8 and 12 ounces and of 1 pound. The distance which the shot will reach varies according to the weight and number of the balls. A six-pounder shoots canister balls of 1 ounce from 200 to 500 paces; twelve and twenty-four-pounders shoot balls of 1 pound 500 to 1000 paces. The number of the balls varies according to their weight.

CASES, Emanuel, count of. (See Los Casas.)

CASHMERE (17,291 sq. miles, 2,000,000 inhabitants) in Hindustan, now a province of the Afghan state of Cabul, in Asia, is a very celebrated valley, surrounded by the gigantic mountains of Asia, the Himalaya and Hindoo Koh, and traversed by the river Behat or Chelum (formerly Hydaspes). From three sides, seven passes only lead to this region; to the east, the Himalaya presents an insurmountable barrier of snow. The splendor and sublimity of the diadem of snow-capped mountains, the beauty and richness of these heights, which form the ascent to the higher peaks, it is impossible to describe. The elevated situation of the valley, and the mountains of snow which surround it, render the climate rather cold; but it is, on the whole, moderate and mild. This region, so rich in romantic scenery, is watered by numerous streams, and is blessed with an abundance of the finest productions. The Asiatics, therefore, call it the paradise of India, the flower-garden, and the garden of eternal spring. The hills are covered with forests and Alpine pastures; at the foot of these are fields of corn; along the sides of the rivers, rice is planted; rich orchards extend over the foremost range of hills; mulberry trees are cultivated in abundance, for the support of silk-worms, and are entwined with vines, from whose grapes wine, very similar to Madeira, is prepared. The fruits of warm climates do not ripen here. The valley is famous for its flowers, with which all the gardens and meadows abound. Violets, roses, narcissuses, and innumerable European flowers, besides many that are not known in Europe, grow wild. The inhabitants are Hindoes, of the religion of Brahma, although they are under the dominion of the Afghans, who profess the Mohammedan religion. Their language is a dialect of the Sanscrit. They manufacture their celebrated shawls in great perfection. The wool which they use for this purpose comes from Thibet and Tartary, in which countries, only, the goat, from which it is taken, is said to thrive. About 80,000 shawls are made yearly, in 15,000 looms, each of which employs 3 workmen. The capital, Cashmere (likewise Serinagur), the largest town in the whole empire of Afghanistan, is situated on the Behat, and contains 300,000 inhabitants.

CASHMERE GOAT, a nobler species of the common goats, is descended from the goat of Thibet, which pastures on the Himalaya. The climate in Thibet is subject to sudden changes. There is little rain, but much snow, as the cold in winter is below the freezing point. Thibet is situated at the northern descent of the Himalaya mountains, and Cashmere at the southern; hence the latter is a little warmer than Thibet. In Thibet, this goat is a domestic animal. It is not allowed a very luxuriant pasture. The favorite food of these animals is a kind of aromatic plants, rue and heath. The people of Thibet give their goats, at least once a week, some salt, which has always proved a useful accompaniment to the customary food of these animals. If they are transferred from their cold, mountainous abode into a warmer country, the
natural consequence follows, that the wool becomes inferior in quantity and fineness. It grows, also, very slowly in the warm part of the year, and more vigorously as the cold season approaches. The head of the Asiatic goat is large, the horns situated backwards, and somewhat curved, the legs slender. The colder the region where the animal pastures, the heavier is its fleece. Proper food and careful tending increase the fineness of the wool. Yearlings, as in the case with the Merino sheep, afford the finest wool.

The goats which pasture in the highest vales of Thibet have a bright ochre color. In lower grounds, the color becomes of a yellowish-white, and, still farther downwards, entirely white. The highest mountains of the Himalaya, inhabitable by man, contain also a kind of goats with black wool, which, in India, and in the mountainous country of the goats, obtains the highest price, as a material for shawls. The goats of Thibet and Cashmer have the fine curled wool close to the skin, just as the under-hair of our common goat lies below the coarse, upper-hair. The wool is shorn in the spring, shortly before the warm season—the time when the animal, in its natural state, seeks thorns and hedges in order to free itself from the burden of its warm covering. All the hard and long hairs are picked out most carefully. The wool, thus purified, is washed, first in a warm solution of potash, and afterwards in cold water, in which process felting must be carefully avoided. It is then bleached upon the grass, and carded for spinning. The shawl wool is three times dyed—before carding, after spinning, and in the shawl. The Asiatics avoid spinning the wool hard, in order that the shawl may be soft. They use a spindle, which consists of a ball of clay, with an iron wire attached. The finger and the thumb of the spinner are kept smooth by steatite powder. A large shawl, of the finest quality, requires 5 pounds of the wool; one of inferior quality, from 3 to 4 pounds. Main, in London, has invented a machine, which spins this wool, in a very simple way, finer than can be done by the best spindles of Thibet, and, at the same time, of a finer thread. The flesh of the Cashmere goat tastes as well as that of the common one; and its milk is as rich, if it is well tended. Since 1820, this species has been introduced into France, and succeeds very well. The enterprising baron Ternaux (q. v.) ordered 1259 of these goats to be brought to France (1820), under the care of the celebrated professor of Oriental languages in Paris, Armand Joubert. Joubert found these goats already spread from Cashmere to the Ural, over Bucharia, in Independent Tartary, purchased them in the deserts there, and transported them over the Volga along the coast to Theodosia, in the Crimea, where they were put on board vessels to be carried to France. On the voyage, which lasted a long time, a great number died; there remained, however, more than 400 healthy animals, which were sent from Toulon and Marseilles, partly to the Pyrenees of Roussillon, partly to the lime-hills of Provence, and to the pastures of Alsatin and Rambouillet.

Cashma, or Cassine, or Kassina; a city in Africa, capital of a kingdom, between Bornou and Timbuctoo, 220 miles W. N. W. Bornou, 690 E. S. E. Tim­buctoo; lon. 11° 34' E.; lat. 16° 30' N. A large proportion of the country of Cash­ma consists of land of great fertility, interspersed with arid wastes. Cashma is level, and said to contain 1000 towns and villages. The monarch is called sultan of all Soudan, f.e. Negroland. The principal articles of traffic are senna, gold dust, slaves, cotton cloths, goat skins, ox and buffalo hides, and civet. Cashma has no salt lakes or mines, but is supplied with salt from Bornou.

Cashoo; the common name of the Anacardium occidentale of Lin.; a native of Bahar. The fruit of the tree is called cashoo-nut. The expressed juice makes a pleasant wine; and an aromatic and medicinal drug is prepared by a decoction and maceration of several parts of the tree, afterwards consolidated by evaporation. The Indians chew it. The Europeans employ it as a digestive, and a soother of coughs.

Cashmir III, the Great, king of Poland, son of Uladislaus Loketek, distinguished himself by his valor, under the reign of his father, who had commissioned him to take revenge on the knights of the Teutonic order; and, that he might learn the art of governing, made him regent of Great Poland. In 1333, he ascended the throne, and had many contests with the Teutonic knights, made himself master of Little Russia, which had formerly belonged to Poland, conquered Silesia, repelled the Tartars, who had advanced to Poland, and the Bohemians, who attempted to gain possession of Silesia, as a fief of Bohemia. He died in 1370, without children, having named a son of the
king of Hungary his successor, in 1339. He caused a new code of laws to be compiled, and protected the peasants with much energy, on which account he was called the peasant king. He had a great number of mistresses, among whom was a Jewess, named Esther, who procured for her nation those liberties which they enjoy in Poland to the present day. With Casimir, the line of the Piastis, which had ruled in Poland for 523 years, became extinct. From that time, the Poles chose foreigners for their kings, and thus laid the foundation of the troubles which distracted the kingdom till its final ruin.

Casino, in Germany, is used to signify a clubhouse. They are now to be found in almost every place of middling population.

Casiri, Michael, a learned Orientalist and Syro-Manonite clergyman, was born at Tripoli, in Syria, 1710, came to Rome, where he studied in the college of St. Peter and St. Marcellino, and, in 1734, entered the clerical profession. The following year, he accompanied the learned Assennani to Syria, where he was going, at the command of the pope, to attend the synod of the Maronites, and, in 1738, gave, at Rome, an exact account of the religious tenets of the Maronites. He afterwards taught, in his monastery, the Arabic, Syrian and Chaldee languages, theology and philosophy; and, in the year 1748, was invited to Madrid, where he was appointed to an office in the royal library. In 1749, he devoted his attention, by the king’s orders, to the library of the Escorial, of which he subsequently became the superintendent. Here he collected the materials for his celebrated work, Bibliotheca Arabico-Hispana (Madrid, 1760—70, 2 vols., folio), which enumerates, in 1551 articles, the manuscripts of the Escorial library, perhaps the richest in Europe in Arabic manuscripts. This work, though not entirely free from errors, contains very important information and valuable extracts, and is indispensable to every Orientalist. Casiri died at Madrid in 1791.

Caspian Sea; a large lake, or inland sea, in Asia; bounded N. by Russia, E. by the Kaspia, S. by Persia, and W. by Persia, Circassia and Russia; 446 miles in length from N. to S., and from 100 to 255 in breadth; supposed to be the largest lake in the eastern part of the globe. The water is less salt than that of the ocean, of a bitter taste, and of an ochre color, without ebb or flow. In some places it is exceedingly deep, yet it abounds in shallows, so as to prevent the navigation of ships which draw more than 9 or 10 feet of water. Among the rivers which flow into it are the Volga, Ural and Kur. It has no outlet. The fisheries here, which are very valuable, occupy and train many seamen. The coasts are divided among the Russians, Persians and Tartars. The Caspian sea was, by the ancients, called the Hyrcanian sea; the Tartars call it Ahdingis, i.e. the White sea; the Georgians call it the Karabogaski sea; and by the Persians it is styled Gursen. The level of the Caspian sea is 375 feet lower than that of the ocean. The Truchmenes, on the shores of the Caspian sea, assert, that the lake Kuli-Duria, which is connected with the gulf of Karabogaskoi, a part of the Caspian sea, contains a whirlpool, which takes in the water of the latter. In fact, the current from the Caspian sea into the gulf of Karabogaskoi is very great. The most recent information respecting the shores of the Caspian sea is that given by Murawiew in his Journey to Khiva, in the year 1819, in Russian.

Cassander, George, born in 1515, in the island of Cadsand, or Cassand, near Bruges, in the Netherlands, from which he received his name, is celebrated for his endeavors to settle the disputes between religious parties. At Bruges, Ghent and Cologne, he studied, and taught philology, the canon law and Catholic theology, and accepted no public office, on account of his ill health. In 1561, he published a work designed to allay religious disputes, in which he considered Calvin for his violence and intolerance drew upon him the attacks both of Calvin and Beza. In 1564, he was employed by the duke of Cleves to convert the Anabaptists. The emperor Ferdinand I invited him to Vienna, to compose articles of union between the Catholics and Protestants. These he published, under Maximilian II, the successor of Ferdinand—De Articulis Religionis inter Catholicos et Protestantes Controversis ad Imp. Ferd. I, et Max. II, Consultatio, ed. Hug. Grot. (1642). Though a sincere Catholic, he founded his opinions on the doctrines of the old Christian fathers, and showed his concurrence with the Protestants, in regard to fundamental doctrines, by proposing communion under both forms, the marriage of priests, the abolition of image-worship, the reform of many abuses, and a modification of the Catholic system. But he asserted the supremacy of the pope, supported
doctrine of transubstantiation, and the importance of the sacrament, ex opere operato. His proposals were not relished by the zealots of either party. He died at Cologne, in 1566, with the reputation of a learned and liberal theologian.

Cassandre, also Alexandra; daughter of Priam and Hecuba, and twin-sister of Helenus. Both children, according to tradition, were playing in the vestibule of the temple of the Thymbrean Apollo, not far from Ilium; and, having stayed there too late to be carried home, a couch of laurel twigs was prepared for them, for the night, in the temple. When the nurses went to them the next morning, they found two serpents at the side of the children, which, instead of injuring them, lamely licked their ears. This miracle produced a still greater one: the hearing of the children was rendered so acute, that they could distinguish the voices of the gods. Cassandre subsequently spent much of her time in the temple of Apollo, who, becoming enamored of her charms, disclosed to her all the secrets of the prophetic art, and, in return, demanded her love. But Cassandre, when her curiosity was satisfied, refused the dishonorable reward. Apollo, incensed at this, put a curse on her prophecies, that they should never find belief. She frequently and continually foretold the destruction of Troy, and warned her countrymen in vain against the deceitful horse. When Troy was conquered, and Cassandre, with the other maidens, fled to the temple of Minerva, Ajax tore her from the altar, deflowered the virgin in the sacred place, and dragged her away to the other female slaves, with her hands tied. On the division of the booty, she fell to Agamemnon, who, as his slave and mistress, to Mycene. Clytemnestra murdered them both. Agamemnon had twins by her—Teledamus and Pelops. The ancients regarded this rape of Cassandre as a most infamous atrocity. It has often afforded subject to poets and sculptors. The Locrians, the countrymen of Ajax, were afflicted, on this account, for many years, with storms, and their country was desolated with the plague.

Cassas, Louis Francis, born in 1759; inspector and professor in the Gobelin manufactury, celebrated as a draughtsman, is a pupil of Lagrenée, junior, and Le Vien. He travelled as companion of the count of Choiseul-Gouffier, about 1770, over Asia Minor, Palestine, Syria, a part of Egypt, Istrin, Dalmatia, and Trogies. He compared the present topography of those places with the accounts of the ancients, took exact measurements of the finest remains of architecture, made drawings of the most remarkable places with equal taste and accuracy, and published his labors, engraved by the best masters, in splendid editions. His Voyage Pittoresque de la Syrie, de la Phénicie, et de la Palestine, et de la Bassie Egypte (1782 in 4°, 30 plates, folio, text by De la Ponce du Theil), is fully described by Landon (ii., 136—6). The original drawings are preserved in the king's library at Paris. In his Voyage Pittoresque de l'Istrin et de la Dalmatie, he has inserted a journal and a short history of this province, digested by Joseph de Valleré (Paris, 1804, grand folio, with engravings).

Cassation; a term used in the courts on the continent of Europe. It is derived from the middle ages, and signifies the annulling of any act or decision, if the forms prescribed by law have been neglected, or if any thing is contained in it contrary to law.

Cassation, Court of (Cour de Cassation); one of the most important institutions of modern France, which gives to the whole jurisdiction of that extensive coherency and uniformity, without endangering the necessary independence of the courts. It was established by the first national assembly, and has been preserved, in every essential respect, under all the changes of the revolution and restoration. It has been maintained even in those districts which, by their union with France, became subjected to French laws, but, by the peace of Paris, have become part of the Prussian monarchy. In France, as early as the reign of Louis IX (1226—1272), petitions were presented to the king by appellants from the decisions of the courts. In later times, appeals to the parliaments, as the highest courts of the kingdom, came into use, and their decisions were not liable to be set aside by the ordinary forms of law. Yet the parties were allowed to dispute even these decisions, if they were founded upon errors of fact, or violated undisputed principles of law; and, by an ordinance of 1392, it was provided, that the parties should be allowed royal letters for the defence of their rights against the decisions of the supreme courts (lettres de grâce de droit contre les arrets), which should be issued from the chancery (by the chancellor of France). The case was then sent back to the parliament for further investigation, but was examined and decided in the
presence of the king himself or of a special commissioner. An abuse, however, crept in, of transferring these cases to the royal council, where they were decided by officers called maîtres des requêtes. These letters received the name of lettres de proposition d'erreur, and, during the civil commotions at the end of the 14th century, began to be more frequently presented to the council, which, as soon as one party complained of the partiality of the parliaments, transferred the case to its own bar, and obstructed the course of justice by lettres d'état (suspensions of the process, on the pretext of the absence of one of the parties in the service of the king). Under the chancellor Poyet (1538—1549), this abuse reached its highest pitch; but the chancellors Olivier (1545—1551) and Hôpital (1550—1558), the two great reformers of French jurisprudence, limited the use of these lettres, till, by the ordinance of Blois (1570), all the provisions against the decisions of the parliaments were reduced to these three—the proposition d'erreur, for an error of fact; requête civile, to restore the parties to their former condition, on account of the fraud of one of the parties, or the mistakes of the attorney; and cassation (petition for abrogation), for violation of forms or settled principles of law. By the famous ordinance of 1607, the first of these provisions was abolished, but the province of the requête civile and cassation was enlarged, and more precisely defined. The former was always brought before the court itself, and decided there, the latter before the council. For this purpose, in the conseil privé, or conseil des parties, a particular committee was formed, consisting of the chancellor, the four secretaries of state (ministers of the departments), the council of state, and all the maîtres des requêtes (in 1789, 78 in number). The decisions of this committee were too much influenced by the will of the king and the ministers, and by various other circumstances, so that they did not enjoy great respect, though they often exposed acts of great injustice on the part of the parliament, and other high courts. It was therefore abolished in the first national assembly, and its place supplied by an independent court—the tribunal de cassation (law of Nov. 27, 1790), which was retained in all the constitutions, and re-established, under the imperial government, (1804), the name court of cassation, which it still retains. It consisted, according to the organization of 1800, of 45 members, chosen from the senate, on the nomination of the consuls, who elected their own president from among themselves. The appointment of president was afterwards vested in the emperor. In the Charte Constitutionnelle of 1814, the right of appointing the counsellors was vested in the king; but they are not removable. The minister of justice or keeper of the seals (garde des sceaux) has the right of presenting when the tribunal exercises its right of censorship over the cours royales: it has, besides, a first president and three presidents of sections. This court never decides on the main question at issue, but on the competency of the other courts, and on the petitions to have their decisions reviewed or annulled, and assigns the question to another court, if a decision is to be set aside for an evident violation of the forms or the principles of the law.

For this purpose, it is divided into three sections:—the section des requêtes, which decides on the admissibility of the petitions in civil cases; the section de cassation civile; and the section de cassation criminelle. After a decision has been reversed, if a second court decides the same case in the same way, and an appeal is entered again, the court of cassation must either request an authentic explanation of the law from the government, or, at least, all the three sections must unite, to pronounce a second reversal, or cassation; and if a third decision is the same as the preceding, a repeated petition for a reversal makes the authentic explanation indispensably necessary. The sentences of the court of cassation are not only recorded in the journals of the courts, the decisions of which are reversed, but published likewise in an official bulletin, by which consistency and uniformity are preserved. The tribunal de cassation has enjoyed, from its commencement, the respect and confidence of France, and numbers among its members several of the most distinguished lawyers, as the president Henrion de Paney, the counselors Chabot, Merlin and Carnot.——For the Prussian province on the Rhine (the districts of Cleves, Düsseldorf, Coblenz, Aix-la-Chapelle, Treves and Cologne), by the ordinance of June 21, 1819, a court of revision and cassation was established at Berlin (consisting of a president and 16 judges, among whom is professor Savigny), which has under it the court of appeal at Düsseldorf (consisting of a president, together with 32 other officers), and six district courts (the former resembling the French royal courts, the latter the French tribunals of original jurisdiction).
CASSAVA, or CASSADA. The cassava or cassada (jatropha manihot) is a South American shrub, about three feet in height, with broad, shining, and somewhat hand-shaped leaves, and beautiful white and rose-colored flowers. It is a very remarkable circumstance, that the roots of the cassava, if eaten raw, are a fatal poison, both to man and beast, and that, when prepared by heat, they yield a safe and valuable food; on which, indeed, many, both of the Indian and European inhabitants of South America, almost wholly subsist. The roots are the only edible parts of the plant. These are white, soft and farinaceous, from one to two feet in length, and five or six inches in circumference. They are dug out of the earth, washed, stripped of their rind, and ground to a pulp. The juice, or cream, appears on the surface. This, being stirred until a thick white substance being constantly stirred, until, at length, it forms into grains about the size of sago. These become hard by keeping, and are the purest and most wholesome part of the cassava. The roots of another species of this shrub, called sweet cassava, are usually eaten with butter, after being roasted in hot ashes. They have much the flavor of chestnuts, and are an agreeable and nutritive food.

Cassel, the residence of the elector of Hesse Cassel, lies on the Fulda; lat. 51° 19' 20" N.; lon. 9° 35' 18" E.; and has 13,866 houses and 23,300 inhabitants, among whom are 500 Jews. One part of the city is quite regular. The river Fulda is navigable at this place. The situation renders the climate pure and healthy. It has 19 squares, 9 churches, and many public buildings, containing highly valuable libraries, collections of works of art, &c. The gallery of paintings contains some famous masterpieces. An observatory is likewise situated here. The city was much embellished under the government of Jerome, king of Westphalia, whose capital it was till the dissolution of this kingdom, in October, 1813. The old elector again took possession of it, Nov. 21, 1813. About a league distant is the summer palace, called Wilhelmskôle. Cassel has considerable manufactures.

Cassel (Hesse-Cassel). (See Hesse.)

Cassia. Wild cinnamon, or cassia, is the bark of a tree of the bay tribe (lauro cassia), which grows in the East Indies and China, and is distinguished by having spear-shaped leaves, each with three nerves. This bark was well known to the ancients, and highly esteemed by them. But since the use of cinnamon has been generally adopted, the cassa bark has fallen into disrepute, on account of its inferiority. It is thicker and more coarse than cinnamon, of weaker quality, and abounds more with a viscid, mucilaginous matter. For many purposes, cassia, as being much less expensive, is substituted for cinnamon, but more particularly for the preparation of what is called oil of cinnamon; and nearly the whole of what is at present sold under the name either of simple or spirituous cinnamon waters, is prepared from cassia. The barks as well as the bark of this tree are used in cooking, &c. Cassia is imported mostly from China.

Cassinia. (See Cassia.)

Cassinia; a name famous in the history of astronomy and geography for three generations.—1. Giovanni Domenico, born July 8, 1625, at Perinaldo, near Nov., studied at Genoa with the Jesuits. Chance turned his attention to astronomy, in which he made such rapid progress, that, in 1650, the senate of Bologna

COURT OF CASSATION—CASSINI.
CASSINI—CASSIODORUS.

bespok on him the first professorship of astronomy at the university. A merit, had been drawn by Ignatius Dante (1575), in the church of St. Petronia, in that city. In 1653, Cassini conceived the idea of extending and correcting it. In two years he completed this difficult task, the first fruits of which were more correct tables of the sun, a more precise determination of its parallax, and an excellent table of refractions. By an observation at Città della Pieve, he discovered the shadows cast by the satellites of Jupiter on the disk of that planet, when they were between it and the sun. By means of these, he corrected his theory of the motion of the satellites, and determined the period of Jupiter's revolution. At the same time, he made a number of observations on insects, which were published by Aldrovandi. In 1658, he published his Ephemerides of the Satellites of Jupiter. In 1673, Colbert prevailed on him to settle in France. He discovered four new satellites of Saturn, and the zodiacal light, proved that the axis of the moon is not perpendicular to the plane of the ecliptic, and showed the causes of her libration. The laws of this motion, which he determined with much accuracy, are one of his finest discoveries. He also wrote observations on the Indian calendar. The meridian commenced by Picard and Lalanne was continued by Cassini, in 1700, to the extreme limits of Roussillon, and, when measured 100 years later, showed a difference of only 21 toises. He died Sept. 14, 1712, having lost his sight some years before. Lalande gives a catalogue of his writings in the Bibl. Astronom. His first work was Observ. Cometa, Ann. 1652—53 (Modena, 1653, fol.). His Opp. Astronom. (Rome, 1656) contains a complete collection of his earlier works. His nephew, Cassini de Thury, has published his biography, written by Cassini himself, under the title Mémoires pour servir à l'Hist. des Sciences (4to.—2. James, son of the preceding, born at Paris, Feb. 18, 1677, was admitted into the academy of sciences in 1694. After several essays on subjects in natural philosophy, &c., he completed his great work on the inclinations of the orbits of Saturn's satellites and ring. His labors to determine the figure of the earth (q.v.) are well known. The first measurement of 1690 made the degrees of the meridian shorter towards the north than towards the south; whence it was concluded that the earth was an oblong spheroid. Cassini continued the measurement, and maintained this opinion in his work De la Grandeur et de la Figure de la Terre (Paris, 1720). In order to settle the question, the academy was commissioned, in 1733, to measure the whole length of France from Brest to Strasburg. Cassini directed this undertaking, but was led into some errors by the defective instruments of former observers. He died in 1784, at Thury. Besides the above-mentioned works, he wrote Elements d'Astronomie (Paris, 1740, 4to.), and Tables Astr. His eloge in the Mémo. de l'Acad. contains a biographical notice of him.—St. Cassini de Thury, Caesar François, son of the preceding, born June 14, 1714, member of the academy from his 22d year. He undertook a geometrical survey of the whole of France, embracing the determination of the distance of every place from the meridian of Paris, and from the perpendicular of that meridian. When the support of the government was withdrawn, in 1756, Cassini formed a society for advancing the requisite sums, which were to be repaid by the sale of the maps constructed from the survey. The work was almost entirely finished, when he died (1784), leaving many writings relating to his great topographical undertaking.—4. Jacques Dominique, count, son of the preceding, born at Paris, 1740, is director of the observatory, and member of the academy, and is a statesman of ability, as well as a mathematician. In 1789, he presented to the national assembly the Carte Topographique de France, in 180 sheets, now increased to 182, by the addition of the Carte des Assemblées des Triangles. The Atlas National is a reduction of it on a scale of one third, prepared by Duncey, and other engineers. Cassini was arrested by order of the revolutionary tribunal. He escaped with life, but lost the copperplates of the Carte de France, which had cost half a million francs. There is a second reduction of the large map, being only a fourth of the size of the original, in 24 plates. CASSUSO; a game at cards, in which four are dealt to each player, four being also placed on the board. The object is to take as many cards as possible, by making combinations. Thus a ten in the player's hand will take a ten from the board, or any number of cards which can be made to combine into tens. The greatest number of cards reckons three points, and of spades, one; the ten of diamonds, two; the two of spades, one; and each of the aces, one. CASSIODORUS, Marcus Aurelius, a
CASSIODORUS—CASSOWARY.

