

# **Claude Laurent and the Madison Flute: Discoveries through Archival Research**

## ***The Dayton C. Miller Collection***

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### **Introduction**

The Dayton C. Miller Collection of the Library of Congress holds among its thousands of flutes and flute-related art and iconography, eighteen glass flutes made in the early nineteenth century by Claude Laurent in Paris. Since the summer of 2014, both scientific and historical research has been conducted on these instruments, in an effort to better preserve them and understand the importance of their legacy.

The research done in the summer of 2015 serves partly as a continuation of the historical survey and research done the previous summer, yet it also represents its own new lines of inquiry. While the 2014 research focused on Laurent glass flutes outside the eighteen of the Library's Miller Collection, as well as compiling and analyzing Miller's own research, volunteer intern Dorie Klein concentrated her research on a number of yet-unexplored facets of the Collection's history. Research targeted information on the flutes' creator from both personal and professional perspectives. Other research sought to shed light on the Collections' most prestigious member: DCM 378, previously owned by President James Madison. Within these two broad topics, research splintered into several directions, which together have led to a more complete understanding of the origins of these beautiful but elusive instruments.

### **Historical and Archival Research**

Most of the research was either done in or derived from archives. Research into Claude Laurent, his family, and his associates was conducted by meticulous searches in the online resources of the regional French archives of Paris, Haute Marne, Aire de Lys, and Sucy en Brie. Genealogical sites, libraries, and museums were also combed through for any reference or information on the mysterious clockmaker-turned-flutemaker. In contrast, research on the Madison flute and its possible paths was centered in The Library of Congress' Manuscript Division resources, with further investigation through the University of Virginia's Rotunda, including the Papers of James Madison and the Dolley Madison Digital Edition. Other avenues were explored as well, with limited success, but their lack of information is helpful as well, pushing research into other, more fruitful directions and eliminating the probability of inefficient future research.

*Madison*

The Madison flute is a unique specimen, as it was made specifically for the President: its glass was not only faceted in the style it seems Laurent reserved for especially illustrious figures, but its silver joint is engraved with James Madison's name, title, and the year the flute was made: 1813. The flute was sent to James Madison from Claude Laurent, and consequently given to his stepson John Payne Todd, who then willed it to Dr. Cornelius Boyle. Boyle's family had the flute displayed in the National Museum in 1903 before selling it to Dr. Miller, who included it in his growing collection of Laurent glass flutes, now housed in the Library of Congress. Research into this object's specific provenance not only gives background on a beautiful and interesting flute, but also sheds light on details of a crucial time in American history.



**Reference Image 1:** Silver Joint on Madison Flute, DCM 0378. The Dayton C. Miller Collection, Library of Congress

What is curious is that though there exists a letter to James Madison dated 1815 from "Laurens"<sup>1</sup>, presumably Claude Laurent, inquiring after the flute, there is no record of the original arrival of either the packaged flute nor any letter to accompany it. The mystery around how the flute came to be in the Madisons' possession in the first place. There are several factors preventing us from easily tracking the flute, the first of which is the time it was sent. During the time of James Madison's presidency, there was no independent

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<sup>1</sup> Laurens. *Laurens Letter to Madison*. 1815. The James Madison Papers, American Memory from the Library of Congress

package delivery system similar to modern ones; there was a postal service, but no formal was of getting packages sent from person to person unless someone asked a favor of a friend traveling to the same area as the recipient or hired a private courier. Therefore there are no tracking receipts through a specific organization to be found. However, it is clear that the Madisons received packages from abroad even before the year 1813. Given Dolley's insatiable appetite for European fashion, she often had friends shop for her send her the items: "I have nothing new, but the Lyons silks sent by Mrs Erving from France and a black velvet..."<sup>2</sup> On the other hand, it is also evident that this system was not always be reliable, particularly during 1813, as evidenced by Dolley's letters: "Your brother & nephew dined with us yesterday, & set out this morning for Pittsburg they brought me the beautiful articles you had the goodness to send ...Mr. Lee ...speaks of haveing sent me various things, not one of which has reached us."<sup>3</sup> Even the normal mail was unreliable on its trips across the ocean that year, expressed by William Lee: "I wrote to you by the Tamerlane, the Gypsey + the Cotton all which vessels I learned since my return to Paris have been lost"<sup>4</sup> Furthermore, letters and packages took a great deal of time to travel from France to the United States; William Lee's letter, dated March 20, 1813, is postmarked to arrive in Newport on August 16. Additionally, the recent death of the American ambassador in France, Joel Barlow, had left the American embassy in a state on some confusion, which was not ideal, considering the already tense political dynamic between the two nations at the time. This upheaval could have certainly contributed to issues with customs and other international shipping matters. Such an uncertain postal system cannot be relied upon to have necessarily delivered all materials accompanying a package; that is, perhaps the letter accompanying Laurent's flute to the Madisons was lost or misplaced in the jumbles of the package's travels and the volume of mail sent to the president.

