Thomas Edison invented the phonograph in 1877 and introduced it to the public through demonstrations at the New York offices of “Scientific American” magazine in December of that year. The first device capable of both recording and reproducing sound generated great curiosity, but this early tinfoil phonograph was short-lived. The novelty eventually waned for both the public and Edison himself, who turned his attention to incandescent lighting. Meanwhile, others improved upon Edison’s invention, resulting in the Bell-Tainter Graphophone (1886), which used a floating stylus to incise the sound on a wax-coated cylinder, and the Berliner Gramophone (1887), which laterally cut sound in a groove onto a flat disc of zinc. By then, Edison had returned to his invention and carried out improvements of his own. In May 1888, he introduced the Improved Phonograph and, by June, the Perfected Phonograph, which replaced the sheet of tinfoil from his original device with a solid wax cylinder that could be shaved and re-used. Operated by an electric motor powered by a large acid-filled glass battery and weighing in at 70 pounds, it was on this Perfected Phonograph that the three cylinders described here—“Around the World on the Phonograph,” “The Pattison Waltz,” and “Fifth Regiment March,” collectively known as the Edison Exhibition Recordings—were recorded in 1888 and 1889.

These phonograms, as early records were called, are the first and oldest of the 50 recordings deemed culturally, historically, or aesthetically significant enough to be included in the first group selected for the National Recording Registry in 2002. Their “aesthetic” quality might seem a stretch as these surely sound strange, even humorous to contemporary ears accustomed to high-definition listening. The drum rolls on the “Fifth Regiment March” sound more like a Bronx cheer than a percussion instrument, and Effie Stewart’s trill-laden wordless coloratura resembles a caricature of an operatic soprano. But their historical and cultural significance is unquestionable. They were the first American recordings to demonstrate the phonograph’s
ability to capture and reproduce singing, speaking, and musical instruments with a clarity that marked a vast improvement over the tinfoil phonograph, as well as the subsequent innovations based on Edison’s original invention. They represent the transition from the early sound experiments in the laboratory to the birth of commercial sound recording in the 1890s.

Letter writing was at the top of the list of ten possible uses of the phonograph Edison proposed in his 1878 essay in “North American Review.” “Around the World on the Phonograph” is Edison’s letter to James G. Blaine, an American statesman who had traveled through Europe with his family in 1887 and who later became Secretary of State under President William Henry Harrison. Edison did not initially want to record his own voice, but found the voice of technician Walter A. Miller less tolerable; Miller finally convinced Edison to speak while Miller operated the machine. Edison’s spoken-word letter began with: “Uh, now, Mister Blaine, as you’ve been nearly around the world, I’ll take you ‘round the world on the phonograph. I’ll not charge you anything. I’ll take you on the steamer, a—Cunard steamer to Liverpool, and from Liverpool to London, from London on the London and Brighton Railroad to Brighton. And from Brighton we’ll go on those little two-cent steamers across the English Channel to Calais, and from Calais . . .” and so on, through Europe, Asia and back across the Pacific Ocean and continental United States. For nearly three minutes Edison names all the cities they would visit, repeating each name once, a technique with a practical purpose. At that time, lack of experience on the part of recorders and limitations of the mechanism made it impossible to reproduce ordinary conversation so that it would be thoroughly understandable. So the technique of naming and repeating city names was intended to assure the listener of the wonders of the device. Edison ends his recording by asking Mr. Blaine to: “say a few words on another cylinder, so my young man can bring it over to the laboratory. I want to put it through a process to get, uh, several hundred duplicate cylinders, so other people can hear what you’ve said.” He then abruptly ends the recording with “Uh, good-bye. Edison.” While Edison’s lab had not yet devised a practical method of mass duplication by the time of this recording in October 1888, he must have been working on it. He no doubt wanted to add Blaine’s voice to the collection of the voices of famous individuals that was an important initiative in the early years of the phonograph and well into the 20th century.

The early phonograph did not capture every voice well, and those who made a living in the early phonograph industry were recording professionals who knew how to project their voices. Miss Effie Stewart, a soprano soloist at St. Patrick’s Cathedral of New York City, had the lungs to project. Although she aspired to an operatic career she may have seen the opportunity to record as a step toward recognition, and perhaps extra cash. Theodore Wangemann, who along with Walter Miller was one of Edison’s technicians, operated the recording device and accompanied Stewart at the piano. As was customary on early recordings, he announced the song title, performer’s name, location and date at the beginning of the record: “‘The Pattison Waltz,’ sung by Miss Effie Stewart of New York City,” followed by a rather loud throat-clearing, and then “Orange, New Jersey, February twenty-fifth, one thousand eight hundred and eighty-nine.” The cough sounds comical, but it may have been intentional to see what the machine could capture as he surely could have started over. The 1877 song by J. N. Pattison, lyrics by E. A. Valentine, begins, “I would like if we could here alone with no other take a turn in this waltz only just once together,” but it seems that Stewart either did not know or chose not to sing the words. This was not a case of the equipment not picking up articulation
--there is only vocalese. After this recording date, Stewart showed enough promise to attract
the support of a wealthy patron who advanced her the money to go to Paris for vocal training.
While there, she learned French, 18 operas, and, after moving to London, joined the Carl Rosa
Opera Company and performed in several operas, even playing the title role in a production of
“Aida” in Scotland. Family illnesses drew her back to the States before she could attain the
success her patron hoped for, leading to a lawsuit to recoup the investment, not for need of the
money, but for her “ingratitude.” Effie Stewart never became the diva she aspired to be, but
the phonograph gave her voice immortality.

Edward Issler was a music teacher and pianist who became a regular accompanist for Edison
recordings. In 1888, he formed a four piece band consisting of himself on piano, David B. Dana
on cornet, George Schweinfest on flute and piccolo, and A.T. van Winkle on violin. He later
added more instruments, and Issler’s Orchestra became fairly well established in Orange, New
Jersey. In March 1889, Miller recorded Issler’s Orchestra playing “The Fifth Regiment March,”
a medley of popular tunes of the day including “Goodnight Ladies,” “Merrily We Roll Along,”
and Stephen Foster’s “Some Folks Do.” Marching band music was able to overcome some of
the limitations of early recording, although not all instruments were captured well. On this
medley, the drum rolls at first resemble a rather loud blowing of raspberries, whereas the cornet,
flute and piccolo, as with Effie Stewart’s soprano, come through quite well.

The historic value of these recordings was recognized immediately and they were preserved in a
glass and wood case along with the recorder and reproducer (the receiving and transmitting
diaphragms) with which they were made on the first Perfected Phonograph. These were white
wax cylinders—actually yellow paraffin (a mixture of ceresin, beeswax, and stearic wax)—that
were soon replaced in the 1890s by brown “wax” cylinders (actually a metallic soap composite),
that became the first produced on a widespread commercial scale. In 1913, just a quarter century
after these first “perfected” recordings were made, “Talking Machine World” magazine visited
Walter A. Miller who by then had become manager of the Thomas A. Edison, Inc. Recording
Department. He proudly displayed the glass case with the Exhibition Recordings. The recording
lines on the white wax were still visible but the cards identifying the selections bearing Miller’s
handwriting had yellowed with age. Today, the cylinders reside in temperature-controlled
storage at the Thomas Edison National Historical Park in New Jersey, but thanks to the wonder
of a later age—the internet—the recordings can be heard anytime.

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*The views expressed in this essay are those of the author and may not reflect those of the Library of Congress.