Cassiderides, in ancient geography; a name given by Strabo to 10 islands, N. W. of Spain, in the open ocean, abounding in tin and lead. Strabo says the Phoenicians only visited them. There are no islands where he describes them to have been. They are, perhaps, the modern Scilly islands. It is probable that the ancient merchants kept their true situation secret from interested views, which, in those times, could easily be done.

Cassius, Longinus Caius, the friend of Brutus, was the questor of Crassus, and preserved the few troops of that general who escaped from the bloody battle with the Parthians. With these he defended Syria against the Parthians till the arrival of Bibulus. In the famous civil war that broke out between Pompey and Caesar, he espoused the cause of the former, and, as commander of his naval forces, rendered him important services. When Caesar, after the victory at Pharsalia, was in pursuit of Pompey, he advanced with a few vessels, while crossing the Hellespont, against a fleet of 70 sail commanded by Cassius, and called upon him to surrender. The latter, astonished by his daring courage, surrendered at his summons. But, when it became evident that Caesar was aiming at sole sovereignty, Cassius, who was a zealous republican, resolved to destroy the usurper, and executed his plan, with the aid of several fellow-conspirators, B. C. 44. He then, together with Brutus, raised an army to maintain his country's freedom. They were met by Octavius and Antony, who professed themselves the avengers of Caesar, at Philippi. The wing which Cassius commanded being defeated, he imagined that all was lost, and killed himself, B. C. 42. Brutus called him the last of the Romans. (See Brutus and Caesar.)

Cassowary (Casuarius, Briss.): a genus of birds, arranged by Cuvier in his family becippens, the first of the order grallae, waders, to which they are related solely by their long, naked, stilts-like legs, and long neck. In the form of the bill and their mode of living, they more closely resemble the gallinaceous birds. The shortness of their wings totally unfit them for flying; and it would seem impossible for nature to have furnished muscular power sufficient to move wings large enough to sustain their great weight in the air. Unlike other birds, their pectoral or wing muscles are comparatively slight and weak, while those of their posterior limbs are very robust and powerful.

Cassiopeia; daughter of Arabus, and wife of Cepheus, to whom she bore Andromeda. She dared to compare her beauty to that of the Nereides, who, enraged thereby, besought Neptune for vengeance. The god, in compliance with the request of the water-nymphs, laid waste the dominions of Cepheus by means of a deluge and a dreadful sea-monster. Thus it appears that in ancient times, as well as in modern, nations have had to suffer for the faults of their masters. Cassiopeia was the mother of Atymeneus by an intrigue with Jupiter.—In astronomy, Cassiopeia is a conspicuous constellation in the northern hemisphere, situated next to Cepheus. In 1572, a new and brilliant star appeared in it, which, however, after a short time, gradually diminished, and at last disappeared entirely. It was thought, at that time, by many persons, that this was the star which appeared to the wise men in the East. The constellation Cassiopeia contains 52 stars of the first six magnitudes.

Cassiquiare; a river of Colombia, being a large branch of the Rio Negro, and remarkable as forming a communication between the two great rivers, the Amazon and Orinoco. The Cassiquiari flows from the Orinoco, and joins the Rio Negro, which last is a large tributary of the Amazon. The reality of this communication, which had been previously asserted by the Jesuit missionaries, was confirmed by the celebrated traveler Humboldt.

Cassiodorus, the celebrated writer, born at Squillace (Syagrum), 450 A. D., or, as some say, 470, filled several public offices in Rome, and became secretary of the Ostrogoth king Theodoric, but, in 537, voluntarily retired to a monastery in Calabria, where he died, 577. He made the monks of his convent copy the manuscripts of the ancient authors, and his book De Septem Disciplinis liberalibus, in which he treated of the trivium and quadrivium, and inserted extracts from the ancient classic literature, was of much value in the middle ages. For Theodoric he also wrote his compilation of letters, Variorum Epistolarium Libri XII. He likewise composed Historia Gotlica (a History of the Goths), of which we have an epitome by Jornandes, and several theological works of little importance. His works have been collected by J. Curet (Venice, 1679, fol.; new edit. 1741).

Cassiquiarum, a river of America, flows between the two great rivers, the Amazon and Orinoco, and joins the Rio Negro, which last is a large tributary of the Amazon. Its situation secret from interested views.

Cassiope, at Philippi. The wing which Cassius commanded being defeated, he imagined that all was lost, and killed himself, B. C. 42. Brutus called him the last of the Romans.
CASSOWARY—CAST ENGRAVINGS.

The wings of the ostrich are of some assistance to it in running, but those of the cassowary are too short even to be of service in this way. Indeed, its whole plumage is so poorly supplied with feathers as to resemble, at a little distance, a coat of coarse or hanging hair. The cassowaries have three toes, all provided with nails. Two of the species of the genus are well known, the common cassowary (casuarius, B.; struthio casuarius, L.), inhabiting various islands of the Indian archipelago; and the emu (C. New Holland), or New Holland cassowary. The first species, called galeated or helmeted cassowary, has a laterally compressed beak, with a head surmounted by an osseous prominence, covered with a sort of horny jacket; the skin of the head and superior part of the neck is naked, of a deep-blue and fiery-red tint, with pendent caruncles, similar to those of the turkey-cock. There are some naked, rigid quills on the wings, which are used as weapons of defence. The inner toenail is the largest of all. The ostrich is the only bird which surpasses the cassowary in size and strength. From the form of its head, and bright eyes, the cassowary is of a fierce and threatening aspect. This, however, is not a true indication of its character, which is rather timid and shy. It is about 5 feet long, from the tip of the bill to the extremity of the longest claw. The head and neck together measure 18 inches, and the largest toe, including the claw, is 5 inches long. The claw of the inner toe is 34 inches long. All the feathers of the cassowary are of the same kind, being entirely designed for covering, and externally are all of one color. They generally grow double, having two long shafts growing out of a short one attached to the skin. The double feathers are all of unequal length, some on the rump being 12 or 14 inches long, while others are only 3. The claw of the inner toe is about a quarter of an inch thick at the base. The helmet is black in front and yellow behind. The eye is of a bright yellow, and more than an inch in diameter.—The anatomy of the cassowary differs very materially from that of the ostrich, which it resembles so much in general the garb and habits. The intestines are short, and the oocum small; there is no stomach intermediate to the crop and gizzard, and the clavicles are not larger in proportion than that of other birds. It feeds on fruits, eggs of birds, &c., but never on grain. It swallows its food with great voracity, and, like the ostrich, boils down bits of iron, broken brick, glass, &c., without injury. In fact, such substances perform the service, in the digestion of these great birds, that gravel does in that of ordinary fowls.—As might be inferred from its structure, the cassowary is a swift runner, and its mode of progression, being unsaddled by wings, is as peculiar as it is efficient. In running, the cassowary appears to strike out powerfully with one leg, so as to project its body violently forward with a bounding motion, far surpassing the speed of a horse. It also kicks violently when, in a state of captivity, it is provoked to anger, and can inflict a very severe blow. The galeated cassowary are of a grayish-ash color, verging to green, and are neither as round nor as large as those of the ostrich. The shell is not very thick, and is marked by numerous little deep-green tubercles. The largest of their eggs measure about 15 inches in length and 12 round.—The emu, or New Holland cassowary, differs from that of the old world by being much larger, and standing higher on its legs, being 7 feet 2 inches in length. The head is destitute of the helmet, and feathered throughout, except around the ear. The plumage is thicker, and the webs of the feathers more perfect. It has neither caruncles to the neck nor prickles on the wings. The nails of the toes are nearly equal. The legs are stout, similar to those of the galeated species, but jagged or dentated along the whole of their back part. The emu is swifter in running than the fleetest grey-hound. It has not yet been found anywhere but in New Holland. The flesh has a considerable resemblance to beef. The young of the New Holland cassowary are striped with white and brown.
alloy in a state of fusion, capable of taking, as it is stated, the finest impression. No sooner is one cast worn out, than another may immediately be procured from the original plate, so that every impression may be a proof.

CASTAGNO, Andrea del, an eminent painter, was born at the village of Castagno, in Tuscany, in 1409. Being deprived, when young, of his parents, who were extremely poor, he was employed by his uncle to attend the cattle in the fields, and, in that situation, by his surprising and untutored essays in the art, attracted the notice of Bernarettò de Medici, who placed him under the tuition of one of the best masters Florence then afforded. At first, he painted only in temper and fresco, and was in high reputation when Domenico Venetiano visited Florence, who had learned, from Antonello da Messina, the new method of painting in oil and varnish, till then unknown in Tuscany. The splendor of this new mode of coloring was very much admired, and, by a pretended friendship for Domenico, Castagno obtained his secret from him; but, not satisfied with this, he desired to be the sole possessor, and determined to murder his friend and benefactor. This he effected without any suspicion, and continued to practise his ill-acquired art with great success. The real author of this atrocious act was never discovered until Andrea made a full confession of his guilt, shortly before his death, which happened in 1480. The best of his remaining works are at Florence, in the church of St. Lucia de Magnuoli, and in the monastery degli Angeli. The latter contains a crucifixion, by him, painted on a wall.

CASTANETS; small wooden rattles, made in the shape of two bowls or cups, fitted together, and tied by a string, and then fastened to the thumbs. The fingers being rapidly struck upon them, a tremulous sound is produced, which marks exactly the measure of the dance. Something similar to this was the crotalos of the ancients, who also made use of small cymbals in their dances and festivals in honor of Bacchus. It is probable, however, that they had their origin in the East, and were brought by the Moors into Spain. Here, too, they received their name castanuelas, from being commonly made of the wood of the chestnut (castano), or from their color. They are still in use in Spain, and here and there in the south of France. The charm of variety has also procured for them a place in ballets and operas, as, for example, in Jean of Paris.

CASTANOS, don Francisco de, a Spanish general, born 1743, compelled the French general Dupont de l'Eclat to lay down his arms, July 20, 1808, in the Sierra Morena, and concluded with him the important capitulation of Baylen. He is descended from a distinguished family in Baeza, and was a pupil of the celebrated general count O'Reilly, whom he accompanied to Germany, where he studied tactics in the school of the great Frederick. In 1794, he served as colonel in the army of Navarre, under Caro. In 1798, he was made lieutenant-general, and soon after was banished, with many other officers, for enmity to the prince of peace. On the invasion of the French, he received, in 1808, the command of a division of the army, on the frontiers of Andalusia, towards which Dupont was preparing to advance his forces. With 9000 regular troops, and about 30,000 militia, he defeated general Dupont. (See Baylen.) He lost, however, a battle at Tudela (November, 1808). In 1811, the regency appointed him commander-in-chief of the fourth Spanish army, and governor of several provinces. He was now the companion in arms of the duke of Wellington, and displayed great military talent in the battle of Vittoria, which was, in part, won by his bravery and the valor of his troops. The regency deprived him of his command, and appointed him counsellor of state. He wrote to the minister of war, "I have the satisfaction of delivering up to field-marshal Freyre, on the frontiers of France, the command which I received before Lisbon, in 1811." On the return of Ferdinand, he was made captain-general of Catalonia, and had several orders conferred on him. In 1815, he commanded the army that was to invade France. In 1816, he resigned his commission. In 1824, he succeeded in defending himself from the charge of constitutional sentiments, was again appointed captain-general, and, in 1835, made counsellor of state.

CASTE; certain classes whose burdens and privileges are hereditary. The word is derived from the Portuguese casta, and was originally applied, by the conquers of the East Indies, to the Indian families, whose occupations, customs, privileges and duties are hereditary. This term has been sometimes applied to the hereditary classes in Europe; and we speak of the spirit or the prerogatives and usurpations of a caste, to express particularly that un-
natural constitution of society, which makes distinction dependent on the accidents of birth or fortune. The division into castes, among the people of the old world, comes to us from a period to which the light of history does not extend; hence its origin cannot be clearly traced: but it is highly probable that, wherever it exists, it was originally grounded on a difference of descent, and in the modes of living, and that the separate castes were originally separate races of people. The division into castes was nowhere so perfectly traceable, where it has existed from the earliest times, and has become blended with the political condition of the people, because it favors despotism, which is the prevailing form of government. Thus, in Persia, even before Zoroaster, there was a division into four classes or castes; priests (magi), soldiers, husbandmen, tradesmen. But the division into castes was nowhere so perfectly formed, and so entirely interwoven in the whole fabric of civil society, as in Egypt and India. In Egypt (q. v.), this division was perfected, as a political institution, in the flourishing period of the Pharaohs; and the lines of separation which had been drawn, in earlier times, by a difference of descent, and different modes of living, were then rendered still more distinct. The number of castes in that country was originally seven. The class of priests, who formed, in some respects, a highly-privileged order of nobility, and maintained possession of the offices of state, was the highest. Next followed the soldiers, who were divided into two classes, and whose occupation was hereditary. Of the remaining castes, the husbandmen, the watermen (who navigated the Nile), the interpreters (who arose subsequently to the rest, and sprung from the Greeks who were invited into the country), and the two castes of herdsmen, formed a gradation of ranks, the order of which is not known, any further than that the herdsmen were the lowest. Among these the swineherd was considered impure, and despised, and was excluded from the temples. In India, there were, state of progress, particularly those of Champaigne, will throw much light upon this interesting subject.

CASTELICCA (Don Fabricio Ruffo), prince of, descended from a very ancient Neapolitan family, obtained great influence under the minister Acton (1796), in the infamous political inquisition or junta. When Acton resigned his ministry, prince Castellicca became minister, and Vanni committed suicide. After the battle of Aboukir, Castellicca persuaded his court to declare war against France. In 1798, he fled with his monarch to Sicily. Two years after, he was Sicilian ambassador in London, and still later at the French court. In 1810, he signed the important treaty admitting all British productions and manufactures into Sicily on paying 10 per cent. duty. After the revolution (1820), he was appointed ambassador to Madrid, but remained in Paris.

CASTELLO, Gabriel Lancelot, an eminent antiquary, was born at Palermo, in 1727, of a noble family, and was placed under a private tutor, with a view to study botany, chemistry, &c.; but, accidentally meeting with some old coins, which had been dug up by a ploughman, he was seized with a great desire to decipher them, and from that time devoted himself to antiquarian pursuits. He formed a splendid collection of the remains of antiquity found in Sicily, and his museum was always open to foreigners as well as to natives. On his death-bed, he bequeathed a large quantity of books, &c. to the public library of Palermo. He died in 1794, being at that time an honorary member of the royal society, and of the academy at Paris. He published several works.—There was another Castello (Ignatius Paterno), who published an account of the earthquake in Sicily in 1783.

CASTI, Giambattista, a poet, born in 1721, at Prato, in the vicinity of Florence, studied at Montefiascone, became professor there, was appointed a canon, and made a journey to France. Receiving an invitation from the prince of Rosenberg, who became acquainted with him in Florence, he went to Vienna, and was presented to Joseph II, who knew how to appreciate the genius of the poet, and delighted in his conversation. Casti took advantage of every opportunity of visiting other courts, and joined several embassies, without office or title. Catherine II received him in the most flattering manner. He visited also the court of Berlin, and several other German courts. After his return to Vienna, prince Rosenberg, the director of the imperial theatre, caused him to be appointed "poeta Cesareo on the
death of Metastasio. After the death of Joseph II, Casti requested his dismissal, and retired to Florence, where he wrote many of his works. In 1783, he went to Paris. Notwithstanding his advanced age, the vigor and activity of his mind were still unimpaired. His vivacity, his naïveté, seasoned by a delicate irony, and his knowledge of the world, made his conversation very attractive. At the same time, he was remarkable for the firmness of his character and the regularity of his habits. He died suddenly, Feb. 6, 1803, at the age of 82. His Novelle galante were republished at Paris, 1804, under the title Novelle di Giamb. Casti, in 3 volumes. They are 45 in number. Almost all are of a licentious character, but written in a lively, original and graceful style. The same may be said of his didactic-satirical poem, Gli Animali parlanti, Poema epico, diviso in 20 Canti, di Giamb. Casti (Milan, 1802, 5 vols.), which he wrote between 1792 and 1796, and which did not receive the attention it deserves until the present day, probably because people formerly feared to speak openly on the bitter truths which it contains. There are two translations of it in French and one in German. It has been also translated into English by Rose. Casti's Rime anarcroniche are pleasing, and his comic operas La Grotta di Trofonio, and Il Re Teodoro in Venezia, &c., are full of wit and originality.

CASTIGLIONE, Baldassare; one of the most elegant of the elder Italian writers; born 1478, at Castiglione, in the territory of Mantua; studied at Milan, and entered into the service of the duke Ludovico Sforza, and, afterwards, of the duke of Urbino, of whose elegant and splendid court he soon became an ornament. In 1505, he was sent as ambassador to Henry VIII of England, and, in 1507, in the same capacity, to Louis XII, at Milan. In 1513, Castiglione appeared as ambassador at the court of Leo X, where he became intimate with the most distinguished literati and artists. In 1521, he was sent as ambassador to Henry VIII of England, in 1524, by pope Clement VII, to conduct his negotiations with Charles V. When Rome was plundered by the constable of Bourbon, in 1527, he was accused of negligence, and his health was undermined by chagrin. He refused to accept the rich bishopric of Avila, which was offered to him by the emperor, until the pope should be reconciled with Charles. He died Feb. 8, 1529, at Toledo. Among his works the Libro del Cortigiano is the most celebrated. It teaches the art of succeeding at court. His few Italian and Latin poems are elegant. His letters (Padua, 1760) are valuable contributions to political and literary history.

CASTILE. New; a province of Spain, bounded N. by Old Castile, E. by Aragon and Valencia, S. by Murcia, Jaen and Cordova, and W. by Extremadura; 230 miles long, and 100 broad. It contains the following subdivisions or provinces:

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<th>Province</th>
<th>Sq. M.</th>
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<tr>
<td>Madrid</td>
<td>1,250</td>
<td>228,300</td>
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<tr>
<td>Guadalaxara</td>
<td>1,970</td>
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<td>Cuenca</td>
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<td>Toledo</td>
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<td>La Mancha</td>
<td>7,620</td>
<td>205,000</td>
<td>Ciudad Real</td>
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The surface is diversified, consisting partly of extensive plains, and partly of ranges of mountains, of which the most remarkable is the Sierra de Cuenca. The principal rivers are the Tagus, Guadiana and Xucar. The climate is temperate, the soil naturally fertile, but the cultivation backward, and the country thinly inhabited. The productions are wheat, barley, hemp, flax, wine, oil, saffron, honey, sheep, cattle, &c. It contains one archbishopric (Toledo), one bishopric (Cuenca), and formerly had three universities, Alcala, Toledo and Siguenza. (For further information, see Spain.)

CASTILE, Old; a province of Spain, bounded N. by Asturian and Biscay, E. by Navarre and Aragon, S. by New Castile, and W. by Leon; 220 miles long, and, where widest, 130 broad. It contains the following provinces or subdivisions:

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Carrion and Torres. (For further information, see Spain.)

Castillo, José María del, in 1809, was an advocate of the province of Tunja; and, in the junta of notables, convened at Bogotá by the viceroy D. Antonio Amar, in September of that year, in consequence of the revolutionary movement at Quito, and on other occasions previous to the deposition of Amar, he distinguished himself by his zeal in the cause of America.

He was also a member of the constituent college, as it was called, which assembled at Bogotá in 1811, and organized the state of Cundinamarca. During the discussions among the patriots of New Granada, in the first years of the revolution, Castillo acted in opposition to Narino, the political chief of Cundinamarca, and was active and influential in support of the deputies assembled at Itagüé, being repeatedly appointed on missions to treat with Narino. In the congress at Neyba, in October, 1812, he was one of the two delegates from Tunja, of which province, in the following year, we find him the acting governor. In 1813, likewise, he and D. José Fernandez Madrid were despatched by the congress to Bogotá, with full powers to make a final arrangement with Narino, and remained in the city for some time as representatives of the congress. After the change in the form of government in 1814, when the authority of the executive was increased, the three persons elected to exercise the executive power being absent, Castillo was one of the deputies appointed to the temporary discharge of their duties. When the Spaniards, under Morillo, took possession of Bogotá in 1816, Castillo's life was spared; but he was imprisoned at Onzón, in the government of Guatemala. After the union of New Grenada and Venezuela, and the adoption of the constitution of Colombia, Castillo was made secretary of the department of the treasury, in which office he continued until the year 1828. He was a member of the convention of Ocaña for the province of Carthagena, and was elected president of that body. He was one of the twenty deputies who withdrew from the assembly, and testified their confidence in Bolivar in a printed exposition of their motives. When the liberator assumed all the powers of the state, after the dissolution of the convention, Castillo was appointed, by decree dated the 27th and 28th of August, 1828, president of the council of ministers, and also of the council of state, by which the new government was to be administered, with a rank next to that of Bolivar himself.

Castille: a seaport town, and capital of Hancock county, Maine, on the east side of Penobscot bay; 34 miles S. Bungor, 122 E. N. E. Portland; lat. 44° 24' N.; lon. 68° 46' W.; population in 1820, 975. It is situated on the east side of Penobscot bay, a little below the entrance of Penobscot river into the bay. It has an excellent and very spacious harbor, capable of receiving ships of the largest size, and accessible at all seasons of the year. Its situation is such that it might easily be made a place of great strength. It is a pleasant town, and has considerable trade.