Another factor preventing a likely discovery of Laurent's original letter to President Madison is his name. In the cataloguing of the James Madison papers there appears to be an error that must have been perpetuated throughout centuries of organizing these documents: the 1815 Laurens letter is labeled under the name "Henry Laurens", the 5<sup>th</sup> president of the Continental Congress and former ambassador to the Netherlands who died in 1792, over twenty years before President Madison would have received the flute in the first place. If the letter had been properly categorized, it would have been far easier to gather all documents related to the records of the existence of this flute coming to and being with the President and his family. This miscategorization also indicates that there

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<sup>2</sup> Letter from Dolley Madison to Richard Cutts, July 15 1811. Cutts Collection of the Papers of James and Dolley Madison, Manuscript Division.

<sup>3</sup> Letter from Dolley Madison to Ruth Baldwin Barlow, December 28 1813. The Dolley Madison Digital Edition, University of Virginia Rotunda Press.

<sup>4</sup> Letter from William Lee to Dolley Madison, March 20 1813. Cutts Collection of the Papers of James and Dolley Madison, Manuscript Division.

might be some documents relevant to research in the Laurent flute that are filed under the wrong name; any collection as large as this one is subject to human error.

With all this confusion, it seems necessary to determine the location and activity of the Madisons during 1813, to find any indication of the flute's arrival or its likely whereabouts. A timeline, based off knowledge of the events of 1813 and correspondence of both James and Dolley Madison, was constructed in order to find any reference to the flute or any hint as to when and where exactly it could have arrived<sup>5</sup>. What was gleaned by going through all of James and Dolley's correspondence of that year was that the Madisons were in Washington all that year, except for August 9<sup>th</sup> through 27<sup>th</sup>, during which time they stayed at James' family estate in Montpelier due to his poor health. Other information from that year has already been well-documented in history books: having won re-election in December 1812, James gave his inaugural address on March 4, and most of his time in office was spent strategizing for the ongoing war. Another trend of the vast collection of letters is that until Madison's presidency had ended, most letters sent to him were addressed "The President of the United States". Some included "Washington City" in the address, but altogether very few were specifically directed to James in Montpelier, only those of close friends and advisors who knew of the family's personal details, and therefore, their travels. However, among all the correspondence related to these matters, no mention was ever made of the arrival of a glass flute, or any unusual package from France.

The next step was to determine if there had ever been any mention or record of the flute being with the Madisons at all. Thorough investigations into digital and paper collections that might contain any sort of information were conducted: the Papers of James Madison and the Papers of Dolley Madison, the Memorandum of John Payne Todd, the Cutts Family Papers, the Cutts family Collection of the Papers of James and Dolley Madison, and the microfiche records of Benjamin Henry Latrobe were all explored in depth. These collections included letters, poems, articles, inventories, estate materials, and more. Among all these, even lists of furniture and jewelry at Montpelier and both Madisons numerous copies of wills, there were no references to the Laurent glass flute. The one exception was found in a letter to Dolley Madison sent from Thomas Ludwell Lee Brent in 1842, referencing "that sweet cristal flute" that he believes to be "in Washington".<sup>6</sup> Mr. Brent had spent considerable time in the company of the president and others, being quite social in Washington during Madison's second administration<sup>7</sup>. It is unclear if in this letter he references the flute in Washington because he remembers it from the White House, or if he assumes that because during 1842 Dolley Madison was staying at the Cutts family house in Washington, she has the flute with her there. There are no inventory records of that house which reference the flute, nor are there any inventories that reference the glass flute

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<sup>5</sup> See Appendix B

<sup>6</sup> Letter from Thomas Ludwell Lee Brent to Dolley Madison, January 6 1842. The Dolley Madison Digital Edition, University of Virginia Rotunda Press.

