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# The Contributions of Thomas Edison to Music Education

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#### ABSTRACT

With the invention of the phonograph in 1877, Thomas Edison initiated an expansion of the musical experience. His device provided new learning opportunities for both amateur and professional musicians, in addition to people who claimed no musical background. Advertised as a musical educator, Edison's phonograph instructed families in the home and children at school.

As a result of the recording feature of Edison's machine, distinct new methods of studying music emerged. Recordings, for example, were utilized to facilitate distance instruction, and the Edison School Phonograph offered music educators the ability to record their pupils. Recording at home, moreover, was marketed with publications that included detailed descriptions and instructive pictures of recording techniques.

#### 1. INTRODUCTION

Of the many uses of the phonograph predicted by Edison, one in particular forever transformed music education. In 1878, Edison announced in *The North American Review* that his phonograph would fulfill the role of a "musical teacher," allowing "... one to master a new air" and "... the child to form its first songs" [1]. However, due to the primitive construction of the phonograph at that time and Edison's contractual obligations with the light bulb, the full realization of his prophecy occurred years later.

While music education was not a primary concern of Edison, he believed his favorite invention would positively impact the profession, as evidenced by his own words and the ways in which his phonograph was marketed to and utilized by musicians as well as music teachers. In American music education history books by Birge, Gates, Keene, Labuta & Smith and Mark & Gary, however, Edison was either briefly mentioned or, surprisingly, not included at all. Since many of the ways Edison directly or indirectly influenced music learning were conspicuously absent and largely undocumented, the purpose of this study was to chronicle the contributions of Thomas Edison as well as his phonograph companies' contributions to music education and help fill this gap in the literature.

## 2. BACKGROUND

Throughout history, humankind has utilized the voice and other materials found in nature to create sound, resulting in the emergence of an innumerable amount of musical styles that enabled humans to express a wide diversity of emotions and cultural influences. In so doing, people created a plethora of musical instruments and devices that were designed to facilitate the production of the tones and timbres mandated by various musics.

For many millennia, the ability to record sound was nonexistent and, regrettably, the utterances and musical manifestations of many peoples have never been audibly memorialized. Edison's invention, however, forever altered humanity's power to aurally preserve and revisit the past. His phonograph enabled humans to experience sound in completely new ways, and music, along with music education, greatly benefited from the profusion of uses facilitated by the device.

## 2.1. Rationale

Thomas Edison invented the tinfoil phonograph in 1877. One of the unique features of his improved cylinder phonograph, appearing over a decade later, was that people could record themselves. By 1903, the Siegel-Myers Correspondence School of Music, in Chicago, Illinois, was offering distance education in music, and in 1906, the company offered instruction in vocal music that incorporated Edison cylinder recordings. This transpired five years before Edison's major competitor, the Victor Talking Machine Company, organized its educational department in 1911 and appointed Frances Elliott Clark (1860-1958) as director, who also had been the founding president of the Music Supervisors National Conference, formed in 1907.

There were clear differences in the approaches to music instruction offered by Edison's phonograph companies and the Victor Talking Machine Company. Victor advanced music education mainly through listening lessons that emphasized formal and historical concepts. The Edison Phonograph Company, on the other hand, promoted music education largely via student performance, self-recording and correspondence feedback, in addition to listening. These differences between the two competitors were reflected in philosophical positions on the purposes of music education and impacted teaching practices.

While Frances Elliott Clark and her work are rightly and widely acknowledged in the music education literature, Edison's contributions are absent. Although music education was not a primary concern of Edison himself, he was an advocate for the use of the phonograph in music education, and his company produced materials specifically for music instruction. Since Edison's contributions to music education are largely undocumented, representing a gap in the literature, this study helps fill that void.

## 2.2. Research Questions

The specific research questions answered by this study are as follows: 1) In what ways did Thomas Edison contribute to music education?; 2) In what ways did Edison's phonograph companies contribute to music education?; 3) How, and to whom, did the Edison phonograph companies market their phonographs and music education products?; and, 4) How did the Edison phonograph companies' approach to music instruction via the phonograph differ from that of the Victor Talking Machine Company?