Casting. Iron, as well as brass, and other metals which melt at temperatures above ignition, is cast in moulds made of sand. The kind of sand most employed is loam, which possesses a sufficient proportion of argillaceous matter to render it moderately cohesive when damp. The mould is formed by burying in the sand a wooden pattern, having exactly the shape of the article to be cast. The sand is most commonly enclosed in flasks, which are square wooden frames, resembling boxes, open at top and bottom. If the pattern be of such form that it can be lifted out of the sand without disturbing the form of the mould, it is only necessary to make an impression of the pattern in one flask; and articles of this kind are sometimes cast in the open sand upon the floor of the foundery. But, when the shape is such that the pattern could not be extracted without breaking the mould, two flasks are necessary, having half the mould formed in each. The first flask is filled with sand, by ramming it close, and is smoothed off at the top. The mould is separated into halves, one half being imbedded in this flask. A quantity of white sand, or burned sand, is sprinkled over the surface, to prevent the two flasks from cohering. The second flask is then placed upon the top of the first, having pins to guide it; the other half of the pattern is put in its place, and the flask is filled with sand, which, of course, receives the impression of the remaining half of the pattern on its under side. After one or more holes are made in the top, to permit the metal to be poured in, and the steam and air to escape, the flasks are separated, and the pattern withdrawn. When the flasks are again united, a perfect cavity, or mould, is formed, into which the melted metal is poured. The arrangement of the mould

CASTLE—CASTING.
CASTING.

is, of course, varied for different articles. When the form of the article is complex and difficult, as in some hollow vessels, crooked pipes, &c., the pattern is made in three or more pieces, which are put together to form the mould, and afterwards taken apart to extract them. In some other irregular articles, as andirons, one part is cast first, and afterwards inserted in the flask which is to form the other part. The metal for small articles is usually dipped up with iron ladles, coated with clay, and poured into the moulds. In large articles, such as cannon, the mould is formed in a pit dug in the earth near the furnace, and the melted metal is conveyed to it in a continued stream, through a channel communicating with the bottom of the furnace. Cannon-balls are sometimes cast in moulds made of iron, and, to prevent the melted metal from adhering, the inside of the mould is covered with powder of black lead. Rollers for flattening iron are also cast in iron cases. This method is called chill casting, and has for its object the hardening of the surface of the metal, by the sudden reduction of temperature, which takes place in consequence of the superior conducting power of the iron mould. These rollers are afterwards turned smooth in a powerful lathe, which has a slow motion, that the cutting tool may not become heated by the friction.—Casting in Plaster.

Copies are most frequently taken, both from new models, and from old statues, by casting them in plaster. For this purpose, a mould in plaster is first made from the statue, and, when afterwards replaced, its parts having been oiled, to prevent adhesion, is made to receive a quantity of plaster, by pouring it in at a small orifice. The mould is then turned in every direction, in order that the plaster may fill every part of the surface; and, when a sufficient quantity is poured in to produce the strength required in the cast, the remainder is often left hollow, for the sake of lightness, and economy of the material. When the cast is dry, it is extricated by separating the pieces of the mould, and finished by removing the seams and blisters with the proper tools. If the form or position require it, the limbs are cast separately, and afterwards cemented on. Moulhs and busts are obtained in a similar manner from living faces, by covering them with new plaster, and removing it in pieces, as soon as it becomes hard. It is necessary that the skin of the face should be oiled; and, during the operation, the eyes are closed, and the person breathes through tubes inserted in the nostrils. Elastic moulds have been formed by pouring upon the figure to be copied a strong solution of glue. This hardens upon cooling, and takes a fine impression. It is then cut into suitable pieces, and removed. The advantage of the elastic mould is, that it separates more easily from irregular surfaces, or those with uneven projections and under cuttings, from which a common mould could not be removed without violence.

* Plaster casts are varnished by a mixture of soap and white wax in boiling water. A quarter of an ounce of soap is dissolved in a pint of water, and an equal quantity of wax afterwards incorporated. The cast is dipped in this liquid, and, after drying a week, is polished by rubbing with stiff linen. The surface produced in this manner approaches to the polish of marble. When plaster casts are to be exposed to the weather, their durability is greatly increased by saturating them with linseed oil, with which wax or rosin may be combined. When intended to resemble bronze, a soap is used, made of linseed oil and salts, colored by the sulphates of copper and iron. Walls and ceilings are rendered water-proof in the same way. (See an abstract of a memoir of D'Arct and Théobald, in Brunelle's Journal, vol. xxii., 184, and Franklin Journal, ii., 270.)
Casting—Castor-Oil.

For small and delicate impressions in relief, melted sulphur is sometimes used; also a strong solution of sin-glass in proof spirit.—Bronze Casting. Statues intended to occupy situations in which they may be exposed to violence are commonly made of bronze. This material resists both mechanical injuries and decay from the influence of the atmosphere. The moulds in which bronze statues are cast are made on the pattern, out of plaster and brick-dust, the latter material being added to resist the heat of the melted metal. The parts of this mould are covered on their inside with a coating of clay, as thick as the bronze is intended to be. The mould is then closed, an upward stirrup of clay on the outside, with a nucleus or core of plaster and brick-dust, mixed with water. When this is done, the mould is opened, and the clay carefully removed. The mould, with its core, is then thoroughly dried, and the core secured in its central position by short bars of bronze, which pass into it through the external part of the mould. The whole is then bound with iron loops, and, when placed in a proper situation for casting, the melted bronze is poured in through an aperture left for the purpose; of course, the bronze fills the same cavity which was previously occupied by the clay, and forms a metallic covering to the core. This is afterwards made smooth by mechanical means. (Bigelow's Technology.)

CASTLEBREACH. (See Londonderry.)

CASTOR. (See Dover.)

Castor and Pollux; the sons of Tyndarus, king of Lacedaemon, and Leda, or, according to some, of Jupiter and Leda. The fable runs, that Leda brought forth two eggs, one of which contained Pollux, the other with the fustiest affection. Castor and Clytemnestra were begotten by Tyndarus, and mortal. The two brothers were inseparable companions, equally brave and spirited, and attached to each other with the fondest affection. Castor was particularly skilled in the art of breaking horses, and Pollux in boxing and wrestling. They were among the heroes of the Argonautic expedition, in which they acquired divine honors; for, a terrible tempest having arisen on the voyage, and all, with loud voices, calling on the gods to save them, there suddenly appeared over the heads of Castor and Pollux two star-like meteors, and the tempest subsided. From this time, they were the patron deities of mariners, and received the name of Dioscuri; and, from them, the name of Castor and Pollux was given to the fires that are often seen on vessels' masts in storms, and which are electrical phenomena. After their return, they released their sister Helen from the confinement in which Theseus had for some time held her. They were also among the heroes of the Calydonian hunt. They wooded the daughters of Leucippus, Phoebe and Iaria, and were each obliged to contend for their mistresses with their rivals, Idas and Lynceus, the sons of Apha­ reus. Castor killed Lynceus, and was slain by Idas. Pollux avenged his brother's death by killing Idas; but, full of grief for the loss of Castor, he besought Jupiter either to take away his life, or grant that, his brother might share his immortality. Jupiter listened to his request, and Pollux and his brother alternately descended to Orcus, and returned to life. It is doubtful whether the ancients understood them as being together or separate in their alternate passage between the upper and the lower worlds. The former opinion seems to be the oldest; the latter, to have gained ground subsequently. Temples and altars were consecrated to them. In great perils, especially in battles, the ancients believed that they frequently appeared to mortals as two youths on white steeds, in shining garments, with meteors over their heads; and then they were chiefly called Dioscuri. They were also represented side by side, either riding or standing, each holding a horse by the rein, with spears in their hands and steeds in their loins.—In the heavens, the Dioscuri appear as one of the 12 constellations of the zodiac (the Twins).

Castor-Oil. The castor-oil plant (ricinus communis) is a native both of the East and West Indies, and has a stem from 5 to 15 or 16 feet in height, and large, bluish-green leaves, divided into 7 lobes, serrated and pointed, the foot-stalks long, and inserted into the disk. The flowers are produced in a terminal spike, and the seed-vessels are covered with spines, and contain three flatish, oblong seeds.—It is to the seeds of this plant that we are indebted for the drug called castor-oil. It is now often used in medicine by pressing the seeds in the same way as is practised with oil of almonds. The oil thus obtained is called cold expressed. But the mode chiefly adopted in the West Indies is first to strip the seeds of
their husks or pods, and then to bruise them in mortars. Afterwards they are tied in linen bags, and boiled in water until the oil which they contain rises to the surface. This is carefully skimmed off, strained, to free it from any accidental impurities, and bottled for use. The oil which is obtained by boiling is considered more mild than that procured by pressure, but it sooner becomes rancid. The mildest and finest Jamaica castor-oil is very limpid, nearly colorless, and has scarcely more smell or taste than good olive-oil. Many people, however, have so great an aversion to castor-oil, even in its purest state, that they do not take it without great reluctance. The use of castor-oil in medicine are well known. It is at present prepared, in great quantities, in various parts of the U. States, and of an excellent quality.

Castration, strictly, the art of transplanting and disposing to advantage the several parts of a camp on the ground. It is sometimes used more extensively to include all the ordinary operations of a campaign. A camp, whether composed of tents or barracks, or merely of places assigned for bivouacking, must be divided in such a way that the several divisions shall be disposed as they are intended to be when drawn up in order of battle; so that, on a sudden alarm, the troops may rise in their proper posts. At the same time, the places for cooking, for the baggage, and for ammunition, must be conveniently arranged.

Castrates. The change produced in men by emasculation is highly remarkable, and assimilates their constitution, in some respects, to that of females. The elasticity of the fibres and muscles is weakened, and the cellular membrane becomes charged with a much larger quantity of fat; the growth of the beard is prevented; the upper part of the windpipe contracts considerably, and the castrate acquires the physiognomy and voice of a female. On the moral character it likewise appears to have some influence, by weakening the intellectual faculties, and rendering the subject unfeeling, morose, faint-hearted, and, on the whole, incapable of performing those deeds which require a high, magnanimous disposition. The most numerous class of castrates are those who are entirely deprived of their genital members. They are used in preference, by the Turks, as keepers of their women. The castrates of all three classes are called eunuchs. Those of the third class, to distinguish them from the two others, are frequently termed entire eunuchs. The word eunuch is Greek, and signifies guard or keeper of the bed. The castration of adults produces some change in the disposition, but little in the bodily constitution. Even the power of engendering continues for a short time. According to the accounts of ancient historians, the Greeks, particularly the Lydians, emasculated women. The latter are said to have used these beings as guards of their wives and daughters. With females, the operation produces a completely opposite effect to that which it has on men. The sexual appetite ceases, a beard appears on the chin and upper lip, the bosom vanishes, the voice becomes harsh, &c. Bornhave and Pott relate modern instances of this kind. Nothing but an immediate and fatal injury to the parts authorizes an operation of such vital consequence to the human race. Among the evils which religious enthusiasm has at all times produced, castration is conspicuous. The emperor Constantine and Justinian were obliged to use their utmost power to oppose this religious frenzy, and could put a stop to it only by punishing it like murder. The Valerians, a religious sect, whose minds had been distracted by the example of Origen (q. v.), not only considered this mutilation of themselves as a duty which religion imposed on them, but believed themselves bound to perform the same, by fair means or foul, on all those who came into their power. In Italy, the castration of boys, in order to form them for soprano singers, has been in use for a long time, having been employed in the pontifical chapel, ever since the beginning of the 17th century, to sing the treble parts. Clement XIV prohibited this abuse, which, notwithstanding, continued for a long time, and, in some Italian towns, was not only suffered, but exercised with such shameful openness, that the practitioners gave public notice of their profession. In modern times, severe laws have been enacted against castration, and the custom is going out of use. Beings thus mutilated, however, are sometimes to be found on European stages and in Catholic churches. Among the papal singers, we
Castrates—Cat.

found castrates as late as 1823. It is remarkable that so odious and unnatural an operation should produce the fine effect on the tones of the singer, which all must acknowledge who can rid themselves of the disagreeable effect of the association. In the Catholic church, no castrate, however he became such, is permitted to be an officiating priest. The part which eunuchs have always played, wherever they have belonged to the household of princes, is well known; and some authors have compared them to Catholic priests, who, like them, have often been the intriguing advisers of sovereigns, and, like them, are not connected with society by the gentle bonds of marriage and family relations.

Castrum Doloris, a Latin term, signifying castle of grief, has a different meaning from catafalco. The latter is used to denote an elevated tomb, containing the coffin of a distinguished person, together with the tapers around, ornaments, armorial bearings, inscriptions, &c., placed in the midst of a church or hall. The cas­ trium doloris is the whole room in which the catafalco is elevated, with all the decorations. The sarcophagus, usually empty, is exposed for show upon an elevation covered with black cloth, under a canopy surrounded with candelabra. Upon the coffin is laid some mark of the rank of the deceased, as his epaulette or sword, and, when the deceased was a sovereign or a member of a ruling family, princely insignia are placed on surrounding seats. The French call the castrum doloris, chapelle ardente, which is to be distinguished from chambre ar­ dente. (q.v.)

Casuistry; that part of the old theolog­ ical and moral, which relates to the principles by which difficult cases of con­ science (especially where there is a collision of different duties) are to be settled. Kant calls it the dialectics of conscience. Hence a casuist is a moralist, who endeavors to solve such doubtful questions. There have been many celebrated casuists among the Jesuits (e. g, Escobar, Sanchez, Buschbaum, &c.), famous for their ingenuity in the invention of such cases, and for the ambiguity and singular­ ity of their solutions. It is impossible, without reading the works of some of the canonical writers, to form an idea of the ingenious and fine-spin sophistry which they contain.

Cat (felis catus, L.); a well-known domesticated, carnivorous quadruped, whose attachment appears to be rather to the dwellings than the persons of her protectors; in which respect her conduct is very opposite to that of the dog, whose alliance with man is founded upon dis­ interested, personal attachment, not to be affected by changes of place or fortune. Her youthful sportiness, beautiful fur, and gentle docility of manner in after life, dispose mankind to regard the animal with kindness; but the most persevering attempts to cultivate her good disposi­ tions are followed with such slight suc­ cess, and met with so much of deceit and ingratitude, as to weary the patience of the most benevolent. The cat is capable of showing considerable fondness for an individual, but never appears to confide fully, even in the warmest demonstra­ tions of kindness. Her treacherous calm­ ness of disposition needs but slight provocation to be changed to vengeful malign­ ity. When hurt, or much alarmed, she is ready to attack her best benefactor with as much fury as a stranger. Being highly sensitive, and fond of ease, the cat evinces little anxiety, except for the con­ tinuance of her enjoyment, and is ever prepared to seek more comfortable quar­ ters, whenever the condition of her pat­ rons may render a movement politic. At what period cats became inmates of hu­ man habitations, it is scarcely possible, at this period, to determine. Beyond doubt, their usefulness in destroying rats, mice, and other small animals, first introduced them to notice. The first mention we find made of them, in profane history, is by Herodotus, the father of historians, in his account of Egypt. (Euterpe, vel lib. ii.) He speaks of them as diminishing the vermin infesting human dwellings; states some of the Egyptian superstitions relative to them, as well as some observations upon their breeding, dispositions, &c. The celebrated naturalist Temminck, in his excellent monography of the genus felis, adduces strong reasons for believing that the cat was originally domesticated in Egypt, and that the gloved cat, P. maniculata (chat gante of Southern Africa) is, in all probability, the original stock of the domestic cat. Its strong resemblance in size, proportions, &c., renders this opinion more acceptable than that which attributes the origin to the common European wild cat, which is smaller, has a shorter, thicker tail, and, indeed, would seem rather to be the domestic cat re­ turned to the savage state, than its original stock. The subtlety and circumspec­ tion of the common cat are evinced by all its habits and movements; and the ob-
servation of this disposition has obtained for it the name it bears in most of the living languages of Europe. In Greek, it is called ἰαθήρος, for which we have found no derivation. In Latin, it was called catus, from the adjective signifying cunning, wary, subtle, &c. According to Varro, this adjective is a Sabine, and not a Roman word; but, as we find it used by Horace, in his ode Ad Mercurium, its admission into the classic vocabulary can scarcely be denied. From this name, catus, we have the English cat, the German katze, the French chat, &c. The domestic cat belongs to a genus (felis) better armed for the destruction of animal life than all other quadrupeds. The short and powerful jaws, moved by vigorous muscles, are supplied with most formidably trenchant teeth: a cunning disposition, combined with nocturnal habits and much patience in pursuit, gives them great advantages over their prey; and their keen, lacerating claws, which are always preserved in the most acute state by the peculiar arrangement that keeps them concealed when not in use, enables them to inflict a death-blow on their victims with as much certainty as ease. The cat, in a degree, partakes of all the attributes of her race—lies in ambush for her prey, and seizes it by a sudden leap; plays with her captives before putting them to death; and does not limit her destruction to the mere gratification of appetite. Cold and wet are disagreeable to the cat, and electricity is especially feared by her: advantage may be taken of the latter circumstance to avert the troublesome visits of the animal. After having once received a shock from a Leyden vial, but little apprehension need be entertained of the cat's return to the same place. Of various aromatic substances, as catnip or catmint, &c., puss is remarkably fond; and the odor of valerian appears to throw her into an ecstasy of pleasure. The food of the cat, in a state of domestication, is necessarily very various, but always of flesh or fish, if it can be obtained. A desire to possess herself of the latter article of diet, proves one of the strongest temptations to theft that the cat is exposed to: in fact, it takes a very severe education to make her any better than a thief under any circumstances. The cat is remarkable for the fetor of its eructations, as well as the powerfully offensive and phosphorus-like odor of its urine, &c. But, personally, it is a very cleanly animal, avoiding to stay in any sort of filth, and preserving its fur in a very neat condition. Of its habits, when well taken care of and much petted, it cannot be necessary to speak here, as they are universally known. Equally notorious is their clamorous mode of making love, which is designated by the term catervaunting, and, once heard, can never be forgotten. The cat goes with young for sixty-three days, and brings forth from three to six at a litter, which remain blind for nine days.

CAT-BIRD (turdus fulirox, Vieill; T. lividus, Wilss.); a numerous and well-known species of thrush, which annually advances from the south with the progress of agriculture, and, during the summer, is found throughout the Middle and New England States, frequenting thickets of brambles, or the shrubbery of gardens. The notes from which the bird obtains its name are strikingly similar to the plaint of a kitten in distress, and would almost certainly deceive the ear of any one unacquainted with the cry of this species. The cat-bird is an exceedingly familiar and unsuspecting, allowing itself to be closely approached, and sulverting every one passing near its abode by its cat-like note. It is lively and active in its movements, and, but for the unfortunate resemblance of its ordinary cry to the voice of an animal by no means a favorite, would be considered an agreeable bird, notwithstanding its plain, lead-colored plumage. Wilson informs us, that the cat-bird arrives in the lower parts of Georgia about the end of February, whence he infers that its winter residence is not far distant from Florida. It reaches Pennsylvania by the second week in April, and has its nest built by the beginning of May. For this purpose, a brier or bramble thicket, a thorn-bush, thick vine, or fork of a sapling, is selected. Little attention is paid to concealment, though few birds are more solicitous for the safety of their young. The nest is constructed of dry leaves, weeds, small twigs, and fine, dry grass, the inside being lined with fine, black, fibrous roots. The female lays 4 or 5 eggs, of a uniform greenish-blue color, free from spots. They generally raise two, and sometimes three, broods in a season. The admirable naturalist above mentioned relates, that he sometimes, when in the woods, amused himself with imitating the violent chirping or squeaking of young birds, in order to discover what species were in his vicinity; and these sounds, to birds in the
breeding seasons, he compares to the alarm of fire in a large and populous city. On such occasions of alarm and consternation, the cat-bird is the first to make his appearance, not singly, but sometimes half a dozen at a time, flying from different quarters to the spot. Other birds are seriously affected, but none show symptoms of such extreme suffering. He hurries backward and forward with hanging wings and open mouth, calling out louder and faster, and actually screaming with distress, till he appears house with his exertions. He attempts no offensive measures, but he bewails, he implores, in the most pathetic terms with which nature has supplied him, and with an agony of feeling which is truly affecting. This species does not readily desert its nest; and, when the eggs or young of other birds are placed in it, they are content to throw out the intruders, and continue their attentions to their own family. When the nest and eggs are carefully removed to another place by man, the parents follow, and do not remit their cares. Before the dawn, when there is scarcely light enough to render it visible, the cat-bird generally begins its song, while fluttering with great sprightliness from bush to bush. His notes are more singular than melodious, consisting of short imitations of other birds, but failing where strength and clearness of tone are requisite. He appears to study certain passages with great perseverance, commencing in a low key, and, as he successively aspires to a higher and freer note, unembarrassed by the presence of a spectator, even within a few yards. An attentive listener discovers considerable variety in his performance, apparently made up of a collection of odd sounds and quaint passages. The cat-bird is a great enemy to the common black snake (Coblescor constrictor), which makes its nest whenever an opportunity offers. As the cat-bird uniformly attacks or pursues this snake, and is frequently seen in the act of hopping eagerly after it, numerous ridiculous stories are related of its being fascinated or charmed by the snake. The testimony of Wilson and Bartram show that the bird is almost uniformly the aggressor and victor, driving the snake to its hiding-place. In one instance, the writer witnessed an attack of a cat-bird on the black snake, almost precisely similar to that related in Wilson's Ornithology, by his venerable friend, the naturalist Bartram. The cat-bird is nine inches long; and, at a short distance, appears nearly black, but, on a closer inspection, is seen to be of a deep slate-color above, lightest on the edges of the primaries, and of a considerably lighter slate-color below, except under the tail coverts, which are of a very dark red; the tail, which is rounded, and the superior part of the head, as well as the bill and legs, are black. (See Wilson, 1st ed., vol. ii. p. 90.)