<sup>7</sup> Brent, *Thomas Ludwell Lee*. The Dolley Madison Digital Edition, University of Virginia Rotunda Press.

from the White House, Montpelier, nor the Octagon House, where the Madisons stayed while awaiting the reconstruction of the White House after its burning in 1814. Carol Lynn Ward Bamford, Curator of Musical Instruments and supervisor of this research, graciously contacted the experts and curators from these historic sites and none could find any mention of the flute at all in their records, other than Brent's letter. Therefore, there is no way of knowing whether the flute was at any of these locations, or if it traveled with the Madisons as they moved from place to place, or when James Madison gave it to John Payne Todd.

The available papers of John Payne Todd are limited. A notoriously unreliable alcoholic, he is most remembered for his fight against his cousin, Anna Payne, over his mother's will, altered shortly before her death to place Todd's funds in monitored trusts and give some wealth to Anna, instead of the entire unrestricted estate, as it had previously been written. Therefore most of the material written by Todd is either curt letters to his mother, usually asking after money, or related to the settlement of Dolley's will. Indeed, his memorandum only contains papers from just before her death until his own death, only six years later. None of these papers mention a flute having been given to him by his stepfather, but one of Dolley's documents refers to the precedent of gifts from James to John: "I certify that my late husband J<sup>s</sup>. Madison gave to his stepson John P Todd during his lifetime, among other things a tract of land together with slaves + stock supposed would sell for 15000 \$..."<sup>8</sup> Given Todd's near constant debt, James often felt obliged to help his stepson financially, so it is conceivable that the flute was given to Todd as a means of helping with some money troubles. On the other hand, Todd was known as a lover of culture and art<sup>9</sup>, and having spent some time in Europe, particularly Paris, it is also possible that James gave him the flute as a token of fatherly affection. There is no documented evidence either way, only that eventually Todd bequeathed this flute to Dr. Cornelius Boyle in his will.

Dr. Boyle was a prominent and well-loved figure of the Maryland and Washington D.C. area in the mid-nineteenth century. An active member of the Irish American community as well as a veteran of the Civil War, he attended to many patients of all kinds including, it seems, John Payne Todd, whose health was in decline a few years before his death in 1852. Dr. Boyle was even the physician to sign Todd's death certificate<sup>10</sup>. However, since Todd was in considerable debt by the end of his life, it is certainly plausible that the bequeathing of the luxurious flute served not as a sentimental gesture, but as an unorthodox means of payment for medical services he could never pay during his lifetime. Moreover, in his state both of physical decline and financial distress, it is conceivable that Todd fabricated the myth of General Lafayette presenting the flute to Madison, in order to increase the value of the instrument and therefore cover any further debt to Dr. Boyle. It is

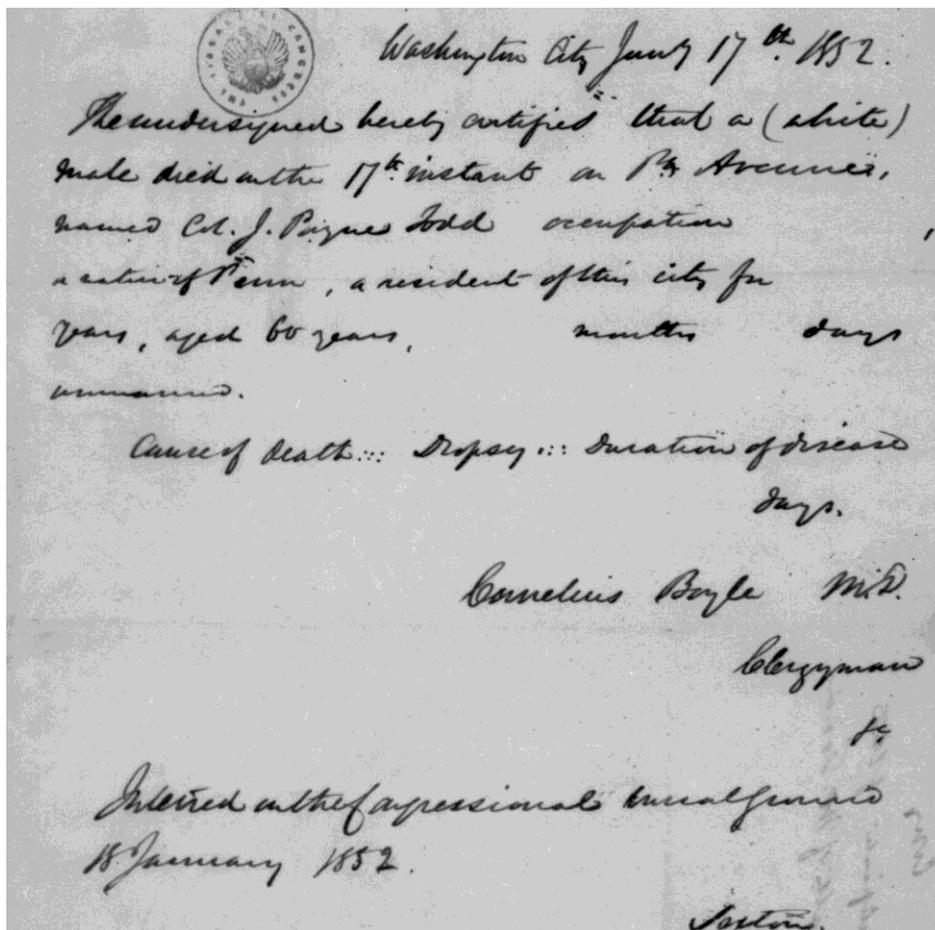
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<sup>8</sup> Letter from Dolley Madison, June 11, 1849. The Papers of Dolley Madison, Manuscript Division.