CAT ISLAND, or ST. SALVADOR, or GUANAHANI, or GUANIMA; one of the Bahamas islands; about 60 miles in length from N. to S., and 12 in its mean breadth. Population, in 1757, 637. This island is remarkable for being the first land of America discovered by Columbus, who landed here Oct. 12, 1492. From the productions of art in its infancy or decline, they have occasionally met with types of perfection. Many monuments of this description have been preserved to our days, and still contain traces of the painting and architecture with which
they were decorated. There are catacombs existing in Syria, Persia, and among the most ancient Oriental nations. But the revolutions in these countries, and the changes which they have occasioned, have deprived us of the documents which would have given us exact information regarding them. The description of the catacombs in Upper Egypt gives us an idea of those whose existence is still unknown to us. They contain the history of the country, and the customs and manners of the people, painted or sculptured in many monuments of the most admirable preservation. The subterraneous caves of these countries, like almost all of the kind, have their origin in quarries. From the depths of the mountains which contain them, stone was taken, which served for the building of the neighboring towns, and also of the great edifices and pyramids which ornament the land. They are dug in a mountain situated in the neighborhood of the Nile, and furnished the Romans with materials for the construction of buildings in their colonial establishments. The excavations in these mountains are found throughout a space of 15 to 20 leagues, and form subterraneous caverns, which appear to be the work of art; but there is neither order nor symmetry in them. They contain vast and obscure apartments, low and irregular vaults, supported, in different places, with piles, left purposely by the workmen. Some holes, of about six feet in length and two feet in width, give rise to the conjecture, that they were destined for sepulchres. Cells of very small dimensions, formed in the hollows of these obscure caverns, prove them to have been the abode of recluse. In Sicily and Asia Minor, a prodigious number of grottoes and excavations have been discovered, containing sepulchres. Some appear to have served as retreats to the victims of despotism: the greater part are the work of the waters which traverse the mountains of these regions, as, for instance, the great cave of Noto, which passes for one of the wonders of Sicily. This cave, the height, length and breadth of which are equal, has been formed by the river Casibali, which runs at the bottom, and traverses it for the length of 100 fathoms. In the interior of this cave are a number of houses and tombs. In the ancient Hybla, there is a grotto containing many sepulchres, near which is the tomb of Eschylos. At Vela are abodes for the living and sepulchres for the dead, cut in the rocks; at Agrigentum, subterraneous caves, labyrinths and tombs, arranged with great order and symmetry. There are also caverns in the environs of Syracuse, which may be ranked with the principal monuments of this description, from their extent and depth, their architectural ornaments, and from some historical recollections attached to them. In the catacombs of Rome, coffins are sometimes found, and it is supposed that the bones in them belonged to Christians. Inscriptions are also seen on the walls of the apartments. But, though they may not have been used by the Christians as tombs, it is certain that they served for places of assembling for secret exercises of devotion. (See Arnaud's *Voyage dans les Catacombes de Rome*, Paris, 1810.)—The catacombs in the tufa mountains of Capo di Monte, near Naples, consist of subterraneous galleries, halls, rooms, basilicas, and rotundae, which extend to the distance of two Italian miles. Throughout there are seen niches for coffins (loculi) and bones. A description of them was given by Celano, in 1643. They probably owe their origin to the quarries which afforded tufa for the walls of the cities Paleopolis and Neapolis, and afterwards served as sepulchres for the Christian congregations. The catacombs of Paris are extensive subterraneous galleries, to which you descend from the buildings on the western side of the par­ rière d'enfer. The name itself, which has been given to this labyrinth of caverns and galleries, from its resemblance to the asylums and places of refuge of the persecuted Christians under Naples and Rome, informs us of the purpose to which it has been applied since 1783. These galleries were originally the quarries from which materials were excavated for constructing the edifices of the capital. The weight of the superincumbent houses rendered it necessary to prop them; and when the cemeteries of the demolished churches and the burying grounds were cleared in 1785, the government resolved to deposit the bones in these quarries, which were consecrated for that purpose. The relics of ten generations were here united in the repose of the grave. Eight times as great as the living tide that rolls over this spot is its subterraneous population. By the light of wax tapers you descend 90 feet to a world of silence, over which the Parisian police keeps watch as strictly as over the world of noise and confusion above. You enter a gallery, where two can just go
abreast. A black streak on the stones, of which the walls consist, points out the way, which, from the great number of intersecting by-passages, it would be difficult to trace without this aid, or without guides. The plain of Montorgueil and the great suburb St. Jacques, as well as St. Germain, and, according to some, the channel of the Seine, are thus understood. Among the curiosities of this part of town, may be mentioned the harbor of Mahon, which, in his hours of leisure, an ingenious soldier faithfully copied, from memory, in the material of the quarries. You finally enter the hall, where you are ushered into the realms of death by the inscription which once stood over the entrance to the church-yard of St. Sulpice:— *Hæs ultra metas requiescant beatam spem expectantes.* Narrow passages between walls of skeletons; chambers in which mausoleums, altars, candelabras, constructed of human bones, with festoons of skulls and thigh-bones, interspersed, occasionally, with inscriptions, not always the most happily selected, from ancient and modern authors, excite the gloomy impression which is always produced, even in the most light-hearted, to memory the victims of those mournful days, whose remains are here united. It is the only spot in the whole labyrinth, that speaks immediately to the heart of every body. On leaving these rooms, consecrated to death, where, however, the air is always preserved pure by means of secret passages, you may visit a geological cabinet, formed by Mr. Hericourt de Thury, the director of the carrière sous Paris, who has also published a description of them (Paris, 1815). Specimens of the minerals furnished by the regions you have traversed, and a collection of diseased bones, in a continuos hall, scientifically arranged, are the last curiosities which these excavations offer. 300 toises east of the road to Orleans you finally return to the light of day. We understand that it has lately been prohibited to visit this remarkable spot, because a person had lost himself in this labyrinth, and had never been heard of again. In Rome, there is a Franciscan church, under which, for centuries, the bones of the monks of the convent, and of many persons, who think their eternal happiness will be promoted by their burial there, have been preserved, ingeniously arranged in columns, altars, arches, garlands, festoons and architectural ornaments. Every year, mass is read there.

**CATACOMBS—CATALANI.**

Catalani, Angelica, by marriage Valabrige; a celebrated singer, born, according to her own statement, in 1784, at Sinagaglia, in the Ecclesiastical States, and educated in the convent of St. Lucia, near Rome. Angelica displayed, in her seventh year, an uncommon talent for singing, and such multitudes came to hear her, that the magistrates of the place prohibited her singing any longer in the convent. But the favor of a cardinal, and the love of the celebrated Bosello, enabled her to cultivate her talents. After leaving the convent, she appeared, in her fifteenth year, at the theatre in Venice, and then in other Italian cities. In Lisbon, she was, for five years, together with Crescentini and Galliari, the ornament of the Italian opera. Her first concert in Madrid brought her more than $15,000; and, from her concerts in Paris, her fame spread over all Europe. In London, she had, in the first year of her engagement, a salary of 72,000 francs ($12,931), and, in the following, of 96,000 francs ($17,211). Two concerts, besides, brought her 30,000 francs ($5,388) each, and she received immense sums in her journeys through the country towns during her eight months' stay in the island. In 1814, she undertook, in Paris, the direction of the Italian opera, left it on the return of Napoleon, and obtained it anew on the restoration of the king, after an interval which she spent in journeys through Belgium. In 1816, she visited the chief cities of Germany and Italy. She owes her fame to an agreeable exterior, to a lively way of acting, to an uncommonfulness and a rare flexibility of voice, a singularly fine shake; and an exceeding richness of difficult and striking, but brilliant rather than beautiful, figures and ornaments, particularly in chromatic passages, and an original combination of all these excellences in a whole, which is more fit to excite astonishment and admiration than to touch the heart. As the French government, after her return, were continually obliged to advance considerable sums for the support of the Ital-
ian opera in Paris, whilst she never yielded to the wish of the public in the choice of the pieces performed, and, through jealousy, removed other female singers of merit, she was dismissed, and travelled anew, in 1818, through the chief cities of Germany, and then to Petersburg and Warsaw; in 1822 to London, in 1825 to Italy, in 1826 to Stuttgart. She is married to M. Valrubro, formerly a captain in the French service, by whom she has several children. The latest accounts inform us that she has determined not to sing publicly any more, except for charitable purposes. She lives retired in Italy.

**Catalepsy.** This is a spasmodic disease, and, by some, regarded as a species of tetanus. It affects the whole body, so as to render it immovable, as if dead. Tetanus differs from catalepsy in its subjects and causes. Females are most liable to the last, while the first is equally produced in both sexes by appropriate causes. Tetanus is most frequently produced by punctured wounds of tendinous textures, and most readily in hot weather. Sometimes, however, it occurs, like catalepsy, independently of wounds. The spasm is more limited in tetanus; sometimes being most severe in the muscles of the face, producing lock-jaw; now it attacks the muscles of the trunk, on the fore part, producing *empysemolos,* and now the muscles of the back part, producing *episthlos,* or curvature of the trunk backwards. During all this, the temperature may remain, the pulse be perfectly natural, and the senses unimpaired. Under the most active and varied treatment, tetanus has always been a very fatal malady. Catalepsy is a universal spasmodic disease of the organs of locomotion. The body remains in the position in which it may have been when attacked with the fit, and the limbs preserve any situation in which they may be placed. The senses are obliterated, and the mind totally inactive, nothing being able to rouse the patient. The pulse and temperature remain natural. The fit is of uncertain length; according to some writers, not lasting more than a quarter of an hour, though known by others to be much longer. This disease is an obstinate one, and is very liable to recur, even when the patient seems in the least respectable liable to a recurrence. It is, for the most part, a consequence of some other disease. This may be a local affection; but it more frequently occurs in a generally enfeebled constitution, induced by some grave malady, or one which has been caused by the gradual operation of unobserved morbid causes.

**Catalogues of Books.** (See Books, Catalogues of.)

**Catalonia** (anciently Taracencis); a province of Spain, bounded N. by France, E. and S. E. by the Mediterranean, S. W. by Valencia, and W. by Arragon. Its form is nearly that of a triangle, the base towards the Mediterranean being about 140 miles in length, the side towards France 120, and that towards Arragon 140. The country in general is mountainous, but intersected with fertile valleys, while the mountains themselves are covered with valuable woods and fruit-trees. Corn, wine, oil, flax, hemp, legumes, and almost every kind of fruit, are abundant. Here are quarries of marble of all colors, of crystal, and alabaster; also topazes, rubies, jaspers and other precious stones; mines of lead, tin, iron, alum, vitriol and salt, and, formerly, of gold and silver. On the coast is a coral fishery. Catalonia is naturally much less fertile than either of the Castiles; but it far surpasses both, and, indeed, every other province in Spain, in the industry of its inhabitants, as well as the improvements which they have effected in manufactures, agriculture and commerce. Pop. 858,818; square miles, 12,111. It has usually been divided into 15 viguerias or jurisdictions. The principal towns are Barcelona, Tortosa, Tarragona, Girona, and Villa Franca de Panades. (See Spain.)

**Catamenia** (derived from these two Greek words,—κατα, according to, and μην., the month); menses, the monthly discharge from the utero of females, between the ages of 14 and 45. Many have questioned whether this discharge arose from a mere rupture of vessels, or whether it was owing to a secretory action. There can be little doubt of the truth of the latter. The secretory organ is composed of the arterial vessels situated in the fundus of the uterus. The dissection of women who have died during the time of their menstruating proves this. Sometimes, though very rarely, women, during pregnancy, menstruate; and, when this happens, the discharge takes place from the arterial vessels of the vagina. During pregnancy and lactation, when the person is in good health, the catamenia, for the most part, cease to flow. The quantity a female menstruates at each time is very various, depending on climate and a variety of other circumstances. It is com-
CATAMENIA—CATARACT.

mently, in England, from five to six ounces: it rarely exceeds eight. Its duration is from three to four, and sometimes, though rarely, five days. With respect to the nature of the discharge, it differs very much from pure blood. It never coagulates, but is sometimes glutinous, and membranes like the decidua are formed in difficult menstruations. In some women, it always smells rank and peculiar; in others, it is inodorous. The use of this monthly secretion is said to be to render the uterus fit for the conception of the fetus; therefore girls rarely conceive before the catamenia appear, and women rarely after their entire cessation, but very easily soon after menstruation.

Catania (anciently Catana); a city of Sicily, in the valley of Demons, on the borders of the valley of Noto, the see of a bishop, the suffragan of Montreal; 47 miles S. S. W. Messina, 85 E. S. E. Palermo; lat. 37° 30' N.; lon. 15° 6' E. The population is variously estimated at from 40 to 80,000. It is situated on a gulf of the Mediterranean, at the foot of Mount Etna. This city has been repeatedly visited by tremendous earthquakes, and was laid in ruins by one in 1693, when 18,000 people were destroyed; and upon the situation which it occupied, the present city is built; the lava serving, at the same time, for a foundation, as well as a quarry, from which stone was dug for its construction. Catania is reviving with great splendor, and has much more the features of a metropolis and royal residence than Palermo. The principal streets are wide, and well paved with lava. Most of the edifices have an air of magnificence unknown in other parts of the island, and the town has a title to rank among the elegant cities of Europe. Here is a university with three faculties, much celebrated in Sicily. The inhabitants have always been noted for their superiority over the other Sicilians in politeness. The Benedictine convent of St. Nicholas is very large. Every part has been rebuilt since the earthquake of 1693. An obelisk of red granite, placed on the back of an antique elephant of touchstone, stands in the great square, which is formed by the town-hall, seminary and cathedral. The cathedral, dedicated to St. Agatha, the patroness of the city, has suffered so much by earthquakes, that little of the original structure remains. The other religious edifices are profusely ornamented, but in a bad taste. The harbor, though one of the largest in the island, is not much frequented; but the trade is considerable. The exports are wheat, barley, wine, oil, &c.

Cataplasms, or Poultices, are soft compounds intended to be applied to the surface of the body. They are commonly made of meals, powders, boiled pulps, &c., mixed with water, milk, or some other liquid. They are called sinapisms when mustard forms their base.

Catapults (Latin, catapulta; Greek, καταπλωτής); certain machines of the ancients, corresponding to our heavy cannon. The catapults differed from the ballista by throwing more accurate, the latter more in a curve. The form also differed, and the catapults resembled, in their general shape, a cross-bow. The whole machine rested on a frame, and, if intended for the field, had wheels. The size of these machines varied much. The large catapults shot arrows of 3 cubits, or 4½ Roman feet, in length, often larger ones, and sometimes beams 12 feet long. Burning arrows were likewise often thrown by the catapults. The large ones threw their arrows 4 stadia, but not more than 2 stadia with precision. Pliny ascribes the invention of catapults to the Syrians; Plutarch and Diodorus, to other nations. At the siege of Jerusalem, the Romans had 300 catapults and 40 ballista. The Romans did not carry all the parts of these machines with them, but only the ropes and fastenings, with the necessary tools; and the soldiers built the catapults when they wanted them. The terms catapult and ballista were often used indiscriminately; and, in later times, the word catapult went entirely out of use. Vegetius and Ammianus Marcellinus never introduce it, and employ ballista to signify all machines throwing large arrows or beams, and enger for those throwing stones.

Cataract. By this term two very different diseases are designated by some writers, viz. the true cataract, and enuresis, or guida serena. By the first of these terms, in its most common signification, is understood opacity of the crystalline lens, or its capsule, or both. By the second is meant a disease of the retina, by which it is rendered unsuceptible of the action of light. In cataract, the lens becomes opaque, loses its transparency, and is no longer capable of transmitting the light. The causes of cataract are numerous. Inflammation may produce it. Sometimes it is ascribed to a state of the vessels of the part which prevents a proper nourishment of the lens or its
CATARACT.

capsule. It is produced by various diseases, such as gout, rheumatism, scrofula, and accompanies old age. Its earliest approach is marked by a loss of the natural color of the pupil; this becoming turbid, or slightly gray. Mucus volitantes accompany this period. The opacity is not, at first, over the whole crystalline, and, most frequently, first attacks the centre portion; this being turbid, and of a grayish color, while the surrounding portions remain transparent, and of the usual black color. While it exists in this degree only, the person can see in an oblique direction. The color of the pupil is various; mostly grayish-white or pearl-colored; sometimes milk-white, or of a yellowish-gray; now and then of a grayish-brown, and even of a dark-brown or dark-gray. The consistence of the lens differs in different cases, being either hard, and even horny, or very soft, as if dissolved. The treatment of cataract is by a surgical operation on the eye, and different operations have been tried and recommended. They all consist in removing the diseased lens from its situation opposite the transparent cornea. By one of these operations, the cataract is depressed, removed downwards, and kept from rising by the vitreous humor. This is called cousing. Another operation is extraction, and consists in making an incision of the cornea, and of the capsule of the lens, by which the lens may be brought forward, and through the cut in the cornea. The third operation is by absorption. This consists in wounding the capsule, breaking down the crystalline, and bringing the fragments into the anterior chamber of the eye, where they are exposed to the action of the aqueous humor, and are, at length, absorbed. This last operation has the name keratectomy applied to it. The choice of the operation is determined by the character of the cataract. After the operation, the patient is to be kept from the light, and from all means of irritation. Such medicines and such articles of food are to be prescribed as will most effectually prevent inflammation; and should this occur, it must be treated by such means as are the most sure to restrain or overcome it.—Amaurosis is a disease of the optic nerve, and its continuation, the retina. Its causes are numerous. It may be occasioned by organic disease of the parts referred to, by mechanical pressure upon the nerve, by too powerful light, by long-continued use of the eyes in too weak light, by rapid transition from darkness to light, and, finally, by old age. Various other, and some more general, causes may produce amaurosis. Among these are wounds of the head, compression of the brain, fits of apoplexy, suppressed colds in the head, habitual incrustation, vomiting, coughing, sneezing, affections of the alimentary canal, and some of the neighboring viscera—the liver, for example. According to the activity of these various causes, the malady comes on suddenly or gradually. The patients are sometimes unable to bear the light, and, therefore, seek the darkness, where sparks and flames frequently appear to their eyes. Objects sometimes appear of different colors, or fluctuate, swim, and confuse themselves. At other times, the patients begin to squint, suffer a severe pain in the ball of the eye, and a straining above the eyebrows; finally, they begin to see as if through a crape or fog, and only in bright daylight can distinguish accurately black flakes and specks appear to hover before their eyes. The greatest insensibility of the retina is often opposite the centre of the cornea; but ultimately the disease produces total blindness, the pupil losing its motion, and becoming permanently dilated. Deep is the eye a white speck is often visible, which is traversed by veins. According to the different causes, the malady is either easily cured or is incurable. Regard is especially to be had to them in the selection and use of remedies.

CATARACT, in geography (from the Greek karapekaros). The English language has more words than most European languages, to express different degrees of rapid and sudden descent in streams of water. The most general term is falls. A considerable declivity in the bed of a river produces rapid descent; when it runs down a precipice, it forms a cataract; and, if it falls from steep to steep, in successive cataracts, it is often called a cascade. In primary and transition counties, rivers abound in rapids; they also sometimes occur in secondary regions, but the descent is always more gentle. In alluvial districts, falls, of course, are very rare: they are almost always found in the passage of streams from the primitve to the other formations; thus falls are found where the alluvial formations, on the coast of the U. Sates, border on the primitive formations; but none are found in the alluvion below. Rapids and cataracts are often the greatest blessing to rugged countries, since they furnish the cheapest means to move machines in
CATARACT. 577

manufactories, &c. In flat countries, as Holland, the lower part of Germany, and the West Indies, people must resort to windmills on account of the want of falls. Many cataracts are remarkable for their sublimity; and the falls of Niagara surpass all others of the known world in grandeur. The whole mass of water which, forming itself down the great inland seas of North America is here compressed into a channel of three quarters of a mile in width, and plunges over a precipice of 150 to 100 feet in height. The river, near it, is divided by Grand and Navy islands, and has a gradual descent of 57 feet from this place. The banks preserve the level of the country, and, in some parts, rise 100 feet from the water; the whole stream is covered with foam and waves. At the grand falls, the river is three quarters of a mile broad, and the precipice curves nearly in a semicircle, extending in the longest line on the American or eastern side. An island, called Goat Island, divides the cataract into two principal portions—the American fall on the west, and the Horse-shoe on the east, or Canada side. A small portion of the fall on the American side is cut off by a small island on the precipice; the rest descends in one body, almost perpendicularly, from a height of 184 feet, and 1000 feet in width. Both the falls on the American side are crossed by bridges. The Horse-shoe fall is 14 feet less in height, but surpasses the other much in grandeur. The great body of the water, as it approaches the precipice with such force, that it forms a curled sheet, which strikes the water below 50 feet from the base of the precipice, and visitors can pass behind the sheet of water. The best view of this cataract is from Table rock. It is frequently adorned with a rainbow. Sometimes these are seen in the clouds of spray, which rise 100 feet above the precipice. The river Monthmorency forms a cataract 250 feet in height and 50 feet in breadth; nine miles below Quebec.—The falls of the river Chaudière, not far from the cataract just mentioned, are about 100 feet in height. The Mississippi forms a cataract of 40 feet in height, above its junction with the Ohio. The stream is 700 feet in width, and the surrounding country level.—The Niagara, at a distance of 500 miles from its sources, descends 300 feet in 18 miles. There are three principal cataracts; one of 87, one of 47, and one of 26 feet in height. The river is 1000 feet broad, and the whole scene is described as most beautiful, only surpassed by the falls of Niagara.—The falls of Passaic, in New Jersey, at Patterson, about 15 miles from Newark, are among the most celebrated of the U. States. The river is 150 feet broad, and falls, in one entire sheet, into a chasm 70 feet in depth, and 12 wide. Its waters form the moving power for some of the most manufacturing districts of the U. States.—The Mohawk river, near its junction with the Hudson, forms the falls termed the Cohoes, about 60 feet high. The Hoosac river, in the state of Massachusetts, forms the finest cataract in New England.—In Georgia, the cataract in the Toccoa creek is interesting. It passes through a channel of 20 feet wide, over a precipice of 187 feet, in one sheet, if the season is wet. A similar cataract occurs in the river Jochie, in Bavaria; falling 200 feet, by five steps, and being entirely scattered in spray. Its noise is heard at a distance of several miles. Belovaes falls, on the Connecticut river, near Walpole, are grand and striking. Glen's falls, in the Hudson river, are similar. The highest cataract in America is that of Tequendama, in the river Bogota, or Funza, a branch of the Magdalena. The river rises in the lofty plain, in which Bogota is situated, 9000 feet above the sea, and is precipitated in the lower part of the country, through deep ravines and over steep precipices, and finally plunges 600 feet into a deep chasm. The cataracts of the Nile (one at Syene, and the other some distance above), have been described, by Mr. Bruce, as grand, principally from the wildness and desolation of the scene; but the highest of them does not exceed 40 feet in height. The primary regions of Europe abound in cataracts. The torrents are seldom of great size, but the rocky beds over which they roar and dash in foam and spray, the dark glens into which they rush, and the wildness of the whole scenery, often produce awful emotions. The most remarkable cataract in Scotland is the Fyres. The river Gotha has a fall of celebrity at Trolleba, in Sweden. It descends 100 feet. One of the most considerable falls in Europe has lately been discovered in the river Lutin, in Swedish Lapland. It is described as half a mile in width and 400 feet in height. Another, of immense size, has been discovered by Mr. Esmark, in the river Manneleten, in Norway, consisting of three separate falls, the whole height being 200 feet. The Alpine highlands, in Europe, abound in beautiful falls. The
CATARACT—CATECHETICAL SCHOOLS.

Cataract near Schaffhausen is 400 feet broad and 70 high. The river Orco, descending from mount Rosa into Italy, forms a cascade, the height of which is estimated at 2400 feet. The fall of the Evron, flowing from the same mountain, is stated to be 1300 feet high. At Staubach, in the canton of Bern, in Switzerland, a small stream descends a height of 1400 feet. In Italy, the falls of Terni and Tivoli are beautiful, and were celebrated even among the ancients. At Terni, about 45 miles north of Rome, the Evelina plunges over a precipice of marble rocks, 300 feet high. The waters contain lime, which produces many petrifications. At Tivoli, 19 miles north-east of Rome, are the falls of the Anio or Teverina, a branch of the Tiber. It falls nearly 100 feet deep. (See Woodbridge’s System of Universal Geography, Hartford, 1827.)

Catarh (from κατάρα, I flow down); an increased secretion of mucus from the membranes of the nose, fauces and bronchia, accompanied with fever, and attended with sneezing, cough, thirst, loss of appetite. There are two species of catarh, viz.: catarhus sérius, or a cold in the head; and catarhus contagió, the influenza, or epidemic catarrh, which sometimes attacks a whole city. Catarh is also symptomatic of several other diseases. It is seldom fatal, except in scrofulous habits, by laying the foundation of phthisis; or where it is aggravated, by improper treatment, or repeated exposure to cold, into some degree of peripneumony; when there is hazard of the patient, particularly if advanced in life, being suffocated by the copious effusion of viscous matter into the air-passages. The epidemic is generally, but not invariably, more severe than the common form of the disease. The latter is usually left to subside spontaneously, which will commonly happen in a few days, by observing the antiphlogistic regimen. If there should be fixed pain of the chest, with any hardness of the pulse, a little blood may be taken from the arm, or tonically, followed by a blister; the bowels must be kept regular, and diaphoretics employed, with demulcents and mild opiates, to quiet the cough. When the disease hangs about the patient in a chronic form, gentle tonics and expectorants are required, as myrrh, squill, &c. In the epidemic catarh, more active evacuations are often required, the lungs being more seriously affected; but, though these should be promptly employed, they must not be carried too far, the disease being apt to assume the typhoid character in its progress; and, as the chief danger appears to be that suffocation may happen from the cause above-mentioned, it is especially important to promote expectoration, first by antimonials, afterwards by squill, the inhalation of steam, &c., not neglecting to support the strength of the patient as the disease advances.

Catechesis; the science which teaches the proper method of instructing beginners in the principles of the Christian religion by question and answer, which is called the catechetical method. (See Method.) Hence catechet and catechise. The art of the catechist consists in being able to elicit and develop the ideas of the youthful minds of learners. This part of religious science was first cultivated in modern times, and Rosenmüller, Dinter, Schmidt, Wolrath, Delitz, Grütz, Daub, Winter, Heinrich Müller, and others have particularly distinguished themselves by their writings upon it.

Catechetical Schools; institutions for the elementary education of Christian teachers, of which there were many in the Eastern church from the 2d to the 5th century. They were different from catechumenical schools, which were attached to almost every church, and which were intended only for the popular instruction of proselytes, and of the children of Christians; whereas the catechetical schools were intended to communicate a scientific knowledge of Christianity. The first and most renowned was established about the middle of the 2d century, for the Egyptian church at Alexandria, on the model of the famous schools of Greek learning in that place. (See Alexandrian School.) Teachers like Pantæenos, Clement and Origen gave them splendor and secured their permanence. They combined instruction in rhetoric and oratory, in classical Grecian literature, and the Eclectic philosophy, with the principal branches of theological study, exegesis, the doctrines of religion, and the traditions of the church; distinguished the popular religious belief from the Gnosis, or the thorough knowledge of religion; established Christian theology as a science, and finally attacked the dreams of the Chiliasts (believers in a millennium) by blending Greek speculations and Gnostic phantasies with the doctrines of the church, by an allegorical interpretation of the Bible, and the assumption of a secret sense in the Scriptures, different...
from the literal, contributed to the corruption of Christianity. The distinction of the Alexandrian church by the Arian controversies proved the destruction of the catechetical schools in that place, about the middle of the 4th century. The catechetical school at Antioch appears not to have been a permanent institution, like the Alexandrians, but only to have been formed around distinguished teachers, when there happened to be any in the place. There were some distinguished teachers in Antioch, about the year 250. We have no certain information, however, of the theological teachers in that place, such as Lucian, Diouorus of Tarsus, and Theodore of Mopsuestia, until the latter part of the 4th century. These teachers were distinguished from the Alexandrian by more sober views of Christianity, by confining themselves to the literal interpretation of the Bible, by a cautious use of the types of the Old Testament, and by a bolder discussion of doctrines. The Nestorian and Eutychian controversies, in the 5th century, drew after them the ruin of the schools at Antioch. Of a similar character were the catechetical school instituted at Edessa, in the 5th century, and destroyed in 452; and the school afterwards established at Nisibis, by the Nestorians, in its stead; both of which were in Mesopotamia. To these catechetical schools succeeded, at a later date, the cathedral and monastic schools, especially among the Western Christians, who, at least as the 6th century, made use of the heathen schools, and had never established catechetical schools even at Rome. (See Schools.)

Catechisms. A book which contains the principles and first instructions to be communicated in any branch of knowledge, particularly in religion. In modern times, the word has been applied more freely than formerly. Thus we see catechisms of chemistry, history, and, in France, catechism des gens de bon sens (a naut), catechism du bon ton, &c. The word is derived from the Greek ευχομαι, to sound, i.e., into the ears of the person to be instructed. The word, however, is chiefly used to denote the books that contain the religious instruction which any sect deems most important to be taught to the children and the people, in a popular and easy form, generally in the form of question and answer. In the Catholic church, each bishop has the right to make a catechism for his diocese. But in modern times, their catechisms are generally a pretty close copy of the one drawn up by the council of Trent, of which an English translation was published in London (1687), "permissu superiorum," under the patronage of James II. Among Protestants, the catechism of Luther acquired great celebrity, and still continues to be used by many clergymen in Germany, where regular instruction in religion, during a certain period prescribed by law, must precede the confirmation, which takes place between the 13th year of age and the 17th. Clergymen, however, in some parts of that country, have been allowed to publish and use their own catechisms; and it is a matter of no little interest, to observe how the many different philosophical schools of Germany have influenced the tone of the catechisms by their various systems of morals, &c. Some, which we have seen, were books of 300 pages, and rather philosophical systems, supported by numerous quotations from the Bible, than simple catechisms. Such catechisms, however, are going out of use. The catechetical mode of giving instructions in Christianity had much declined previous to the reformation, when it was revived, and numerous catechisms sprung up. The proper preparation of such manuals, the communication of religious and moral instruction in a short compass and a simple form, is a thing of no small difficulty. In England, soon after the reformed religion was established there, a short catechism was introduced, consisting of the creed, the Lord's prayer, and the decalogue, to which a few cautious, explanatory passages were added, about 1549, it is supposed by archbishop Cranmer. "A Shorte Catechisme or Playne Instruction, conteynynge the Summe of Christian Learning, sett fourth by the King's Maiesties Authoritie for all Scholemaisters to teach," was the work which closed the labors of the reformers in the reign of Edward VI, whose name it commonly bears. It was printed both in Latin and in English, in 1553, and may fairly be considered as containing the sense of the church of England then established. The catechism of the English church, now in use, is drawn up, after the primitive manner, by way of question and answer. The questions and answers relative to the sacraments were subjoined to it, at the revision of the liturgy, in the first year of James I. As now extant, it consists of five parts, viz.: 1. the doctrine of the Christian covenant; 2. the articles of belief; 3. the commandments; 4. the duty and efficacy of prayer; and, 5. the nature...
and end of the holy sacraments.—Calvin wrote a catechism, as Luther did; but that of the former has not enjoyed so much popularity, nor been translated into so many languages, as that of the latter.—In France, the catechisms of later times exhibit plain marks of political influence. The catechism of Napoleon, in its tenth chapter, explicitly states in what light he and his family were to be regarded. This celebrated chapter has generally been exhibited, after a fashion, by the papal nuncio. Most of the catechisms published since 1814 are equally scandalous, because they contain illegal, nay, anti-constitutional, precepts. When the complaints on this score became too loud to be disregarded, the pitiful excuse was made, that the offensive turn of the passages was owing to errors of the press.

Catgut. (Sera japonea) is a name which was invented by Archytas of Tarentum. From him it passed to Plato (who, however, admitted only five categories—substance, identity, diversity, motion and rest), and from Plato to Aristotle. The Stoics held four—subjects, qualities, independent circumstances, relative circumstances. (For the categories of Kant, see Kant.)

Catez, Charles Simon, composer of music, born about 1773, a pupil of Gossec, professor of harmony at the conservatory (q.v.) in Paris, has published many musical works, of which none has obtained so much fame as his Traité d'Harmonie (1822), which the conservatory has chosen as a text-book for instruction in composition. Among the works of Catez, besides a great number of compositions for wind instruments, particularly for military music, are the operas Semiramis, Les Baudrières, L'Abbaye de Beigniers, and Les Artistes par Occasion.

Caterpillar. (See Papilio.)

Catgut. The strings of certain musical instruments, the cords of clock-weights, and those of some other machines and implements, are made of a dense, strong animal substance, denominated catgut. It is made from the intestines of different quadrupeds, particularly those of cattle and sheep. The manufacture is chiefly carried on in Italy and France. The texture from which it is made is that which anatomists call the muscular coat, which is carefully separated from the peritoneal and mucous membranes. After a tedious and troublesome process of steeping, scouring, fermenting, inflating, &c., the
material is twisted, rubbed with horse-

hair cords, fumigated with burning sul-

phur, to improve its color, and dried.

Cords of different size, and strength, and
delicacy, are obtained from different do-

mestic animals. The intestine is some-
times cut into uniform strips, with an
instrument made for the purpose. To
prevent offensive effluvia during the pro-
cess, and to get rid of the oily matter, the
French made use of an alkaline liquid,
called eau de Javelle. Catgut for stringed
instruments, as violins and harps, is made
principally in Rome and Naples. For the
smallest violins strings, 3 thicknesses are
used; for the largest, 7; and, for the largest
lutes, 120. In the kingdom
of Naples, whence the best strings, com-
monly called Roman, are obtained, there
are large manufactories of this article.

Catari; a denomination which was
applied, from the middle of the 11th to
the 13th century, to several parties and
sects, that appeared first in Lombardy,
and afterwards in other countries of the
West, and which were violently persecut-
ed, on account of their Manichean tenets
and usages. As they originated in Bulga-
ria, they were sometimes termed Bulga-
rians, whence arose the French term of
al?bes, Bougres. Sometimes, in token of
their contemptibleness, as men of the
lowest class, they were called Patarineres,
or Patarines, from Pataria, a region of
bad reputation near Milan; sometimes
Publicans, or Popelites, and, in the Low
Countries, Pijpels. But the most general
name, by which they were denoted, in the
middle ages, was Cathari (either from
cathars, the pure, which they claimed to
be, or from the national appellation Cha-
sars, because they were said to have pro-
ceeded from Chazars, the present Crimea;
whence ketsa, the German word for her-
dicts). The religious views and practice
of the sects, comprehended under this
name, differed much, according to the age
and country in which they appeared, and
according to the spirit of their leaders;
but they all agreed in an obstinate resis-
tance to Catholicism, and in the following
points of doctrine and religious life:—In
common with the old Manichees, but
without esteeming Manes a prophet, they
entertained an aversion to the mixture of
Judaism in Christianity, professed the
dualism couched in scriptural language,
which places the devil nearly on a level
with God, and entertained the concit of
a high moral perfection. The influence
of Arian and Platonic notions was con-
spicuous in their explanations of the doc-
trine of the Trinity, which defined the
Father to be the unity of the divine will,
the Son, or Logos, to be his first thought,
and the Spirit to be their common opera-
tion. In every good man they saw a
Christ, and, therefore, in their congrega-
tions, separated the elect from the novices.
The merit of the Redeemer they believed
to consist more in his example than in
his expiatory death, and built their hopes
of happiness, for the consummation of
which a resurrection of the body did not
appear to them requisite, on their own
virtue. They regarded the exaltation
of the soul over the mortal nature, so as to
become wholly absorbed in mystical con-
templation, as the highest stage in the
religious life of man. They despised the
mass, the service of the altar, and similar
ceremonies, as mere vanity. The adora-
tion of the cross, of saints and relics, to-
gather with all arbitrary penances and
good works, so called, they deemed idle
superstition. The daily blessing of their
meats and drinks they esteemed equiva-
lent to the celebration of the eucharist.
The imposition of the hands of spotless
priests served for the communication of
the spirit, for baptism, and as a pledge of
the forgiveness of sins. Deep devotion
of the heart in prayer, and a life of purity,
connected with abstinence from sexual
pleasure, and from the use of stimulating
food, were their exercises of piety. The
tenets of popery, and the whole estab-
lishment of the Catholic priesthood, as it
then existed, they looked upon as un-
christian and pernicious. They insisted
on the restoration of the apostolic sim-
elplicity, and the literal fulfilment of the
precepts of the New Testament, which
they read, indeed, with assiduity, but fre-
quently misunderstood. In an age when
the heartless subtilties of dialectics, the
mechanical administration of divine wor-
ship, and the scandalous morals of the clerg
y, widened more and more the breach be-
tween religion and the established church,
such doctrines and maxims necessarily
met with approbation, on account of their
opposition to the prevalent practices. The
piety and morality at which most of the
separatists diligently aimed, the charm of
their secret connexions, and the high intel-
ligence of things sacred to which they
made claim, the warmth of their mysti-
cism, and the moving power of their sim-
ple worship, procured them many ade-
pts, and those not from the common
people merely. They were joined by the
discontented of all classes, even by the
clergy and nobles; whence they were
CATHARI—CATHARINE OF ARRAGON.

called, in France, bons hommes, good, i.e., noble, people; and, in the rude state of the existing political constitutions, amid the confusion of civil wars and ecclesiastical controversy, their congregations, with little mutual connexion, and not menacing the state with danger, were able to pursue with impunity, for years, their quiet course. But these sects were not free from corruption. The nocturnal assemblies, the community of goods, the homeless, roving life (on account of which several of them were called Passagori, Passagrai), and the contempt of the marriage state, which originated in ascetic views, gave rise, in many cases, since they permitted the two sexes to live together, to gross immorality; and the mystery, in which they enveloped their religious exercises, sometimes served to conceal the errors of an unbridled fanaticism. But, when the old denominations became disgraced by such errors, new leaders, and reforms in doctrine and life, gave rise to new sects, and imparted a fresh impulse to the once excited spirit of separatism. From this originated the excitement occasioned among the people of France, Switzerland, and Italy, by Peter Brays, and Henry and Arnold of Besançon, in the 13th century, which introduced the names Petrobrusians, Henricians and Arnoldists. (See Arnold of Brescia.) The ecclesiastical authority now became zealous in searching out and punishing heretics; so that these new, but unconnected, classes of Cathari soon became extinct. The older Cathari, Publicans, Patarens, &c., had the prudence, wherever they were settled, to adhere publicly to the Catholic church, and to hold their private meetings in the night. They even allowed the persecuted members to have recourse, before the spiritual courts, to an apparent recantation; but, the attention of these authorities being once excited, and the popes carrying on the persecution of the heretics by their own legates, and establishing the horrible inquisition in the 13th century, the most blameless life, and the utmost secrecy in the performance of religious exercises, no longer afforded security to these heterodox believers. The fate of the Albigenses (q.v.), who were mainly Cathari, finally produced the overthrow of all this family of sects in the 13th century. The Waldeuses (q.v.) alone, who were unjustly confounded with the Cathari, escaped. No sects of a later origin, have borne this general appellation.

CATHARINE, ST.; a virgin of Alexandria, who, according to Catholic tradition, suffered martyrdom under Maximian, about A.D. 238. She is represented with a piece of a wheel; and the legend of her marriage with Christ has been painted by several of the first masters. Correggio's Catharine, in Dresden, is beautiful. There are two other St. Catharines mentioned. The knights of St. Catharine on mount Sinai are an ancient military order, instituted for the protection of the pilgrims who came to visit the tomb of St. Catharine, on this mountain. In Russia, the order of St. Catharine is a distinction for ladies, instituted by Catherine, wife of Peter the Great, in memory of his signal escape from the Turks in 1711.

CATHARINE OF FRANCE, queen of England, youngest child of Charles VI and Isabella of Bavaria, was born in 1401, and, in 1420, was married to Henry V of England, who was then declared successor to the crown of France. To this prince she bore Henry VI, crowned in his cradle king of both countries. After the death of Henry, Catherine privately married Owen Theodore, or Tudor, a Welsh gentleman of small fortune, but descended from the ancient British princes. By this marriage she had two sons, the eldest of whom, Edmund, earl of Richmond, by a marriage with Margaret Beaufort, of the legitimate branch of Lancaster, became father of Henry VII, and founder of the house of Tudor. Catherine was treated with some rigor, on the discovery of her second marriage, and died in the prime of life, in 1438.

CATHARINE OF ARRAGON, queen of England, the youngest daughter of Ferdinand of Arragon and Isabella of Castile, was born in 1485. In 1501, she was married to Arthur prince of Wales, son of Henry VII. Her husband dying about five months after the king, unwilling to return her dowry, caused her to be contracted to his remaining son Henry, and a dispensation was procured from the pope for that purpose. In his 15th year, the prince made a public protest against the marriage; but, at length, yielding to the representations of his council, he consented to ratify the contract, and, on his accession to the throne, in 1509, was crowned with her. The inequality of their ages, and the capricious disposition of Henry, were circumstances very adverse to the durability of their union, and it seems surprising that Catherine should have acquired and retained an ascendancy over the affections of the king for nearly 20 years. The want of male issue, however, proved a
source of disquietude to him, and scruples, real or pretended, at length rose in his mind concerning the legality of their union, which were greatly enforced by a growing passion for Anne Boleyn, one of the queen's maids of honor. He speedily made application to Rome for a divorce from Catharine. An encouraging answer was returned, and a dispensation promised, it being the interest of the pope to favor the English king. Overawed, however, by the power of the emperor Charles V, Catharine's nephew, the conduct of the pontiff, who depended upon the empire, became embarrassed and hesitating. Catharine, meanwhile, conducted herself with gentleness and firmness, and could not in any way be induced to consent to an act, which would render her daughter illegitimate, and stain her with the imputation of incest. Being cited before the papal legates, cardinals Wolsey and Campeggio, in 1529, she declared that she would not submit her cause to their judgment, but appealed to the court of Rome; which declaration was declared contemptuous. The subterfuges of the pope at length induced the king to decide the affair for himself; and the resentment expressed on this occasion, by the court of Rome, provoked him to throw off his submission to it, and declare himself head of the English church—a result of royal caprice more curious and important than most in history. In 1532, he married Anne Boleyn; upon which Catharine, no longer considered queen of England, retired to Ampthill in Bedfordshire. Cranmer, now raised to the primacy, pronounced the sentence of divorce, notwithstanding which Catharine still persisted in maintaining her claims. She died in January, 1536. Shortly before her death, she wrote a letter to the king, recommending their daughter (afterwards queen Mary) to his protection, praying for the salvation of his soul, and assuring him of her forgiveness and unabated affection. The pathos of this epistle is said to have drawn tears from Henry, who was never backward in acknowledging the virtues of his injured wife, who certainly acted with eminent dignity and consistency. Several devotional treatises have been attributed to Catharine, which belong to queen Catharine Parr.

Catharine de Medici; wife of Henry II, king of France; born at Florence in 1519; the only daughter of Lorenzo de Medici, duke of Urbino, and the niece of pope Clement VII. Francis I conceived that his son Henry should marry her, only because he did not believe she ever would ascend the throne, and because he was in great want of money, which Lorenzo could furnish him. The marriage was celebrated at Marseilles in 1533. Catharine was equally gifted with beauty and talents, and had cultivated the fine arts in Florence; but, at the same time, imbued the perverted principles of politics then prevailing in Italy, which justified a constant resort to cabal, intrigues and treachery, and are particularly unsuited to the government of large empires. Catharine's ambition was unbounded. She sacrificed France and her children to the passion for ruling; but she never aimed steadily at one great end, and had no profound views of policy. The situation in which she was placed, on her arrival at the French court, gave her great opportunity to perfect herself in the art of dissimulation. She fluttered alike the duchess d'Etampes, the mistress of the king, and Diana de Poitiers, the mistress of her own husband, though these two ladies hated each other. From her apparent indifference, she might have been supposed inclined to shun the tumult of public affairs; but, when the death of Henry II, in 1559, made her mistress of herself, she plunged her children in a whirl of pleasures, partly to enervate them by dissipation, partly from a natural inclination towards prodigality; and, in the midst of these extravagances, cruel and bloody measures were executed, the memory of which still makes men shudder. Her authority was limited under the reign of Francis II, her eldest son, since this prince, by his marriage with the unfortunate Mary Stuart, was entirely devoted to the party of the Guises. Jealous of a power she did not exercise, Catharine then decided to favor the Protestants. If it had not been for her patronage, by which the ambition of the chief of the Huguenots was stimulated, the conflicting religious opinions in France never would have caused such lasting civil wars. Catharine felt herself embarrassed, by this indulgence towards the innovators, when the death of Francis II placed the reins of government, during the minority of Charles IX, in her hands. Wavering between the Guises on one side, who had put themselves at the head of the Catholics, and Condé and Coligny on the other, who had become very powerful by the aid of the Protestants, she was constantly obliged to resort to intrigues, which failed to procure her as much power as she might easily have gained by openness of
CATHARINE DE MEDICI—CATHARINE I.

conduct. Despised by all parties, but consoled if she could deceive them; taking arms only to treat, and never treating without preparing the materials for a new civil war, she brought Charles IX, when he became of age, into a situation in which he must either make the royal authority subordinate to a powerful party, or cause part of his subjects to be massacred, in the hope, at best a doubtful one, of subduing faction. The massacre of St. Bartholomew (see Bartholomew, massacre of) was her work. She induced the king to practise a dissimulation foreign to his character; and, as often as he evinced a disposition to free himself from a dependence of which he was ashamed, she knew how to prevent him, by the fear and jealousy which she excited in him by favoring his brother Henry. After the death of Charles IX, Catharine became again regent of the kingdom, till the return of Henry III., then king of Poland. She contributed to the many misfortunes of his reign, by the measures which she had adopted previously to its commencement, and by the intrigues in which she was uninterruptedly engaged. At her death in 1589, France was in a state of complete dismemberment. The religious contests were, in reality, very indifferent to her. The consequences she was not able to conceive. She was ready to risk life for the gratification of her ambition. She was equally artful in uniting her adherents, and in promoting dissension among her adversaries. She was extravagant to folly, and was unable to limit her expenses. To those who directed her attention to the prodigal expenditure of the public treasure, she used to say, "One must live." Her example contributed greatly to promote the corruption of morals which prevailed in her time. Her manners, however, were elegant, and she took a lively interest in the sciences and arts. She caused valuable manuscripts to be brought from Greece and Italy, and the Hellenes and the Hotel de Soissons to be built. In the provinces, also, several castles were erected by her order, distinguished for the beauty of their architecture, in an age when the principles of the art were still unknown in France. She had two daughters, Elizabeth, married to Philip II. of Spain in 1553, and Marguerita (q.v.) of Valois, married to Henry of Navarre, afterwards Henry IV.

CATHARINE OF BRAGANZA, wife of Charles II., king of England, and daughter of John IV., king of Portugal, was born in 1638. In 1661, she married Charles II., in whose court she long endured all the neglect and mortification his dissolute conduct was calculated to inflict upon her. This endurance was also rendered greater by her proving unfruitful; but she supported herself with great equanimity, and, after the death of Charles, received much attention and respect. In 1693, she returned to Portugal, where, in 1704, she was made regent by her brother, don Pedro, whose increasing infirmities rendered retirement necessary. In this situation, Catharine showed considerable abilities, carrying on the war against Spain with great firmness and success. She died in 1705, aged 67.

CATHARINE I., empress of Russia. The early history of this remarkable woman is uncertain. According to some accounts, she was the daughter of a Catholic peasant in Lithuania, by name Samuel, for he had (as is frequently the case there) no family name. It is said that she was born in 1667, named Martha, and placed, by her poor parents, in the service of a Lutheran clergyman, named Gluck, who caused her to be instructed in the Lutheran religion. Here she was married to a Swedish dragoon. But, a few days after, he was obliged to repair to the field, and the Russians, within a short period, took Marienburg, a small village in the circle of Wenden, and entered the service of a clergyman named Glick, who caused her to be instructed in the Lutheran religion. Here she was married to a Swedish dragoon. 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CATHERINE I—CATHERINE II.