<sup>9</sup> *John Payne Todd*, James Madison's Montpelier. <http://www.montpelier.org/research-and-collections/people/john-payne-todd>

<sup>10</sup> Death Certificate of Col. J. Payne Todd, 1852.

also possible that the legend of General Lafayette comes not from Todd, but from the Boyle family. Cornelius had six children: one in New York, two in Montana, two in Washington D.C., and one in Utah<sup>11</sup>. Fannie Boyle, one of the two daughters residing in Washington, was the one to ultimately sell the flute to Dayton C. Miller, but she, nor any of her five siblings, had any information on the story of Lafayette when Miller asked them in 1923<sup>12</sup>. Despite searches of genealogical records, descendants of these six Boyle children could not be tracked down, nor does it seem that they would have any pertinent information about the flute, if their parents or grandparents did not.



**Reference Image 2:** Death Certificate of John Payne Todd, January 17 1852, Library of Congress

### *Theories on the Madison Flute and the 1814 Burning of the White House*

There is a definite lack of conclusive information about the details of the history of the Madison flute, due to the scarcity of documents from that time referencing the flute. However, given our general knowledge of historical events, as well as some information gleaned from materials of the time, we can conjecture a few theories about the flute's

<sup>11</sup> *John Boyle and His Descendants*, Journal of American-Irish Historical Society, Page 232.

<sup>12</sup> Correspondence with the Boyle Estate, 1923. Dayton C. Miller Correspondence Collection

history, most significantly as it relates to the infamous burning of the White House in 1814 during the war.

It is unclear when exactly the flute would have arrived. That being said, it is unlikely that it would have arrived in 1813 at Montpelier, as the Madisons were only there for less than a month in August, and in order to arrive there during that short window, Laurent would have had to know about President Madison's victorious election, make an intricate carved glass flute with custom engraving, and secure some method of shipping and delivery before March of that year. Given William Lee's letter, it seems the amount of time it took for mail to arrive from France to the United States was no less than five months. Especially given the engraving, which specifies the year as 1813, it is implausible that the flute would have been completed or sent in 1812; its early arrival would not guarantee its arrival at Montpelier rather than at the White House anyway, as the Madisons did not leave the White House until August of 1813, and then only for a month. Additionally, the Madisons did not travel from Washington between the time of the president's rest at Montpelier in August 1813 until the Burning of Washington on August 24, 1814, so if the flute had been sent later than March it would still have arrived at the White House. Therefore, the previously explained unreliability of the informal package delivery system used in 1813 aside, the date Laurent sent the flute would have had to be very specific for it to be forwarded to Montpelier rather than stay at the White House, and since it was not a package of an urgent nature, there seems to be no reason it would have been forwarded to the ill President Madison in Virginia at all. Nor does it seem likely that White House staff would think that either Madison would prefer the instrument at Montpelier; due to Dolley's fashionable francophilia and love for all things luxurious, she no doubt would have preferred to display the item at the White House, where she could show it off while receiving her friends during her regular soirées there, as supported by Thomas Ludwell Lee's letter referencing the instrument. Therefore it is unlikely that the glass flute would have left the White House and been transported to Montpelier any time between its arrival and the events of the Burning.