CATHARINE II, empress of Russia, a woman of remarkable ability, was born at Stettin, April 25, 1729, where her father, Christian Augustus, prince of Anhalt-Zerbst, and Prussian field-marshall, was governor. Her name was originally Sophia Augusta. The empress Elizabeth, at the instigation of Frederic II, chose her for the wife of Peter, her nephew, whom she appointed her successor. The young princess accompanied her mother to Russia, where she joined the Greek church, and adopted the name of Catharine Alexi-"

Russia; and, having succeeded, by bribing his confidant with her jewels, she disclosed her plan to the emperor, who gave it his approbation, and was soon relieved. She afterwards received many proofs of the gratitude of her husband. (Her coro-nation, as empress, in Moscow, which some place in 1718, took place, according to Weber and Bergholz, in 1724.) Peter even deemed her worthy of being his successor. But, in the latter part of 1723, she fell under his displeasure. Her chamberlain Mons, with whom Peter had found her tête à tête, was beheaded, on pretence that he had been bribed by the enemies of Russia; and she was obliged to view the head of Mons nailed to a gibbet. This, however, is only an anecdote, and the affair of Mons remains a mystery. Menzikoff, who had always manifested much attachment to her, had now been in disgrace for some time, and Peter had very frequent attacks of bodily pain, which were interrupted by dreadful explosions of rage. These circumstances made Catharine’s situation critical, and her anticipations of the future must have been the more melancholy, as the emperor had uttered some threats of a change in the succession to her disadvantage. To prevent such an event, she applied to Menzikoff; and, by the prudence of Jaguschinski, who then enjoyed the favor of Peter, and whom she gained over, a reconciliation was effected with the emperor. The empress and the favorite were laboring to confirm their improving prospects when Peter the Great died, Jan. 28, 1725. Catharine, Menzikoff and Jaguschinski considered it necessary to keep the death of the emperor secret, until, by judicious arrangements, they had secured the succession of the throne to the empress. Theophania, archbishop of Plescow, swore before the people and troops, that Peter, on his death-bed, had declared Catharine alone worthy to succeed him in the government. She was then proclaimed empress and autocrat of all the Russians, and the oath of allegiance to her was taken anew. At first, the cabinet pursued the plans of Peter, and, under Menzikoff’s management, the administration was conducted with considerable ability. But the pernicious influence of favorites was soon felt, and great errors crept into the administration. Catharine died suddenly, on the 17th of May, 1727, in the 43d year of her age. Her death was probably hastened by excess in the use of Tokay wine and ardent spirits.
discipline, his politics, and the faults of his character. This led to a conspiracy, at the head of which were the hetman count Rasumowski, count Panin, the enterprising princess Daschikoff, and a young officer of the guards, Gregory Orloff, who, since Poniatowski's departure, had taken his place in Catharine's affections. All those who were dissatisfied, or who expected to gain by a change, joined this conspiracy. Panin and the greater part of the conspirators were actuated only by the desire to place the minor prince, Paul, on the throne, under the guardianship of the empress, and a council of the empire. But this plan was changed through the influence of the Orloffs. The guards were the first to swear allegiance to the empress, on her presenting herself to them at Peterhof, on the morning of July 9, 1762; and Alexei Orloff prevailed on Teplow, who was afterwards appointed senator, to read, at the Kazan church, instead of the proclamation of the conspirators in favor of the young prince, one announcing the elevation of Catharine to the throne. Peter died, a few days after, in prison. The accusation against Catharine, of having contributed to hasten this event, is without foundation. The young, ambitious princess, neglected by her husband, whom she did not respect, remained passive on the occasion, yielded to circumstances, which were, it is true, propitious to her, and consol ed herself for an event which she could not remedy. She knew how to gain the affections of the people by flattering their vanity; showed great respect for their religion; caused herself to be crowned at Moscow with great pomp; devoted herself to the promotion of agriculture and commerce, and the creation of a naval force; improved the laws, and showed the greatest activity in the administration of the internal as well as the external affairs of Russia. A year after her ascension to the throne, she forced the Courlanders to displace their new duke, Charles of Saxony, and to recall Biron, who was extremely odious to the nobles. After the death of Augustus III, king of Poland, she was the means of Stanislaus Poniatowski's being crowned at Warsaw. But, whilst she was forcing this king on the Poles, the number of the malcontents in her own empire increased, and several attempts against her life were made at St. Petersburg and Moscow. The young Ivan (q. v.) was the person to whom the hopes of the conspirators were directed; but his sudden death, at the fortress of Schlüsselburg, overthrew the plans of the disaffected. After this, the court of the empress was only disturbed, from time to time, by intrigues, in which gallantry and politics went hand in hand, and which had no other object than to replace one favorite by another. In the midst of pleasure and dissipation, Catharine did not neglect the improvement of the laws. Deputies from all the provinces met at Moscow. The empress had herself prepared instructions for their conduct, which were read at the first session; but it was impossible for so many different nations to understand each other, or to be subject to the same laws. In the first session, the emancipation of the peasants was proposed. This alone would have been sufficient to cause a bloody revolution. Catharine, who presided at the debates, and received from the assembly the title of mother of the country, soon dismissed the discordant legislators. About this time, France formed a party in Poland against Russia; but these attempts only served to accelerate Catharine's plans. The war to which the Porte was instigated had the same result. The Turks were beaten. The Russian flag was victorious on the Greek seas; and on the banks of the Neva, the plan was formed of reestablishing the republics of Sparta and Athens, as a check to the Ottoman power. The advancement of Austrian troops into Poland inspired Catharine with the desire to aggrandize herself in this quarter. She therefore entered into an agreement for the division of the country with the courts of Berlin and Vienna in 1772, by which the governments of Polotsk and Moldavia fell to her share, and she ensured to herself exclusive influence in Poland, by undertaking to guaranty the Polish constitution. At the same time, she abandoned all her conquests, with the exception of Azoph, Taganrog and Kinburn, in the peace with the Porte, concluded at Kainardisch in 1774, but secured to herself the free navigation of the Black sea, and stipulated for the independence of the Crimean Tartars. By this apparent independence, the Crimea became, in fact, dependent on Catharine. This peace was as opportune as it was advantageous to Russia; for, in the third year of the war, Moscow and several other cities were desolated by the plague; and, about the same time, an adventurer, named Pugatschoff, assuming the name of Peter III, had excited a revolt in several provinces of Eastern Russia. At this time, Potemkin exercised an unlimited influence on the empress. In
CATHARINE II.

1784, he succeeded in conquering the Crimea, to which he gave its ancient name of Tauris, and extended the confines of Russia to the Caucasus. Catherine, upon this, traversed the provinces which had revolted under Pugatscheff, and navigated the Volga and Boryslavka, taking greater interest in the expedition, as it was connected with some danger. She was desirous, likewise, of seeing Tauris. Potemkin turned this journey which took place in 1787, into a triumphal march. Throughout a distance of nearly 1000 leagues, nothing but feasts and spectacles of various kinds were to be seen. Palaces were raised on barren heaths, to be inhabited for a day. Villages and towns were built in the wilderesses, where, a short time before, the Tartars had fed their herds. An immense population appeared at every step—the picture of influence and prosperity. A hundred different nations paid homage to their sovereign. Catherine saw, at a distance, towns and villages of which only the outward walls existed. She was surrounded by a multitude of people, who were conveyed on during the night, to afford her the same spectacle the following day. Two sovereigns visited her on her journey, the king of Poland, Stanislaus Augustus, and the emperor Joseph II. The latter renewed his promise, given at St. Petersburg, to assist her in her projects against the Turks. About this time, Russia and England combined to instigate the Porte and Sweden to take up arms against Russia. The Turks were no more fortunate this time than before; and perhaps they would have been driven entirely out of Europe, had not Catherine been restrained by the interference of other states. (See Reichenbach Congress, 1798.) Peace was concluded at Jassy in 1792. Catherine kept Orzakow, and all the country between the Bug and the Dniester. Whilst Russia was occupied with the Turks, Gustavus III had commenced hostilities, and, at one time, threatened St. Petersburg. After a war of two years, peace was concluded at Varska, in 1790, leaving the possessions of both countries as they were before the commencement of hostilities. Thus all the wars undertaken against Russia had only tended to augment her political preponderance. Catherine's influence on Poland was equal to absolute dominion. When the republic, in 1791, wished to change its constitution, she took part with the opponents of the plan, gained the concurrence of Prussia, garrisoned Poland with her troops, and concluded a new treaty of partition with the cabinet of Berlin in 1792. (See Poland.) The insurrection, which broke out in Poland in 1794, could not save this unhappy country, which, after the storming of Praga, and the devastation of several of its provinces, was, at last, in 1795, cut in two. Courland, too, was united with the Russian empire. A pension was given to the last duke of Courland, and the last king of Poland spent his pension at St. Petersburg. During these occurrences, Catherine could not take part in the war against France. She, however, broke off all connexion with the French republic, actively assisted the emigrants, and entered into an alliance with England against France. She likewise made war against Persia, and, as some historians assure us, entertained the project of destroying the power of the English in Bengal, when a fit of apoplexy put an end to her life, Nov. 9, 1796.—Catharine II has been equally censured and praised. With all the weakness of her sex, and with a love of pleasure carried to licentiousness, she combined the firmness and talent of a powerful sovereign. Two passions were predominant with her until her death, love and ambition. She was never without her favorite, who, by the manner in which she distinguished him, and by the valuable presents she gave him, was publicly designated as such. She never, however, lost sight of her dignity. She was distinguished for activity, working with her ministers, writing a philosophical letter to Voltaire, and signing an order to attack the Turks, or to occupy Poland, in the same breath. She favored distinguished authors, and was particularly partial to the French. At Paris, she had a literary agent (baron Grimm). She several times invited Voltaire to her court, proposed to D'Alembert to finish the Encyclopedia at St. Petersburg, and to undertake the education of the grand-duke. Diderot visited her at her request, and she often allowed him the privilege of familiar conversation with her. By these means, she gained the favor of the literati of Europe, who called her the greatest of rulers; and, in fact, she was not without claims to this title. She protected commerce, improved the laws, dug canals, founded towns, hospitals and colleges. Pallas was executed at her expense. She endeavored to put a stop to the abuses which had crept into the administration of the different departments of government; but she began without being able to finish. Civilization advanced but slowly in Russia under...
her reign; and her anxiety to enlighten her subjects ceased when she began to entertain the idea that the French revolution had been brought about by the progress of civilization. Laws, colonies, schools, manufactures, hospitals, canals, towns, fortifications, every thing was commenced, but frequently left unfinished for want of means. She issued no paper money. Several letters, and other compositions by her, in the French and Russian languages, have been published. A statue of Catharine, of white marble, in a sitting posture, was executed by professor Götze, at Stockholm, in 1825. The manners of the Russian court, in her time, are set forth in the diary of Krapomisky (St. Petersburg, 1830). Krapomisky was her private secretary for 10 years. Among several histories of her life are Tooke's Life of Catharine II (3 vols.), and Caster's Histoire de Catharine II (3 vols.).

Catharine Parr, sixth and last wife of Henry VIII, was the eldest daughter of Sir Thomas Parr of Kendal, and was, at an early age, distinguished for her learning and good sense. She was first married to Edward Burger, and secondly to John Neville, lord Latimer, and, after his death, attended the notice of Henry VIII, whose queen she became in 1543. Her zealous encouragement of the reformed religion excited the anger and jealousy of Gardiner, bishop of Winchester, the chancellor Wriothesley, and others of the Catholic faction, who conspired to ruin her with the king. Taking advantage of one of his moments of irritation, they accused her of heresy and treason, and prevailed upon the king to sign a warrant for her committal to the Tower. This being accidentally discovered to her, she repaired to the king, who purposely turned the conversation to religious subjects, and began to sound her opinions. Aware of his purpose, she humbly replied, "that on such topics she always, as became her sex and station, referred herself to the wisdom of his majesty, as he, under God, was her only supreme head and governor here on earth." "Not so, by St. Mary, Kate," replied Henry; "you are, as we take it, become a doctor, to instruct, and not to be instructed by us." Catharine judiciously replied, that she only objected in order to be benefited by his superior learning and knowledge. "Is it so, sweetheart?" said the king; "and tended your arguments to no worse end? Then are we perfect friends again." After the death of the king, she espoused the lord admiral Sir Thomas Seymour, uncle to Edward VI; but this connexion proved unhappy, and involved her in troubles and difficulties. She died in childbirth in 1548, not without suspicion of poison. She was a zealous promoter of the reformation. Among her papers, after her death, was found a composition, entitled Queen Catharine Parr's Lamentations of a Sinner, bewailing the Ignorance of her Blind Life; a contrite meditation on the years she had passed in Catholic fasts and pilgrimages. It was published, with a preface, by the great lord Burleigh, in 1548. In her lifetime, she published a volume of "Prayers or Meditations, wherein the Mind is stirred patiently to suffer all Afflictions here, and to set at nought the vain Prosperity of this World, and also to long for the everlasting Felicity." Many of her letters have also been printed.

Catharine Pawlowna, queen of Würtemburg, grand-princess of Russia; born May 21, 1782; younger sister of the emperor Alexander, and widow of George, prince of Holstein-Oldenburg, whom she married in 1800, and thus got rid of a proposal of marriage made her by Napoleon. George died in Russia, December, 1812. Her two sons, by this marriage, born in 1810 and 1812, are still living. She was distinguished alike for beauty, talents and resolution, and exhibited the tenderest affection for her brother Alexander. After 1812, she was frequently his companion in the campaigns in Germany and France, as well as during his residence at London and Vienna, and evidently had an important influence on several of his measures. It is said that she effected, in 1814, the marriage of the prince of Orange with her younger sister. In 1813, William, crown-prince of Würtemburg, in Germany, formed an acquaintance with her, and, in 1814, saw her again in Paris. They were married Jan. 24, 1816, at Petersburg; and, after the death of his father, in October, 1816, he ascended with her the throne of Würtemburg. She was a generous benefactor to her subjects in the famine of 1816. She formed the female associations existing throughout the country, and established an agricultural society. She labored to promote the education of her people, and founded valuable institutions for the poor (particularly a school for educating and employing poor children), a school for the females of the higher classes, and savings banks for the lower classes, after the example of the English savings banks. Indeed, she interfered, often arbitrarily, in the internal economy of the state, and
CATHARINE PAWLOWNA—CATHOLIC EMANCIPATION. 589

Chiefly imitated the institutions of England. For the fine arts she had but little taste. She died Jan. 9, 1819, leaving two daughters.

CAT-HARPS: small ropes in a ship, running in little blocks, from one side of the shrouds to the other, near the deck. Their use is to force the main shrouds tight, for the ease and safety of the masts when the ship rolls.

CATHEDRAL; the Episcopal church of a diocese. The word is derived from the Greek "kathedra", a seat or bench. From the early times of the Christian church, the bishop presided in the presbytery, or the assembly of priests. He was seated on a chair, a little higher than that of the others. The whole meeting of priests was called "cathedra"; and, at a later period, when Christians were allowed to build churches, this name was applied to the Episcopal churches, and the name "cathedra" to the particular churches erected in honor of a saint or a martyr. In the middle ages, the cathedral received the form of the cross. Several of the old churches are masterpieces of Gothic architecture. Among these are the cathedral of Oviedo, that at Milan [see Storia e Descrizione del Duomo di Milano (commenced in 1387, and not yet finished), by Gae. Franchetti, with engravings, Milan, 1824, 4to.]; those at Toledo and Burgos; those at Rouen, Rheims, Amiens, and the church of Notre-Dame, in Paris (see Cathédrales Françaises, dessinées, lithogr. et pub. par Chapuy, avec un Atlas historique et d'histoire, par Jolimont, 36 volumes, Paris, 1823 to seq. It contains views of 25 cathedrals). Those at Lund, Drontheim, Upsal, at York, Salisbury and Canterbury, also Westminster abbey, are celebrated (see J. Britton's Hist. and Antq. of the Metropolitan Church of Canterbury, London, 1823, with engravings; and Cathedrals and Cathedrals, by the same author). The cathedrals at Oppenheim, Ulm, Marburg, Meissen, Freiburg (q.v.), in the Brugiu, are fine buildings [see doctor Moller's Denkmale der Deutschen Baukunst, Darmstadt, 1825; and F. W. Schwechten's Der Dom zu Meissen, bild. dargest. u. besch., Berlin, 1828, 3 nos.].

Respecting the cathedral of Cologne, see Boisserée. (For further information, see Wiebekinger's work Die Kathedralen von Rheims und York, nebst den Grundzügen von 42 anderen merkwürdigen Kirchen, Münich, 1825, fol., with engravings.) In Rome there has appeared, since 1822, the Collection of the oldest Christian Churches, or Basilicas, of Rome, from the 4th to the 15th Century; drawn and published by J. G. Gutensohn and J. M. Knapp (architects); accompanied by an Archeol. Histor. Description, by Amt. Nibby, professor of Archæology in the University at Rome; 7 numbers, each containing 7 plates. There is now in the course of publication at Milan, a splendid work, entitled Chiese principali d'Europa, which will extend to 36 numbers; each of them being devoted to one particular edifice. From the numbers already published, we extract the subsequent measurements of celebrated buildings.

St. Peter's, at Rome.

Width of the cathedral, 233
External diameter of the cupola, 138
Total height, 448

Cathedral at Milan.

Width of the front, 216
Width of the cross, 251
Total height, 359

Pantheon at Rome.

Width of the façade, 148
Great tower, from the ground to the top of the cross, 450
Greatest breadth between the two chief towers, 233

Santa Maria del Fiore, Florence.

Width of the façade, 286
Total height, 384

CATHOLIC EMANCIPATION, the Roman Church signified the release of a son from the power of his father, or of a slave from that of his master. It was performed before the pretor, attended by certain solemnities. By the emancipation of the Catholics is understood the abolition of those civil and ecclesiastical restraints, to which the Catholics of Great Britain, and particularly of Ireland, were once subjected. Ireland, from the time of its subjugation, was maltreated by its conquerors; and repeated attempts, on the part of the natives, to free themselves from foreign domination, only increased the severity of their sufferings.

*The measurements of this edifice are given in feet; but they are neither Roman nor English, nor any other feet we are acquainted with.
of their rulers. (See Orangemen.) The Catholic inhabitants of the country were excluded from public offices, and from all participation in the choice of members of parliament. None but the Anglo-Irish, belonging to the Episcopal church, which had now become the established church in Ireland—men who possessed the greatest part of the landed property, that had been torn from the original inhabitants—were eligible to public offices, or to a seat in parliament. In this oppressed condition the Irish Catholics remained till 1733. But when the principles disseminated at the time of the French revolution produced a general fermentation, which extended to the Irish Catholics, a lively desire was awakened in them to obtain equal rights with their Protestant fellow-citizens. They were supported in England itself by a very respectable party. Burke repeatedly spoke in parliament in favor of their emancipation. In 1792, they presented a petition, praying for the abolition of all the restrictions to which they had hitherto been subjected. Upon this, a recommendation was addressed from the throne to the Irish parliament, to contrive means for the melioration of the condition of the Catholics. Accordingly, the Irish act, so called, was passed in 1793, which conferred the elective franchise on the Catholics, threw open to them all employments in the army in Ireland, and all offices in the navy. Three offices in the army only were excepted—those of the commander-in-chief, master-general of the ordnance, and generals on the staff. They continued to be excluded, however, from 30 public offices, and from parliament—an arrangement which could not be changed without a repeal of the corporation and test acts. (q. v.) A part of the Irish Catholics were satisfied with the concessions. Another party, however, encouraged by a few noblemen, who had entered into connexion with France, cherished the hope that Ireland would succeed, with the help of France, in freeing itself from the British power. An insurrection speedily broke out, which was quelled by the severity of the governor, lord Camden. It blazed forth again, however, in 1788, and Ireland became the theatre of a new civil war. By this rebellion, judicious men, both in England and Ireland, were convinced that, as long as the two kingdoms had separate legislatures, and that of the weaker was dependent on that of the stronger, and the inhabitants of the two kingdoms thought their interests inconsistent, jealousy and distrust would continue. The Anglo-Irish, also, who had previously desired the independence of Ireland, and, at first, supported the rebellion, perceived that the superior numbers of the Catholics, and their bitter enmity to the Protestants, would make the separation of Ireland from England a great misfortune for them. It was resolved, then, to unite Ireland with England; and, three years after the last rebellion, the union was effected, and the united parliament was opened Jan. 22, 1801. In regard to ecclesiastical affairs, nothing further was provided in the act of union, than that the Episcopal church in Ireland should remain the established church, and should constitute, with the English, one church. Respecting the condition of the Catholics nothing was done, and Pitt observed that it would be well to reserve this business for future deliberation. The united parliament had been in session but a few days, when reports were spread, which cast a dark shade over the union, and gave occasion for much anxiety. The Catholics in Ireland, it was said, complained of the non-fulfilment of expectations which had been held out to them, to make them favorable to the union. Full emancipation had been promised them, as a certain consequence of it. Pitt, the author of the union, had pledged himself, with his colleagues, to promote the fulfilment of this wish of the Catholics. After the union was completed, invincible obstructions were found in the way of the accomplishment of their promise. Pitt and his colleagues had encouraged these hopes with the expectation of being able to fulfill them. For this reason, they endeavored, after the union was completed, to obtain an act of parliament, by which admission to parliament and to offices of state, from which the Catholics were still excluded, should be made possible for a certain number of them, by dispensing with the test-oath. But the king set himself against this measure, as being inconsistent with his coronation-oath. Pitt and his colleagues, therefore, in 1801, resigned their places. Pitt foresaw that, if both houses agreed to this measure, the king would still withhold his permission; and thus the discontent of the Catholics would be directed against the person of the king himself. This, like a wise statesman, he wished by all means to avert; and, on this ground, in 1803, he spoke against the emancipation, when the opposition proposed anew to grant the Catholic a
CATHOLIC EMANCIPATION—CATHOLIC MAJESTY.

seat and a voice in parliament, and admissibility to all offices of state. During late years, the petition for complete emancipation has been several times renewed in vain. In 1822, on the motion of Mr. Canning, a bill was passed, in the house of commons, by a majority of 21 voices, enabling Roman Catholic peers to sit in parliament; but, in the house of lords, the bill was rejected. The same happened in 1825, when the duke of York, who died in 1827, solemnly opposed it. In 1827, under Canning’s administration, the motion for emancipation was lost, in the house of commons, by a majority of 3. The measure has, at last, been effected, under the administration of the duke of Wellington. The disturbances in Ireland were assuming an organized character, under the influence of the Catholic association, which was spread through the country, and directed by men of great abilities—such as O’Connell and Shiels—so that his grace was, at last, driven to support the cause of emancipation. He said that he had to choose between concession to the Catholics and civil war. Mr. Peel, who had formerly spoken warmly against emancipation, now moved it in the house of commons. One of the chief opposers of the measure was lord Eldon, the former lord chancellor; one of the royal family—the duke of Cumberland—also took part with the opponents. The emancipation of the Catholics is so interesting an event, that the following abstract of the fate of various motions respecting it may not be unacceptable to our readers.

In 1815, a majority of 129 in the house of lords, and of 212 in the house of commons, refused to act on the petition of the Catholics, moved severally by lord Grenville and Mr. Fox. In 1807, lord Grenville withdrew his motion in favor of emancipation, it being understood that his majesty was averse to it. In 1808, Mr. Grattan’s motion was rejected, in the house of commons, by a majority of 129, and lord Donoughmore’s, in the house of lords, by a majority of 87. In 1810, a motion to the same effect, by the same members, was again lost, by a majority of 113 in the commons, and 86 in the lords. In 1812, there was a majority of 72 in the lords, and 83 in the commons, against the movers. Mr. Canning’s motion was lost, in the same year, by a majority of 129 in the commons, and that of the marquis of Wellesley, by a majority of 113 in the lords. In 1813, the motions of Mr. Grattan, sir John Cox Hippersley and doctor Duigenan, drew forth majorities against the Catholics of 40, 43 and 42, and, on the 24th of May, the bill was given up. In 1821, Mr. Plunkett carried the bill through the house of commons by a majority of 19; but it was lost in the lords by a majority of 29. In 1822, Mr. Canning carried it, in the commons, by a majority of 21; but it was thrown out, in the lords, by a majority of 42. In 1825, sir Francis Burdett carried it, in the commons, by a majority of 27; but it was again thrown out, in the lords, by a majority of 48. In 1827, sir Francis Burdett’s motion for a committee was lost, in the commons, by a majority of 3. In 1828, the motion for a conference with the lords was carried, in the commons, by a majority of 6; but thrown out, in the lords, by a majority of 45. And, in 1829 (April 10), a relief bill, abolishing the civil disabilities on Roman Catholics, by repealing the oaths of supremacy, &c., was carried through the commons by Mr. Peel, with a majority of 150 on the second reading, and 178 on the third; and through the lords, by the duke of Wellington, with a majority of 105 on the second reading, and 104 on the third. By this bill, Catholics are eligible to all offices of state, excepting the lord-chancellorships of England and Ireland, the lord-lieutenancy of Ireland, the office of regent or guardian of the United Kingdom, and that of high commissioner to the church of Scotland. They are still excluded from the right of presentation to livings, and all places connected with the ecclesiastical courts and establishment. The church patronage attached to any office in the hands of a Catholic is to be vested in the archbishop of Canterbury. Attached to the bill is a clause for the gradual suppression of the Jesuits and monastic orders (religious establishments of females excepted). At the same time, the duke carried a disfranchisement bill, by which the 40 shilling freeholders of Ireland were disfranchised, and the income of real estate necessary to entitle to a vote in elections in that country raised to £10 sterling. There has lately been published a History of the late Catholic Association of Ireland, from its Institution, in 1769, to its final Dissolution in 1829; by Thomas Wyse, junior, Esq., one of the members of that body; 2 vols. 8vo., London, 1829, Colburn. Catholic Majesty; a title which pope Alexander VI gave to the kings of Spain, in memory of the perfect expulsion of the Moors out of Spain, in 1491, by Ferdi-
hand of Arragon. But even before that time, and especially after the council at Toledo, in 589, several Spanish kings had borne this title.
## CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baule-Ave</td>
</tr>
<tr>
<td>Battagio, Battacks</td>
</tr>
<tr>
<td>Batoucros (Las)</td>
</tr>
<tr>
<td>Monterey</td>
</tr>
<tr>
<td>Ruman Islands</td>
</tr>
<tr>
<td>Rastam's Carvern</td>
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<tr>
<td>Blaustenzen (Alex, Gottlieb)</td>
</tr>
<tr>
<td>Bnse (John Frederic)</td>
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<tr>
<td>Ramnavo</td>
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<td>Bvavia</td>
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<td>(transcription of)</td>
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<td>Bavian (Marcus) and Michael</td>
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<td>Rawly-House</td>
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<tr>
<td>Baxter (Andrew)</td>
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<tr>
<td>Bayard</td>
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<td>Bayard (Chevalier de)</td>
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<tr>
<td>Bayle (Pierre)</td>
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<tr>
<td>Bayamo</td>
</tr>
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<td>Bawley-House</td>
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<td>Bayonne</td>
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<td>Bayonet</td>
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<td>Bazaar</td>
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<tr>
<td>Beacon (see Signals, and Light-house)</td>
</tr>
<tr>
<td>Beagle</td>
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<td>Boston (archbishop)</td>
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<td>Beaufort (in S. C.)</td>
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<td>Beaufort (in N. Y.)</td>
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<td>Beaumont (in Eng.)</td>
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<tr>
<td>Bel (see Baal)</td>
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<tr>
<td>Bed (in gunnery)</td>
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<tr>
<td>of Justice (see Lit de Justice)</td>
</tr>
<tr>
<td>Beddies (Thomais)</td>
</tr>
<tr>
<td>Bell (see Lancaster)</td>
</tr>
<tr>
<td>Bel (Stefano della)</td>
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<td>Bellisle (in bay of Biscay)</td>
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<td>Bell-Metal (see Copper)</td>
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<td>Beltri (James)</td>
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<tr>
<td>Bellitude (see Bello-Isle)</td>
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<td>Bellinone (Charles Michael)</td>
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<td>Bell-Men (in N. A.)</td>
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<td>Bell-Rock</td>
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<tr>
<td>Bebochutan (see Belujistan)</td>
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<td>Belt (Great and Little)</td>
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<td>Belujistan</td>
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<tr>
<td>Belgians</td>
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<td>Benedict XIV</td>
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<td>Benedict</td>
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<tr>
<td>Benedictines</td>
</tr>
<tr>
<td>Benediction</td>
</tr>
<tr>
<td>Benefit of Clergy</td>
</tr>
<tr>
<td>Benvenuto</td>
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<td>Benet (Ambry)</td>
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<tr>
<td>Bengtson (Ambry)</td>
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<td>Bengal (kingdom)</td>
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<td>Bengt (John Alcimus)</td>
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<td>Benjowes (count of)</td>
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<td>112</td>
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<td>113</td>
</tr>
<tr>
<td>114</td>
</tr>
<tr>
<td>115</td>
</tr>
</tbody>
</table>

**Note:** The page contains a list of names and titles, possibly from a historical or genealogical context.
CONTENTS.
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PRICE TWO DOLLARS AND A HALF EACH.