Since the flute exists intact to this day, it must have been in a safe place during the Burning of Washington; if it had been on display in the White House, it must have been removed during when Dolley Madison and other staff saved objects before fleeing Washington. There is a great deal of evidence of expensive or important items, especially those of silver, being removed from the White House. Dolley's accounts of the events are somewhat dramatic: "At this late hour a wagon has been procured, I have had it filled with the plate and most valuable portable articles belonging to the house...When I shall again write you, or where I shall be tomorrow, I cannot tell!"<sup>13</sup> A more level-headed account was

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<sup>13</sup> Letter from Dolley Madison to Lucy Payne Todd. August 23, 1814. The Dolley Madison Digital Edition, University of Virginia Rotunda Press.

provided years later by Paul Jennings, a former slave of the Madisons who wrote on the infamous day in his memoir:

“Mrs. Madison ordered her carriage, and passing through the dining-room, caught up what silver she could crowd into her old-fashioned reticule, and then jumped into the chariot...John Freeman (the colored butler) drove off in the coachee with his wife, child and servant; also a feather bed lashed on behind the coachee, which was all the furniture saved except part of the silver and the portrait of Washington...All she carried off was the silver in her reticule... John Susé (a Frenchman, then door-keeper, and still living) and Magraw, the President’s gardener, took it down [the portrait of Washington] and sent it off in a wagon, with some large silver urns and such other valuables as could be hastily got ahold of.”<sup>14</sup>

As the flute is expensive-looking, French, and highly transportable, it seems likely that it would have been a reasonable candidate for saving by either Dolley Madison or Jennings and other staff. While there is no explicit documented evidence of this possibility as described, this is a theory that can be easily supported by the mentioned compiled information and documents, which leads the research to conclude that this theory is more plausible than others.

The other, less likely possible scenario is that the flute arrived in the United States and either travelled directly to Montpelier, or the Madisons had it sent to the estate sometime before the events of 1814. There is no evidence to support this theory, no letters to Montpelier explaining items sent from the White House to the estate for any reason. Additionally, it is unlikely that James would have presented the flute to John Payne Todd before 1814, as Todd was abroad between 1813 and 1815, and would probably not have even been in the United States when the flute could have arrived. Consequently, the first hypothesized series of events: that the Laurent glass flute arrived at the White House and was rescued before the Burning of Washington in 1814 seems the most probable.

### *Claude Laurent*

Research into Claude Laurent, the second line of inquiry about the Laurent glass flutes of the Dayton C Miller Collection, is broader than just one flute; in fact, its motives were to give life to the stories of all of Laurent’s flutes in collections around the world. As a result of the research done in 2014, all that was known about Claude Laurent was his two patents, his addresses, the name of his protégé, and that he came from near the town of Langres. Research on Laurent had yielded few results, and most of them relied on the premises that Laurent was from Langres and that he was making clocks by 1785. The

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<sup>14</sup> Jennings, Paul. *A Colored Man’s Reminiscences of James Madison*, pages 11-15. 1865.

sources for these notions were have been revealed to be either vague or dubious. Research in 2015 instead focused on Laurent's personal and professional origins and by using wider and more trustworthy sources, resulted in more information on Laurent and eliminated certain areas of research as worthwhile, thereby allowing for greater future efficiency.

Upon researching general information about the town of Langres, it became clear that there are a number of small villages surrounding Langres, all in the Haute Marne region. By using the Haute Marne online regional archives and searching for Claude Laurent, a document was found, transcribed, and translated by Dorie Klein.<sup>15</sup> This document is a review of Claude Laurent's "flute en cristal" by the Athenaeum of Arts in Paris in 1806, the year of Laurent's first patent for his flute. The review not only provides more textual evidence of Laurent's activity as a flutemaker in Paris, but in fact includes previously unknown information about Laurent and his first flutes. For example, the review reveals that Laurent is at that time a clockmaker by profession, but a musician by personal taste, interested for years in the perfecting of the flute so that it could not be influenced by neither temperature nor by air. It also specifies Laurent's origins: he originally comes from "Saint-Maurice- lès-Langres", a very tiny village quite near Langres. In regard to the flute under judgement, the document not only goes into detail about its physical characteristics, both positive and negative, but it also describes the physical tests that the Athenaeum conducted, such as playing the flute under high and low humidity and heat, specifically five or six Reaumur to the highest temperature of a fireplace<sup>16</sup>. Furthermore, the document provides feedback largely positive feedback on the durability, sound, and appearance of the flute, going so far as to award it a silver medal, and the one negative criticism, the flute's weight, is noted to be possibly solved by fluting the glass tubes. This technique, according to the judges, not only reduces the weight for the benefit of the player, but also further beautifies the instrument; this double benefit of the fluting is something that had been previously theorized in research, but never textually confirmed until the discovery of this review. This document fills in many factual gaps about the beginnings of Laurent's career as a flutemaker and about the first of his creations.