The necessity for instruction was never more universally felt than at the present period, when desire for knowledge pervades every department of society. Hence have resulted attempts to satisfy the demand by numerous Encyclopedic publications in different countries, the merits of which works we shall not discuss, as they have generally been either exclusively devoted to certain branches of the tree of knowledge, or engaged in purely scientific examinations of select topics, better suited to particular classes than to the great mass of readers. Of the whole number, but one appears to be directed to the end we have in view, that of presenting a sufficient amount of easily accessible information to those desirous of learning, together with agreeable and useful remembrances to such as are already instructed.

The work we thus prefer, is the Encyclopedic Dictionary published in Germany a few years since by an association of distinguished literary and scientific men, with the unpretending title of the Conversation Lexicon. It presents almost all that a man ought to know, in order to have a fair general acquaintance with the present state of
human knowledge; in proof of this, its success in Germany and elsewhere may be stated, seven editions having been published within a few years, each of which has been an improvement upon its immediate precursor.

The American publishers therefore believe, that in naturalizing this Encyclopædia, in such a manner as to adapt it to the peculiar condition, differences of taste and habits of our country, they are rendering an acceptable service to the community; such a work being admirably adapted to extend and gratify that thirst for knowledge which distinguishes and facilitates the advances of civilization.

In the work now presented to the American public, all that is of general interest and enduring value in the German work has been extracted, without being, however, restrained to a servile imitation; it has served as a mould or basis rather than been rigidly copied. For articles of local interest, others suited to our people and circumstances have been substituted; subjects slightly sketched in the German have been drawn up in an ample form, by experienced hands, for the American work; modifications, abridgments, and additions, bring down the original articles to the actual state of knowledge; new discoveries, recently observed facts, and improvements in various departments have been inserted; and, finally, neither exertion nor expense have been spared to render it worthy of the success of its distinguished European prototype.

The Conversation Lexicon, of which the seventh edition in twelve volumes has lately been published in Germany, originated about fifteen years since. It was intended to supply a want occasioned by the character of the age, in which the sciences, arts, trades, and the various forms of knowledge and of active life, had become so much extended and diversified, that no individual engaged in business could become well acquainted with all subjects of general interest; while the wide diffusion of information rendered such knowledge essential to the character of an accomplished man. This want, no existing works were adequate to supply. Books treating of particular branches, such as gazetteers, &c. were too confined in character; while voluminous Encyclopaedias were too learned, scientific, and cum brous, being usually elaborate treatises, requiring much study or previous acquaintance with the subject discussed. The conductors of the Conversation Lexicon endeavoured to select from every branch of knowledge what was necessary to a well-informed mind, and to give popular views of the more abstruse branches of learning and science; that their readers might not be incommoded, and deprived of pleasure or improvement, by ignorance of facts or expressions used in books or conversation. Such a work must obviously be of great utility to every class of readers. It has been found so much so in Germany, that it is met with every where, among the learned, the lawyers, the military, artists, merchants, mechanics, and men of all stations. The reader may judge how well it is adapted to its object, from the circumstance that though it now consists of twelve volumes, seven editions, comprising about one hundred thousand copies, have been printed in less than fifteen years. A French translation is now preparing in Brussels.

A great advantage of this work is its liberal and impartial character; and there can be no doubt that a book like the Encyclopaedia Americana will be found peculiarly useful in this country, where the wide diffusion of the blessings of education, and the constant intercourse of all classes, create a great demand for general information.
The Publishers feel satisfied, that, by the efforts of the Editors, the work will be so prepared for publication, as to justify in this country the reputation it has obtained in Europe. Dr. Lieber is connected with many of the principal men of letters in Germany; he has resided for a considerable period in England, and is possessed of the talents, knowledge, and industry, needful to carry on such a work with success. Mr. Wigglesworth is a gentleman of ability and acquirements, acquainted with the condition and wants of his own country, and with the literature of Europe; and the Publishers feel assured he is fully competent to give all needful assistance in fitting the work to the present condition of the United States. But, while they feel confident that the task of translating and arranging the *Conversation Lexicon* for publication in America, is in safe and suitable hands, they have not neglected, and will not neglect, any other means that may come within their power, to make it as complete as possible.

In the preparation of the work thus far, the Editors have been aided by many gentlemen of distinguished ability, and for the continuation, no efforts shall be spared to secure the aid of all who can, in any way, contribute to render it worthy of patronage.

The American Biography, which is very extensive, will be furnished by Mr. Walsh, who has long paid particular attention to that branch of our literature, and from materials in the collection of which he has been engaged for some years. For obvious reasons, the notices of distinguished Americans will be confined to deceased individuals: the European Biography contains notices of all distinguished living characters, as well as those of past times.

The articles on Zoology have been written expressly for the present edition by Dr. John D. Godman. Those on Chemistry and Mineralogy, by a gentleman deeply versed in these departments.

In relation to the Fine Arts, the work will be exceedingly rich. Great attention was given to this in the German work, and the Editors have been anxious to render it, by the necessary additions, as perfect as possible.

To Gentlemen of the Bar, the work will be peculiarly valuable, as in cases where legal subjects are treated, an account is given of the provisions of American, English, French, Prussian, Austrian, and Civil Law.

The Publishers believe it will be admitted, that this work is one of the cheapest ever published in this country. They have been desirous to render it worthy of a place in the best libraries, while at the same time they have fixed the price so low as to put it within the reach of all who read.

### Conditions of Publication.

I. It will be completed in twelve volumes, of from six to seven hundred pages each, handsomely printed on fine paper.

II. The second volume will appear in December, 1829; and a volume will be published every three months, until completed. The work is now so far advanced as to enable the publishers to assure the subscribers, that no delay shall take place.

III. The price to subscribers will be two dollars and a half per volume, strongly done up in muslin.
Letter from George Ticknor, Esq. of Boston.

Boston, Nov. 25, 1827.

Sir,—I am not acquainted with any book in a foreign language, which, I think, may be translated into English and published in the United States, with the needful alterations, with so much success as the Conversations Lexicon, of which so many editions have been published in Germany. It seems to me to be suited, in a particular manner, to the present condition and wants of this country, because it contains more of that information which is useful and interesting to well-educated persons of all classes, than any other work with which I am conversant. It has made the fortunes of its publishers in Germany, and it is about to be adapted to the wants of the rest of the continent; in a French translation just undertaken at Brussels; and I do not doubt, a similar adaptation of it to the United States, would be as fortunate and as successful as was the original work; because, the class of persons to whom it would be interesting, is much greater in this country than it is in Germany.

GEORGE TICKNOR.

Letter from Dr. Charles Follen, Instructor in German in Harvard University.

Cambridge, Nov. 23, 1827.

Sir,—My opinion with respect to the translation of the Dictionary for Conversation into English, as proposed by Dr. Lieber, coincides entirely with the views which this gentleman and several eminent literary men of this country have already expressed. The Dictionary for Conversation owes its excellence, as well as its signal success, principally to this circumstance, that in Germany every one who aims at distinction in any science or art, commonly devotes himself almost exclusively to his particular pursuit. This devotedness to a single object is apt to be attended with a very imperfect acquaintance with other branches of knowledge, and it is this defect which occasioned the editing of a work which brought within the reach of every one the most interesting results of all the different departments of learning and industry. On the other hand, the profound knowledge contained in the works of those who have made a particular pursuit the object of their life, has enabled the compilers of that Dictionary to present to the public, in a concise manner, a great number of articles which are generally interesting, without being superficial. It is satisfactory not only to the general reader and scholar, to the philosopher and the historian, but to those also who are engaged in any particular business or profession, as farmers, mechanics, physicians, lawyers or theologians. Those articles of the work which do not fully deserve this praise, will certainly be improved in usefulness and interest for this country, by the translator and those literary men who are expected to assist him in this useful and patriotic undertaking.

CHARLES FOLLEN.

From George Bancroft, Esq. one of the Principals of Round-Hill Seminary, Northampton.


Sir,—I am very glad to hear that you seriously propose to publish the Conversations Lexicon among us. It is the most convenient book for general reference, with which I am acquainted; and as for its popularity, the sale of more than seven or eight thousand copies of it in Germany, establishes that point. It is for the past, what a newspaper is designed to be for the present,—a general summary of the most interesting things known, stated on the best authority, to which access could readily be had. There is one circumstance which I think is much in its favour. We have had Encyclopedias compiled in France and Great Britain, each containing the current views on matters of science and letters, prevailing respectively in those countries. In the German work we shall have the materials a little differently wrought. There has been nothing of the kind at once so popular and so trustworthy.

I remain, with best wishes and sincere regards,

Respectfully yours,

GEORGE BANCROFT.

From Edward Everett, Esq. Member of the House of Representatives of the United States.

Winter-Hill, Charlestown, Nov. 17, 1827.

I entirely concur in the opinion expressed in the foregoing pages, of the merit of the Lexicon for Conversation. It is somewhat of the nature of an Encyclopaedia, intended, however, for convenient and popular use. Although, of the great number of articles contained in it, all are not equally well executed, no work, that I am acquainted with, contains such an amount and variety of information, in a form so accessible and commodious. The alterations proposed by Dr. Lieber, seem to me calculated to render it still more valuable in this country, and with them, it will be, in my opinion, the best work for convenient general reference, in the English language. So deeply impressed have I been with the merit of the work, that, without having heard of Dr. Lieber's proposal to undertake a translation, I had determined to recommend to some of the principal booksellers to endeavour to procure a translator of it.

EDWARD EVERETT.
Extract from a Letter from Joseph Story, Esq., one of the Judges of the Supreme Court of the United States.

Salem, April 26, 1826.

Dear Sir,—I wish every success to your excellent undertaking. It will supply a desideratum in our libraries, which I have almost despaired of seeing supplied in my day. Please to consider me a subscriber to the work.

Dr. Francis Lieber.

New York, July 18, 1826.

Gentlemen,—It gives me pleasure to hear of your proposed publication of the Conversation-Lectures in English. It has long been a very popular work in Germany; has passed through seven large editions there, and is soon to appear in a French translation, at Brussels. The articles are generally comprehensive, and for the most part very satisfactory; and the work may properly be entitled, a well digested summary and general dictionary of interesting and useful information, in all departments of knowledge. It will meet the wants of a large portion of our community, and be received, I think, with very general approbation and encouragement.

J. F. Schroeder.

Extract from a Letter from the Rev. Dr. P. C. Showfier, of New York.

"Since the first appearance of the Allgemeine deutsche Real-Encyclopädie, oder Conversation-Lectures in English, in its present form, I have had occasion to use it as a book of reference, and have frequently expressed the opinion, that an English translation of this valuable work, with necessary emendation, would be a great benefit to American readers who are acquainted with the language of the original. In passing through several editions, it has been much improved; and, on comparing the sixth and seventh edition, it is readily perceived, that the latter, the ground work of the 'Popular Encyclopædia,' to be edited by the able Dr. Lieber, is to be considered as far better than a mere reprint."

The great number of Biographical Dictionaries and extensive Encyclopaedias already in the libraries of opulent individuals or well endowed literary institutions, might, by some, be urged as an argument against the necessity of such a work as the Encyclopaedia Americana; but it appears to us, that for the very purposes for which Biographical Dictionaries were compiled and Encyclopaedias written, this work is pre-eminently fitted, viz. as a book of frequent and ready reference. It is a fact that most of the Encyclopaedias are such heavy tomes, that they lie upon the shelves, monuments of physical and literary gravity, like the stone henges of England, to be gazed at for their size and to excite admiration, less as to their usefulness than how they came there.

In forming the Encyclopaedia Americana, care has been taken to insert all that would be likely to arrest the attention in connexion with general reading. Where the whole of a science would be necessary, the reader, instead of finding a superficial sketch, is referred at once to the proper treatise; but that species of information which is so often the subject of inquiry, and which becomes necessary to the proper understanding of a great portion of general reading, is gathered into the Encyclopaedia Americana, and enlivens every page that we have examined. The parts of the work that relate to American geography, biography, history, natural and physical, botany, &c. have been written in this country, by gentlemen of acknowledged talent and literary taste. We cannot doubt that the succeeding volumes will equal the first, and we hence warmly recommend the work to the patronage of the public, as being by far the best work of the kind ever offered for sale in this country.—U. S. Gazette.

The work appears to abound in that sort of information most necessary for frequent reference. We cannot venture to speak of its merits after the hasty inspection which has made us but slightly acquainted with them. The plan is undoubtedly excellent, and has been executed by competent hands. We shall endeavour to qualify ourselves for a more particular notice of their performance.—Daily Chronicle.

We entertain no fear that our ingenuousness or judgment will be called in question for our praise or warm terms, the plan, and, as far as may be judged by the one volume, the execution, both literary, scientific, and mechanical, of the Encyclopaedia Americana. The volume before us includes the whole of letter A, and B as far as the word Battle. We have been at the pains to compare it with Rees's Cyclopaedia to the same extent, and feel no hesitation in saying that, while it embraces all the most important subjects to be found in that very voluminous and expensive dictionary of the Arts and Sciences, they are treated with perfect perspicuity, and if not so much, certainly with sufficient minuteness. Without reference to the fact that a copy of Rees's Cyclopaedia is to be obtained, we cannot but consider the mere circumstance, that what in the one extends through so many quarto, and costs such a large sum, is in the other to be comprised in twelve volumes, at the moderate price of $2 20 each, as in itself a recommendation which entitles the Encyclopaedia Americana to extensive patronage.—New York Evening Post.
A compendious library, and invaluable book of reference. It is printed in an octavo form, and that in itself is a great convenience; and, so far as we have examined the articles, they afford, though necessarily at much less length than in large and more voluminous Encyclopaedias, clear and satisfactory information. In addition, there is scarcely any topic, which may be supposed to occur in the conversation of intelligent persons, that will not be found explained here. It is not only what pertains to art, or to science, or, indeed, to any particular branch of knowledge that is treated of, but that sort of general information is given, upon all subjects, (as from this first volume it would seem to us,) as to render this Lexicon indispensable, as a book of reference, to those who, like editors of newspapers, for instance, or members of legislative bodies, are obliged, frequently, upon the spur of the moment, to write or speak on points, where accuracy and precision are necessary, and where, in order to be accurate, it might otherwise be necessary to go into a long and laborious investigation. For instance, under the word Balkan, (now in the mouth of every one,) a notice will be found of the extent, position, and history of this interesting chain of mountains; under that of Banda Oriental, a brief but comprehensive sketch of the position, fertility, and political history of that province, comprising the late war with Brazil, is given. We cite these articles, not because they evince more talent than others, but, as illustrating our view of the utility of this work as a book of prompt reference, ever and above all merits, as a standard work of information.—N. Y. American.

The pledge given in the title page is amply redeemed by the contents of the first volume, so far forth as we have been enabled to judge by examination and a perusal of several of the articles. It is a very large and handsomely printed octavo, with double columns, containing a vast quantity of matter, including all under the letter A and part of B. The Encyclopædia will be completed in twelve volumes, one of which is to be issued every quarter, at the price of $2.50. It will be seen that it is by far the cheapest work of the kind, considering its comprehensive utility, and the style in which it is got up, that has ever been published in this country. It is difficult, if not impossible, to procure a complete set of Rees's work from any bookseller, and the cost is six times as great as that of the Encyclopædia Americana. The latter is a better book of reference for almost every purpose, besides which, the American articles, from the pens of Dr. Godman, Robert Walsh, Jun., and others, add to its usefulness and convenience. In reading a few of the biographical notices of eminent men, such as Ames, for example, we are pleased to observe that facts alone are stated, without indulging in speculation; and that the sketches are not embarrassed with the examination of mooted opinions.—N. Y. Commercial Advertiser.

This cannot but prove a valuable addition to the literature of the age.—Mr. Advertiser.

The appearance of the first volume of this valuable work in this country, is an event not less creditable to its enterprise, than it is likely to prove lastingly beneficial to the public. When completed, according to the model presented by the first volume, it will deserve to be regarded as the spirit of all the best Encyclopaedias, since it comprises whatever is really desirable and necessary in them, and, in addition, a large proportion of articles entirely original, or expressly written for its pages. This is the condition of all the articles of American biography, by Mr. Walsh; those on Zoology, by Dr. Godman; and those on Mineralogy and Chemistry, by a gentleman of Boston, distinguished for his successful devotion to these studies. The work abounds with interesting and useful matter, presented in a condensed and perspicuous style; nor is one of its least commendations that it is to be comprised in twelve octavo volumes, which may be placed on an office table, or occupy a shelf in the parlour, ever ready for immediate reference, instead of requiring almost a room to itself, like its ponderous predecessors, the Britannica, Edinburghensis, &c.

The vast circulation this work has had in Europe, where it has already been reprinted in four or five languages, not to speak of the numerous German editions, of which many have been published, speaks loudly in favour of its intrinsic merit, without which such a celebrity could never have been attained. To every man engaged in public business, who needs a correct and ample book of reference on various topics of science and letters, the Encyclopædia Americana will be almost invaluable. To individuals obliged to go to situations where books are neither numerous nor easily procured, the rich contents of these twelve volumes will prove a mine which will amply repay its purchaser, and be with difficulty exhausted, and we recommend it to their patronage in the full conviction of its worth. Indeed it is difficult to say to what class of readers such a book would not prove useful, nay, almost indispensable, since it combines a great amount of valuable matter in small compass, and at moderate expense, and is in every respect well suited to augment the reader's stock of ideas, and powers of conversation, without severely taxing time or fatiguing attention. These, at least, are our conclusions after a close and candid examination of the first volume.—Am. Daily Advertiser.

We have seen and carefully examined the first volume of the Encyclopædia Americana, just published by Carey, Lea and Carey, and think our readers may be congratu-
lated upon the opportunity of making such a valuable accession to their libraries. The
editors have judiciously substituted articles especially interesting to Americans, in the
place of those which exclusively related to German local affairs, in the seventh edition
of the work, which served as the basis of this. They have condensed and improved
the translated articles by bringing them down to the present time, and have added
largely to the value of the book by procuring original articles to be written expressly
for it on American Biography, Zoology, Chemistry, and Mineralogy. Every candid
examiner will be surprised at the vast variety, extent and general accuracy of the in­
formation contained in the first volume, as well as pleased at the condensed and forcible
style in which the majority of the articles are drawn up. From the completion of this
enterprise, we anticipate a most valuable book of reference in the arts, sciences, and
letters, and shall rejoice to supersede our copious copy of the Encyclopædia Britani­
ica, now condemned to the obscurity of an inconvenient closet, by twelve neat volumes
which we can keep in reach upon the desk. So many advantages are combined by the
Encyclopædia Americana, that we cannot help believing it must meet with a warm and
liberal support.—Aurora.

The readers of this paper are generally acquainted with the fact that a work was in
preparation for the press, by Dr. Francis Lieber, the basis of which was a celebrated
German work, entitled Conversation Lexicon. Some of the articles prepared for the
work, have been published in our columns, and been received with a high degree of
favour. It is in our power now to announce the publication of the first volume, and
commend it to the general patronage of the American public.

Independent of the intrinsic value of the original German work, which is undisputed,
there are two reasons which should operate in the minds of our reading community to
secure their support and approbation. In the first place, it is the first work of the kind
which has ever been projected in our country, that lays any claim to the character of
nationality. A foreign work is, indeed, the acknowledged basis of this; but the trans­
lation is made here, in part by a foreign scholar who has taken up a permanent resi­
dence among us, but chiefly by American scholars under its superintendence and sub­
ject to his revision. The work is enlarged by additions prepared by some of the most
eminent writers in the nation, and no one can deny that these additions are valuable
improvements. In the next place, the character of the articles superadded to the origi­
nal work is such as should secure for it the favour of the American public; they are
additions containing information on topics with which every American ought to be
familiar, but which is to be found embodied in no other work with which we are ac­
quainted. The history and geography of the western world have heretofore, in works
of this description, been passed over in the briefest manner possible, and many inter­
esting topics, which were fair subjects for an elaborate essay or a copious descrip­
tion, have been turned off with a notice almost as barren as the definition of an ordinary
word in a common school dictionary. The department of American Biography, a sub­
ject with which it should be disgraceful to be ignorant, to the degree that many are, is,
in this work, a prominent feature, and has received the attention of one of the most
indefatigable writers in this department of literature, which the present age can furnish.

The consideration that this is the latest work of the kind is an important one. Such
are the rapid changes in the political condition and geographical limits of some por­
tions of the world, that one can hardly rely upon any authority of a few years' stand­
ning, in which the civil and political geography of those regions is concerned. The dis­
coveries in science and the inventions in various arts, too, are so various, and follow
each other in such rapid succession, that a new dictionary of arts and sciences is re­
quired almost as frequently as a new almanac. Particular pains have been taken by the
editor to introduce into this work, all that is valuable in recent discoveries and improve­
ments. He has brought to the task, untiring industry and unappalled devotion to the
accomplishment of his purpose. We should not omit to mention that the compiler is
assisted by Mr. E. Wigglesworth of this place, a young gentleman whose learning and
industrious application to literary pursuits promise reputation for himself and great use­
fulness to his country.