In order to take advantage of the information from the 1806 Athenaeum review, all references to figures of importance in the document were pursued further in the Paris archives and the Bibliothèque Nationale Français: each of the judge's names was researched, but no other links to Laurent and his glass flutes could be found.

However, by specifically searching the civil records of the town of Saint Maurice in the digital archives of the Haute Marne region, numerous records of the Laurent family were found. These records would not have been discovered if the review had not reference Saint Maurice as Laurent's birthplace. Through that digital archive, several records of a man named Etienne Laurent were found, and it seems that this individual was a person of

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<sup>15</sup> See Appendix C

<sup>16</sup> See Appendix C and D



could be confirmed. In Paris, there were several records that mentioned men and women of that same name, but there is no way to know if these names refer to the flutemaker in question. This research is made particularly difficult by the civil record-keeping system in France. That is, especially in the case of marriage certificates, it is very difficult to track down a record unless one known the names of both spouses. This is because though the forms are formatted to be categorized by the last name of the husband, the clerk would often be careless and write the wife's name first. Since the digital records are organized alphabetically by the first family name written, not all civil records are organized uniformly. Despite significant searches into the relevant archives, there was no conclusive information on any marriage of Claude Laurent, in either Paris or in any Laurent's hometown of Saint-Maurice. As for death records, the research was concentrated in the Paris archives, as both known business addresses for Claude Laurent are located in Paris.<sup>20</sup> However, there are no clear references in any documents or articles about the specific year of Claude Laurent's death, other than the supposition that he must have died in the 1840s, as the last known flutes to his credit are dated 1844. In the Paris civil records archives, there are several death certificates for people named Claude Laurent. These are organized by year, but do not include any biographical information aside from the arrondissement in which the deceased lived. None of the death certificates are from either the 4<sup>th</sup> or the 1<sup>st</sup> arrondissements, where Laurent's first and second addresses were located, respectively. That therefore indicates that Laurent had a private residence in one of the other arrondissements, but since there is no reference to that location anywhere in Paris records or in the Bibliothèque Nationale Française, the correct death certificate cannot be identified. Furthermore, all records after 1859 must be researched by arrondissement, year, and name, instead of simply by name, which complicates any investigation into a possible death after 1859 or any information on descendants in Paris. Due to the vague information known about Laurent, specific confirmation of personal details through archival research is difficult, but progress has been made to narrow down the possibilities of when and where Laurent might have lived and died, which was previously unknowable.

There are also few documents, official or otherwise, pertaining to the activity or fate of Laurent's business. One document, explicitly referencing Claude Laurent and his glass flutes, was partially forwarded to Dorie Klein by Mr. Touvet, who had located it in the digital catalogue of the BnF, and Klein found the remainder of the document in the Library of Congress. This piece, consisting of three entries from 1935 in an early-twentieth century French periodical called *L'Intermédiaire des Chercheurs et Curieux*, bring up both leads on Laurent's life as well as previously unknown information on the flutes. It references negative reviews about the sound of Laurent's glass flutes, the existence of a portrait of Laurent by the famous Baron Gérard, known for his works on the Napoleon family, belonging to a family with the last name "Vidal", and some confusion regarding Laurent the

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<sup>20</sup> See Appendix A

flutemaker and another Laurent, an engraver also with a business address at Palais-Royal, the location of Laurent's second known address.<sup>21</sup> However, none of these leads have come to any satisfactory conclusion. First, inquiries into the negative reviews of the flutes were unsuccessful, as the BnF had no further reference to these claims. Second, after having searched through all reputable and some suspicious art catalogues with information on the portraitist Baron Gérard, no other record of a portrait of Claude Laurent was found, which indicates either that the portrait was not indeed of the flutemaker, or the portrait remains in a private collection to this day. Third, searches into connections between Claude Laurent and a Vidal family yielded no results from research in BnF, nor in Paris civil archives due to the lack of information about the Mr. Vidal who reported the family portrait and the great deal of time that would have passed between Laurent's life and the birth of Vidal. Finally, the reference to another Laurent also working at Palais-Royal, which was causing some confusion as to whether Claude Laurent was indeed a flute maker or an engraver, was the only information to have further documented proof. In the BnF, there is a document referencing one "Laurence, Palais-Royal n°44, graveur sur pierres fines, sur métaux et en taille douce"<sup>22</sup> who is the figure understandably confused with the flutemaker Claude Laurent, at Palais-Royal. This puzzle could very well be a reason for why information on Laurent is so limited; as in America with Mr. Henry Laurens, documents about the Claude Laurent may be mistakenly organized under the wrong name. However, no other information from the writings in *L'Intermédiaire* proved to help in the quest to illustrate Claude Laurent's life and work.