The work exhibits great neatness in the mechanical execution, to the credit of the

We are glad to see the unanimity with which the American editors bear evidence to
the value of the new Encyclopædia Americana, which is edited by Dr. Lieber, at Bos­
ton, with the aid of Mr. Wigglesworth. These gentlemen are eminently competent
to the extensive and useful task which they have undertaken. We regard them both
as literary of considerable attainments, indefatigable zeal and sound judgment. Dr.
Lieber is a German scholar sufficiently acquainted with our tongue to do justice to that
part of the work which is to be derived from the popular Conversation Lexicon, the most
recent German Encyclopædia, of which more than eighty thousand copies have been sold
in Germany, and translations already made into several of the continental languages.

It must be known to all general readers, that English bibliography embraces no good
"Popular Dictionary of Arts, Sciences, Literature, History, Politics, and Biography, brought down to the present time"—none without abundant rubbish or surplusage.—none that furnishes accurate and copious information on all the topics likely to occupy the attention of intelligent individuals and enlightened circles. The compilation of Rees is too voluminous; much of its ingredients may be regarded as obsolete, and a number of its articles are excessively copious and heavy. According to the plan of Dr. Lieber, a desideratum will be supplied; the substance of contemporary knowledge will be brought within a small compass—and the character and uses of a manual will be imparted to a kind of publication heretofore reserved, on strong shelves, for occasional reference. By those who understand the German language, the Conversation Lexicon is consulted ten times for any application to any English Encyclopaedia. It is not the mere multitude of heads, or the length and depth of treatises, which constitute the chief or proper worth of such productions; their merit and usefulness may lie, principally, in the judicious exclusion of matters rarely emergent, and the skillful compression of whatever belongs to the active fund of theory, fact and illustration. The possessor of the Encyclopaedia should be enabled by it, to understand all that he may peruse or hear in the ordinary routine of life; to satisfy that curiosity or need which may be casually created. There is a large stock of information, moreover, which is specially required in America, and which has not been, and could not be, embodied in Europe in a suitable manner. All that is desirable will be attempted in the American Conversation Lexicon. The first volume, which has been issued by Messrs. Carey, Lea and Carey, is admitted to be a satisfactory earnest. We coincide in the general sentiment, after having looked through it with some care. It is an octavo of more than six hundred pages, neatly printed, comprising letter A and part of B. A volume is to be published every three months, until the whole twelve have been completed. In the Prospectus, only two American contributors are named. There are others of the highest distinction, very able writers, to whom the departments of Law, Geography, Mineralogy, Technology, &c. have been allotted. Every measure, in short, has been taken, which seemed eligible for a thorough accomplishment of this literary enterprise. National Gaz.

The first volume of this long expected work, edited by Dr. F. Lieber and E. Wigglesworth, Esq. of this city, has just been issued from the productive press of Messrs. Carey, Lea and Carey, of Philadelphia. The whole work is to be comprised in twelve octavo volumes of about six hundred pages each, closely printed. From the splendid specimen which we have examined, we can have no doubt of the determination of its conductors to fulfill, to the greatest extent, their pledges to the public. The volume now published is not only highly honourable to the taste, ability and industry of its editors and publishers; but furnishes a proud sample of the accuracy and elegance, with which the most elaborate and important literary enterprises may now be accomplished in our country. Of the manner in which the editors have thus far completed their task, it is impossible, in the course of a brief newspaper article, to speak with adequate justice. It can only be necessary perhaps to remark, in general terms, that the work, as indicated by this volume, is all that it professes to be; it treats upon all the modern improvements in philosophy, and records all the new facts in national economy, which can be useful or interesting to the present age, or worthy of transmission to succeeding generations. To this end the editors appear to have spared no pains or labour—having made numerous additions to such articles relating to science and the arts, as the progress of improvement may have rendered expedient, and furnished an extensive collection of original biographical notices, that must be peculiarly valuable to the future historians, statesmen, and scholars of this republic.

We do not mean to assert, that in this Encyclopaedia may be found all the information required by men in various departments of society—that it furnishes the theologian, the physician, the civilian, and the artisan with all manner of minutiae touching the mysteries of their divers vocations; but we do mean to say, that it is such a work as may be added to their libraries, with vast profit to themselves—such a work as no man, be his profession, or his trade, what it may, should willingly dispense with. The editors, in the specimen now produced, have furnished an earnest of their power to accomplish their immense enterprise, and a proof of their claim upon the encouragement and the gratitude, even, of the American public. Of the style in which the letter-press is executed, it is impossible to speak in terms of too high praise.—The first volume extends to the article Battle—and when our leisure will permit, we shall select and copy a few pages from different parts of the work, in order to illustrate the truth of our preceding observations. But perhaps the strongest testimony in its favour, are the facts that the hundred thousand copies of the work upon which this is based, have been sold in Germany; and that it has also been translated into the Swedish, Danish, Dutch, and French languages. These are proofs that such a work was desired in Europe; and it will be found, on inspection, that the American editor is as perfectly adapted to the condition and circumstances of this country, as the original was to those of Germany.

—Boston Bulletin.
## CONTENTS OF VOL. I.
### ENCYCLOPÆDIA AMERICANA.

<table>
<thead>
<tr>
<th>Page</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acarnania</td>
<td>Aljibitum</td>
</tr>
<tr>
<td>Acatholici</td>
<td>Adagio</td>
</tr>
<tr>
<td>Accho</td>
<td>Adalbert</td>
</tr>
<tr>
<td>Acclamatio</td>
<td>(Abp. of Bremen)</td>
</tr>
<tr>
<td>Acceptor</td>
<td>(of Prague)</td>
</tr>
<tr>
<td>Accepution</td>
<td>Adam</td>
</tr>
<tr>
<td>Accepution</td>
<td>Adamant</td>
</tr>
<tr>
<td>Acconammodatio</td>
<td>Adamantian Spar</td>
</tr>
<tr>
<td>Accompagni</td>
<td>Adami Pomus</td>
</tr>
<tr>
<td>Accord (in music)</td>
<td>Adami Pomus</td>
</tr>
<tr>
<td>Addan</td>
<td>Adagostes</td>
</tr>
<tr>
<td>Adda</td>
<td>Adia</td>
</tr>
<tr>
<td>Address</td>
<td>Adiant</td>
</tr>
<tr>
<td>Ado</td>
<td>Adm</td>
</tr>
</tbody>
</table>
CONTENTS •
219 Androides ..............
" Andromache ...... , • .. • •
2:0 Andromeda ............ ,
Andronicus of Cyresthe,.
" ------Rhodes •••
Andros ...._. ••• ·,······'·
Androscoggm • • • • • • • • • • •
222 Anello ••••••••••• •....
Anemometer • • • • • • •• • • •
223 Anemone •••••• •...... •
Anesmoscope. • • • • • • • • • •
" Aneurism •••••••••••• -: •
" Anfossi • • • • • • • • • • • • • • • •
" Angel ..... , .••••••••••
'' - - (a gold coin) • . . . . •
AmPlet • • . • • • . . • . . . • . • • " Angelo Buonarotti.... . . .

. Amplitude •.•••• ; ••.•.•
Ampulla ........ • • .. .. •
Amput~tion .... , •••••••
Amretllll'. • • • .. • • • • • .. ..
Amaterdam.,...........
----Jisland of ~he
_" South Pacific
/
Ocean .•..•
_ __,._ (island in the
North Sea) ••
_ _ _ _ (island in the
South Sea) •
- - - - Island • • • • • • •
- - - - (New) . . • . . .
Am'uck . . . • • . • • • • . . . . .
Amusette . . . . . . . . . . . . . .

Amygdalus • . • • • • • • • • •
Amyot...... •• • • • • • • • •
Ana ............ , • • • • • •
Ana Santa ••••••••••••••
Anabaptists.. • • • • • • • • • • •
Anacharsis the Younger ••
Anachorets . • • • .. • • • . • • .
Anacletus.; ••••.••••••..
Anacoluthon . • . • . . • . . • • •
Anacreon...............
Anadyomene •••••.••.•••
Anagnlista •• •• •••• •. •• ••
Anagogy ••• • . •.•.• •. • . •
Anagram • • • • . . . • • • . . . ..
Analecta •••• -...........
Anaiogy . • • • • . • • • • • • • • . •
Ana1ys1s ..••.•• , •••• •. ••
Anamorphosis •••••••••• ,
Anaprest ............, ... :,.,~,;Ananas ..•_••• _•• , ; . . . . • . .
·Anaphora.. . • • . • • • • . • . . .
Anastasius I......... • . . •
Anathema . . . . . . . . . . . . . .
Anatomical Preparations •
Anatomy ..•. :..........
- - - - of Plants ...•...
Anatron ..•.•••••••.•.•••
Anaxagoras.............

''

"
"
224
"
228
"
229
"
230
"

"
233
"
234
235
"
Anaximanderu·...... .. ~. "'
Anaximenes • : . . • . . • . . . • "
!nbert Kend . . • . . . • . . . . . 2;!6
ncestors • • • • . • . • . . . • . .
Anchises ........·....... ::
Anchor.. . • . . . . . . • . . . . . .
Anchoret... . • . . • • . . . . . . . 237
Anchovy .. ,. . . . . . . . . . . . • "
Anchylosis .•.•..•••••••• 238
Ancillon.. . . . .. . • • . . . . • .
Ancona ................. ,~
Ancus Martins .....••.... 239
Anda .... ··· .... .'....... ''
Andalusia...............
Andante •. ,..... • . . . • . . . "
Andes ....•. , . · · . · •.• -. . . "
, Andover ......•..•.•... 240
. - - - - (in Mass.) . . . .. • "
Andre, •.. •• .•••.•.••.•. 241
Andrea Jel Sarto . . • . . . • • "
Andreossy. . . . • . . • • • . . . . "
Andrew, St............. "
- - - ' s St.• ·, . .', . • . . • "
- - - - - (cross of)... "'
·Andrews ...• , • • . • • . . • • . "
Andrieux .• , •...'. .•.. , .•. 2-12

: Androclus ..... ; . .... : : . .

~

"
"
"
"
243
"
"
"
"
"
"
244
''
"

Anegar................. 266
Aneon • • • .. .. • .. .. •.. .. 11
Anepach ................ 261
Anstey • .. • .. • • .. • • .. •.. "
Ant ................... "
-Eater ............... 269
Anta:ms ................. 270
Antagonist Mus<.:les .... ., 11
Antanaclasis•.••.......• 11
Antar.... . . . . . • .. .. •.. . "
Antarctic Circle •••.•..• ,, "
Antediluvian ••••..•••..• 11
Antelope . . • • • • • • . . .. . .. 11
Antenati ................ 271
Antennre .......... ; . . . . . "

Antenor . .•............ , "
Angeloni ............... 246 Anteros .............. , . · "
Angerstein . . . . • . • • . • • • • " Anthem'· ........... ., .. 2i2

- - - - Galle:-y...... "
Angle. . . • .. • • . • • • • • • . • • "
Angles .•.•.•••••••••••• 247
Anglesea. • • • . • . • • • • • • • • "
---(marquis of).... "
Angling.. • • . . • . • . • . . • • • "
Auglo-Saxon History ..... 248
Angola •••••••••.•••••.• 250
Angostura.............. "
Angoul~me •.•.•.••••••• 251
- - - - (duke of).... "
----(duchess of) •• 252
An~ora . . . • • • • • . . . . . • • • "
Angra ..•••..•••••.••••. "
Anguilla.. . • • • • • • • . • • . . . "
Anguinum Ovum .•.•.••• 253
Anhalt................. "
n_ Jcliite ,~::-!-, ...-:-••:.......__,,~'
Amch.... . • • ••••••..•• · "
Anichini . . . • • • • . . • . . • • . "
Anima Mundi .....•.••.. 254
Animal, Animal Life .... .: . ''
- - - Heat •..•••. , .•• 257
- - - Magnetism .•.... 258
Matter . . . •. . . • • "
Animalcule............. "
Anime ....•••.••••••.•. 259
Anise·seeds............. u
Anru.................. "
An erstrrem . . . . • • . • • . • •
Anlace . . . . . • ..• . . • . . • . • "
Anna Ivanowna ••• ,..... "
Annaberg .....•.•••••• , 260
Annals . . . . . . . . . . . . • • • • • "
Annamabiie .•.•••.• : . • . •. "
Annamooka ............ ; "
Annapolis . • • • • . • • • . . • • • "
Annates ... ,. ...........

Anne (queen) : •.•••. , • .
- - of Austria ........
----Cleves ...•.....
Annealing. . . . • • . . • . . . • •
Anmus of Viterbo .•...•.
Anno ..... , • • . . • • . . . . . •
Annuities •.••• ; •••.•.•.•
Annunciation ...•••..•••
Day... . • • .
Anodynes ; ..••• , • . . • . . •
Anointing..............
Anomaly . . . • . • • . • • . . . • .
Anomreans •. : •••• , . • . • •
Anonymous.............
Anquetil du Perron .•••_••
.. Anselm ..... ; . . . . • . . • . .

Anthing-................ · u
Anthology .. . . • . . .. . • . .. 11
Anthony, St. (the Great) .. "
- - - - - (a cape) ..... 2i3
(falls of) .... "
(island of).. 11
- - ~ - of Padua, St. ... 11
Anthracite ............. .
Anthropolit1,s ............ 274
Anthropology .... ,. . . . .. . 11
Anthropomorphites ...... 11
Anthropophagi .......... "
Antibacchius ......... ; .. 11
Antibes ...•.•.•......... "
Anticaglia............... 275
Antichrist .-•..• , .. , ..... "
Ant)cyra •.•..•.. .', ..... , ::
Ant~gone ···············, H
Ant!ll:onus ............ , .
Antigua-................ 276
Antilegomena ........... 277
Antilles . ~ ....... oa. •• . . "
Antilochus .............. "
Antimachus ............. 11
Ant)mon;y .•_. .............~
Antmom111msm ........... ,s
Antinous ................ 11

=========

Antioch .•... ·. u

........

",

Ant!ochus ............... 2!,9
Antiope .......•." . . · · ·
Antiparos ... , ....... ;... . 11
Antipaschia, ........... · • ·:
Ant~pater .......•...•. · • "
Antipathy ......... :· · · ·
Antiphlogistic Chemistry· 2;:°
Ant~phon:l;' •..• ·: . ... •.. · · "
Ant1phras1s • • • . . . . . .•. .. "
Antipodes·······~···:·· u·

"
261
"
"
262
"
"
264
"
"
"
"
"
"
265
"

Antipope ... , ... · • .. · · ··
Antiquaries ... , .. ······· 2Sl

Antique .•...... '. . •· ..._'. "
Antiquity •.. : .... • · .. · · · ~
Antisabbatarians · • · · · · · · 283
Antiseptics-.•.. , • .. · · • ••
Anti-Slavery Society·•'.•• ::
Antispasmodic ... ··•.... "
Antistheh~I~s_.. · , · · • · · ·. · · · "
Antisyp _1 1t1c .. • • • • • · · ..
Ant1thes1s ..... · · • · · · · · ·­ 284
Antitrinitarians • · • • • · · · · ::
Antium •...•.• , • • · •' .. •. 11
Antoinette . · .. · · · ·: · · · · 2S5
Anton?llo ofMessema •.. -. · 41
A11ton1nus ...... ,... • ... · •., ..

I


<p>| CONTENTS.                                                                 |
|----------------------------------------------------------------------|---|
| Aristotélè................... | 364 |
| Aristotlees ................. | 365 |
| Aristophanes .............. | 366 |
| Aristoteles ................ | 367 |
| Arithmetic .................. | 368 |
| Ark .................................. | 369 |
| Arkansas ...................... | 370 |
| Arkelloa ..................... | 371 |
| Arkwright .................... | 372 |
| Armada ......................... | 373 |
| Armandillo .................. | 374 |
| Armagh ....................... | 375 |
| Aristolochi ................. | 376 |
| Armored Ship .............. | 377 |
| Armenia ....................... | 378 |
| Armenian Literature .... | 379 |
| Arnoild ................. | 380 |
| Armfelt ....................... | 381 |
| Arminia ....................... | 382 |
| — or Hermann ......... | 383 |
| Armor (coat of) ........ | 384 |
| Armoric ....................... | 385 |
| Arnaud ......................... | 386 |
| Arnaud, the Elder .... | 387 |
| Arnold of Brescia ....... | 388 |
| — (Benedict) .......... | 389 |
| — (Christopher) ........ | 390 |
| — (John) .................. | 391 |
| Arnoldists .............. | 392 |
| Aroba ......................... | 393 |
| Arpino ......................... | 394 |
| Aragon ......................... | 395 |
| Arrage, Arrangement .... | 396 |
| Aracein ......................... | 397 |
| Arras ......................... | 398 |
| Archedamus ............... | 399 |
| Arria ......................... | 400 |
| Arria ......................... | 401 |
| Array ......................... | 402 |
| Arseus .......................... | 403 |
| Art .................................. | 404 |
| Arthurs ....................... | 405 |
| Arthurs ....................... | 406 |
| Arrowsmith ............... | 407 |
| Arschin ......................... | 408 |
| Arsenic ......................... | 409 |
| Arsinod ......................... | 410 |
| — (name of coun- | 411 |
| tries) .......................... | 412 |
| Arsis ......................... | 413 |
| Arson .......................... | 414 |
| Art ............................... | 415 |
| Artas .......................... | 416 |
| Arta .......................... | 417 |
| Arthurs ....................... | 418 |
| Arthurs ....................... | 419 |
| Arthurs ....................... | 420 |
| Arthurs ....................... | 421 |
| Arthurs ....................... | 422 |
| Artas .......................... | 423 |
| Arthurs ....................... | 424 |
| Arthurs ....................... | 425 |
| Arthurs ....................... | 426 |
| Arthurs ....................... | 427 |
| Arthurs ....................... | 428 |
| Arthurs ....................... | 429 |
| Arthurs ....................... | 430 |
| Arthurs ....................... | 431 |
| Arthurs ....................... | 432 |
| Arthurs ....................... | 433 |
| Arthurs ....................... | 434 |
| Arthurs ....................... | 435 |
| Arthurs ....................... | 436 |
| Arthurs ....................... | 437 |
| Arthurs ....................... | 438 |
| Arthurs ....................... | 439 |
| Arthurs ....................... | 440 |
| Arthurs ....................... | 441 |
| Arthurs ....................... | 442 |
| Arthurs ....................... | 443 |
| Arthurs ....................... | 444 |
| Arthurs ....................... | 445 |
| Arthurs ....................... | 446 |
| Arthurs ....................... | 447 |
| Arthurs ....................... | 448 |
| Arthurs ....................... | 449 |
| Arthurs ....................... | 450 |</p>
<table>
<thead>
<tr>
<th>CONTENTS.</th>
<th>vii</th>
</tr>
</thead>
<tbody>
<tr>
<td>At-Calisthenes</td>
<td>453</td>
</tr>
<tr>
<td>Attles</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>475</td>
</tr>
<tr>
<td>Atreus</td>
<td>476</td>
</tr>
<tr>
<td>Attica</td>
<td></td>
</tr>
<tr>
<td>Attemper</td>
<td>481</td>
</tr>
<tr>
<td>Augeas</td>
<td></td>
</tr>
<tr>
<td>Attack</td>
<td>483</td>
</tr>
<tr>
<td>Attainder</td>
<td>484</td>
</tr>
<tr>
<td>Attila</td>
<td></td>
</tr>
<tr>
<td>Attorney</td>
<td>485</td>
</tr>
<tr>
<td>Auric</td>
<td>486</td>
</tr>
<tr>
<td>Attic</td>
<td></td>
</tr>
<tr>
<td>Aticus</td>
<td>487</td>
</tr>
<tr>
<td>Attucks</td>
<td></td>
</tr>
<tr>
<td>Attack</td>
<td>488</td>
</tr>
<tr>
<td>Attic</td>
<td>489</td>
</tr>
<tr>
<td>Attilus</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>490</td>
</tr>
<tr>
<td>Attorney</td>
<td>491</td>
</tr>
<tr>
<td>Aubrey</td>
<td></td>
</tr>
<tr>
<td>Aubigna ..........................</td>
<td>492</td>
</tr>
<tr>
<td>Aubine</td>
<td></td>
</tr>
<tr>
<td>Aubigna (Droit d')................</td>
<td>493</td>
</tr>
<tr>
<td>Aubrey</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
</tr>
<tr>
<td>Aubina</td>
<td></td>
</tr>
<tr>
<td>Aubrey</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td>Aubigna (in Maine)...............</td>
<td></td>
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<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
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<td>Aubigna (in Maine)...............</td>
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<td>Aubigna (in Geo.)...............</td>
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<td>Aubigna (in Maine)...............</td>
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<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td></td>
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<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<td>Aubigna (in Maine)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
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<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Maine)...............</td>
<td></td>
</tr>
<tr>
<td>Aubigna (in Geo.)...............</td>
<td></td>
</tr>
</tbody>
</table>
| Aubigna (in Main...
<table>
<thead>
<tr>
<th>Page Numbers</th>
<th>Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>530</td>
<td>Balkan</td>
</tr>
<tr>
<td>531</td>
<td>Baraton (Benjamin S.)</td>
</tr>
<tr>
<td>532</td>
<td>Barataria</td>
</tr>
<tr>
<td>533</td>
<td>Barthelemy</td>
</tr>
<tr>
<td>534</td>
<td>Battering Ram</td>
</tr>
<tr>
<td>535</td>
<td>Barbeau</td>
</tr>
<tr>
<td>536</td>
<td>Barcelona</td>
</tr>
<tr>
<td>537</td>
<td>Basilica</td>
</tr>
<tr>
<td>538</td>
<td>Basiu</td>
</tr>
<tr>
<td>539</td>
<td>Barjapoor</td>
</tr>
<tr>
<td>540</td>
<td>Baramah (in law)</td>
</tr>
<tr>
<td>541</td>
<td>Barros</td>
</tr>
<tr>
<td>542</td>
<td>Barrows</td>
</tr>
<tr>
<td>543</td>
<td>Barrows and Sale</td>
</tr>
<tr>
<td>544</td>
<td>Bassano</td>
</tr>
<tr>
<td>545</td>
<td>Bassora</td>
</tr>
<tr>
<td>546</td>
<td>Bassin</td>
</tr>
<tr>
<td>547</td>
<td>Bassin and Sale</td>
</tr>
<tr>
<td>548</td>
<td>Base</td>
</tr>
<tr>
<td>549</td>
<td>Basque</td>
</tr>
<tr>
<td>550</td>
<td>Basque (town of)</td>
</tr>
<tr>
<td>551</td>
<td>Basque (in Maine)</td>
</tr>
<tr>
<td>552</td>
<td>Basque (province)</td>
</tr>
<tr>
<td>553</td>
<td>Bass-Relief</td>
</tr>
<tr>
<td>554</td>
<td>Basque (in Maine)</td>
</tr>
<tr>
<td>555</td>
<td>Basque (in Maine)</td>
</tr>
<tr>
<td>556</td>
<td>Bass-Viol</td>
</tr>
<tr>
<td>557</td>
<td>Baptism</td>
</tr>
<tr>
<td>558</td>
<td>Barrows</td>
</tr>
<tr>
<td>559</td>
<td>Barrington</td>
</tr>
<tr>
<td>560</td>
<td>Barataria</td>
</tr>
<tr>
<td>561</td>
<td>Barbeau</td>
</tr>
<tr>
<td>562</td>
<td>Barataria</td>
</tr>
<tr>
<td>563</td>
<td>Bartlett</td>
</tr>
<tr>
<td>564</td>
<td>Basque</td>
</tr>
<tr>
<td>565</td>
<td>Bastia</td>
</tr>
<tr>
<td>566</td>
<td>Bastia (in Maine)</td>
</tr>
<tr>
<td>567</td>
<td>Barbauld</td>
</tr>
<tr>
<td>568</td>
<td>Barlow</td>
</tr>
<tr>
<td>569</td>
<td>Barlow and Sale</td>
</tr>
<tr>
<td>570</td>
<td>Barmen</td>
</tr>
<tr>
<td>571</td>
<td>Barlow (Earl)</td>
</tr>
<tr>
<td>572</td>
<td>Barlow (Earl) and Sale</td>
</tr>
<tr>
<td>573</td>
<td>Basque</td>
</tr>
<tr>
<td>574</td>
<td>Barmen</td>
</tr>
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