### *J.D. Bréton*

During the research into Claude Laurent, efforts were also made to learn more about his protégé, Mr. J.D. Bréton. From the research in 2014, Bréton is already known to have worked on green glass flutes, as well as wooden ones, which he displayed at exhibitions in Paris, but for which he did not win any awards.<sup>23</sup> In 2015, thanks to Carol Lynn Ward Bamford, *Les Facteurs D'Instruments de Musique A Paris Au 19e Siecle* by Malou Haine was noted to have information about both Laurent and Bréton. Indeed, Haine confirms that Laurent was a known master of the flutemaking trade, most famous for his 1806 glass flute. He also states that Laurent's annual revenue from his business was 30,000 francs. Haine goes on to elaborate about Bréton, who sold a crystal flute for 1500 francs and he reportedly exported 90% of his product, which included not only glass flutes, but was in fact mostly embouchures.<sup>24</sup> Bréton's work with embouchures had been previously unknown; in 2014, his 1855 patent on improvements for the bore and mechanism of flutes

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<sup>21</sup> See Appendix G

<sup>22</sup> Oudiette, Charles. *Dictionnaire: Topographique Des Environs de Paris*, Page 438. 1812.

<sup>23</sup> See Appendix A

<sup>24</sup> Haine, Malou. *Les Facteurs D'Instruments de Musique A Paris Au 19e Siecle*. 1985

was noted<sup>25</sup>, but in 2015, Haine's remarks led to the discovery of references to Bréton's second known patent- "Pour des becs de clarinettes faits en verre" (For clarinet mouthpieces made of glass).<sup>26</sup> Unfortunately, the original patent has not yet been located.

Hoping to find out more about Bréton's business and thereby find out more about his relationship with Laurent, genealogical records in the digital civil archives of Paris were searched yet again. While no clear mention of a flute or embouchure-maker with the name Bréton was found, other Brétons were found, even those married to people with the last name of Laurent, but their genealogy could not be in any way reliably traced back either Claude Laurent or J.D. Bréton, despite following the leads through the records of other regional archives, including Pas-de-Calais and Val-de-Marne. Despite these significant attempts, no concrete information on either man could be found.

### *Nineteenth Century French Crystal and Glass*

Research into Laurent's and Bréton's businesses was also approached from the glass perspective. Due to the rarity of uranium glass during the nineteenth century, there is very little known about its true origins or how exactly it spread through Europe.<sup>27</sup> However, a reference to a French factory producing uranium glass in the nineteenth century<sup>28</sup> led research to the Choisy-le-Roi factory, located just outside of Paris.<sup>29</sup> No longer active and not advertising any available digital records of its production and business, the factory had little information available about it, only that in the early to mid-nineteenth century, it was directed by a man named Georges Bontemps. Research into this man led to a book found in the BnF catalogue: *Guide du verrier: Traité Historique et Pratique de La Fabrication des Verres, Cristaux, Vitraux*, which is a compendium of knowledge about glass and crystal, their trade, their manufacture, and their history. He includes recipes from the factory he ran, including one for green glass that uses uranium.<sup>30</sup>

Considering the rarity of uranium glass during that time, let alone in France and near Paris, it is plausible that this factory was, or at least served a guide for the producer of the glass tubes used for Laurent's glass flutes. Bontemps' book also includes information on and recipes for cobalt glass, neutral colored glass<sup>31</sup>, and of course crystal.<sup>32</sup> In 2015, there has been tremendous progress made in the compositional testing and aging of the flute glass recipes. Though the recipes may not be exactly the same as those in *Guide du*

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<sup>25</sup> See Appendix A

<sup>26</sup> Christian, Gerard-Joseph and Claude Pierre Molard. *Description des Machines et Procédés pour lesquels des Brevets d'Invention ont été pris sous le Régime de la Loi du 5 juillet 1844*. 1859.

<sup>27</sup> Skelcher, Barrie. *Uranium Glass*. 1998

[http://www.glassassociation.org.uk/sites/default/files/Uranium\\_Glass\\_sample\\_article.pdf](http://www.glassassociation.org.uk/sites/default/files/Uranium_Glass_sample_article.pdf)

<sup>28</sup> Bowey, Angela. *Uranium Glass*. 2008. Online Glass Museum New Zealand.

<sup>29</sup> *Vers 1900: rue du Docteur Roux au croisement des rues Demanieux à gauche et de l'Insurrection Parisienne à droite*. 2014. See Appendix E.

<sup>30</sup> See Appendix H

<sup>31</sup> See Appendix I

<sup>32</sup> See Appendix J

*Verrier*, it is still conceivable that Choisy-le-Roi was the factory to produce the glass, as many glassmakers' recipes differ from batch to batch with the availability of materials and alterations made by chemical suppliers, not to mention that Bontemps may have written his recipes but not included certain small details of procedure or composition in order to ensure that a competitor never achieved a high-quality glass identical to his own. Nonetheless, a comparison between the glass flutes and the Bontemps recipes is strongly suggested.

### **Acknowledgements**

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## References

1. Laurens. *Laurens Letter to Madison*. 1815. The James Madison Papers, American Memory from the Library of Congress [http://memory.loc.gov/cgi-bin/ampage?collId=mjm&fileName=17/mjm17.db&recNum=227&itemLink=D?mjm:1:/temp/~ammem\\_3nSM](http://memory.loc.gov/cgi-bin/ampage?collId=mjm&fileName=17/mjm17.db&recNum=227&itemLink=D?mjm:1:/temp/~ammem_3nSM)
2. Cutts Collection of the Papers of James and Dolley Madison, Manuscript Division, Library of Congress.
3. Dolley Madison Papers, Manuscript Division, Library of Congress.
4. Cutts Family Papers, Manuscript Division, Library of Congress.
5. Diary of John Payne Todd, Peter Force Collection, Manuscript Division, Library of Congress.
6. Jennings, Paul. *A Colored Man's Reminiscences of James Madison*. 1865.
7. Microfiche of Benjamin Henry Latrobe, Prints and Photographs Division, Library of Congress.
8. The Dolley Madison Digital Edition, University of Virginia Rotunda Press. <http://rotunda.upress.virginia.edu/dmde/default.xqy>
9. James Madison Papers, 1723-1859, Manuscript Division, Library of Congress. <http://www.loc.gov/collections/james-madison-papers/?fa=partof%3Athe+james+madison+papers%2C+1723-1836%3A++1+general+correspondence&sb=shelf-id>
10. Letter from Thomas Ludwell Lee Brent to Dolley Madison, 1842. The Dolley Madison Digital Edition, University of Virginia Rotunda Press. <http://rotunda.upress.virginia.edu/dmde/DPM1634>
11. *DCM 0378: Claude Laurent / Flute in C*. The Dayton C. Miller Collection. <http://www.loc.gov/item/dcm000136/>
12. Archives of Haute-Marne <http://archives.haute-marne.fr/pages/index.html>
13. Catalogue of Bibliothèque Nationale Français <http://gallica.bnf.fr/>

14. Archives of Val-de-Marne <http://archives.valdemarne.fr/archives-en-ligne/eta-search-form.html>
15. Archives of Pas-de-Calais <http://www.archivespasdecalais.fr/Archives-en-ligne/Etat-civil>

## **Appendices**

Appendix B

[Madison 1813 Timeline.docx](#)

Appendix C

[Texts and Translations\Claude Laurent Review by Athenee 1806.docx](#)

Appendix D

[Texts and Translations\Réaumur Temperature Athenaeum Clarification.docx](#)

Appendix E

[Historical Bibliography 2015.xlsx](#). This has four tabs, organized by topic: Laurent, Madison, Boyle, and Crystal

Appendix F

[Q:\List of Flutes Miller Collection.xlsx](#)

Appendix G

[Texts and Translations\L'Intermediare Three Articles Transcription and Translation.docx](#)

Appendix H

[Texts and Translations\Guide du Verrier Green Glass Transcription and Translation.docx](#)

Appendix I

[Texts and Translations\Guide du Verrier Neutral Glass Transcription and Translation.docx](#)

Appendix J

[Texts and Translations\Guide de Verrier Cristal Transcription and Translation.docx](#)