## 2.3. Archives

Historical research techniques were employed at the archives of the Thomas Edison National Historical Park, the MENC (Music Educators National Conference) Historical Center at the University of Maryland and, lastly, the University of Michigan. These locations contained a large amount of primary source material regarding Edison and his main competitor, the Victor Talking Machine Company, as well as their respective phonograph and business operations.

## 3. REVIEW OF RELEVANT RESEARCH

### 3.1. Music Education

In *The History of Public School Music in the United States*, Birge discussed the phonograph in the context of music appreciation. He noted that before the invention of the player piano and phonograph, someone had to be present to perform music in order for students to hear a work [2]. The Victor Talking Machine Company and Frances Elliot Clark, however, organized a collection of recordings for use in the classroom that essentially

eliminated this need for a live musician to perform works, according to Birge [3].

While Birge revealed that "... other phonograph companies built up similar libraries ...," he did not state any by name [4]. He also recorded that "... phonograph companies began to train teachers and send them out into schools and to teachers' institutes and conventions to show how the subject of appreciation should be taught" [5]. Yet again, Birge did not disclose the identities of these phonograph companies.

Summarizing his thoughts on the impact of the phonograph, Birge noted the beginning of a "... new era in popular music education ...," the emergence "... of the amateur listener on a nation-wide scale" [6]. He did not, however, credit or include in his text the inventor of the device who also helped pave the way for this new epoch.

Gates, in *Music Education in the United States*, provided the type of coverage found in Birge's writing. He posited, "The real beginning of music appreciation in schools ... came in 1911, when the Victor Company organized its educational department and placed Frances E. Clark in charge of developing educational uses for the phonograph" [7].

Keene did not mention Edison at all in *A History of Music Education in the United States*. He did, however, devote an entire chapter to Clark and her work with the Victor Talking Machine Company [8].

Labuta & Smith, in *Music Education: Historical Contexts and Perspectives*, followed the lead of other authors by mentioning Clark's contributions to music appreciation and, in similar fashion, left out any reference to Edison [9]. Mark and Gary, on the other hand, included Edison in *A History of American Music Education*, but he was grouped together with Alexander Graham Bell and George Eastman as inventors who helped America achieve world leader status [10].

### 3.2. Music Appreciation & The Phonograph

It is clear from the aforementioned texts on music education history in the United States that the phonograph greatly impacted the way music appreciation was taught. Richard Dunham reported in his dissertation on music appreciation in United States' public schools that the phonograph represented a milestone for the subject [11]. "By the time the United States entered World War I," Dunham believed "the phonograph had become inseparably identified with the teaching of music appreciation" [12]. Nathan Bowers also added the following: "By 1912, the concept of listening to opera records as a fundamental part of one's musical education had taken hold in articles and music education books" [13].

A description of a music appreciation lesson found in a 1909 issue of *Musical America* was included by Bowers in his dissertation: "... [F]irst, the record was played; then the teacher explained what was heard; finally, a discussion of the singer ensued. No mention or emphasis was placed on the composer" [14]. This format is somewhat different than current teaching practice on the subject, where a majority of emphasis seems to be placed on the composer of a work as well as the sociological conditions surrounding the creation of the work.

Bowers reported that using the phonograph in schools became standard "... due to its popularity among the students: children enjoyed listening to 'high class' recorded music" [15]. Mark Katz noted a parallel finding among American adults, who "... considered themselves lovers of 'good music,' but felt they lacked the abilities to explore the repertoire as amateur performers" [16].

Confirming this notion with his answer to a 1921 questionnaire from Thomas A. Edison, Inc., George Ruhlen explained the following: "I am not a trained musician, never tried to sing correctly a single note and do not try to play any musical instrument of any kind, but am none the less [sic] fond of good music and for want of opportunities of hearing it have gone in for the phonograph" [17]. In 1926, Dorothy Fisher penned a similar statement that appeared in the *Phonograph Monthly Review*: "[T]here are many others whose musical training, like my own, is completely nil, but ... whose intellectual curiosity about great music ... will receive great satisfaction in becoming familiar with music through the medium of the phonograph" [18].

# 3.3. The Phonograph in the Home & Gender Roles

Understanding the impact of the phonograph requires an examination of home life in the United States during the late nineteenth and early twentieth centuries. Nathan Bowers, in his dissertation titled "Creating a Home Culture for the Phonograph: Women and the Rise of Sound Recordings in the United States, 1877-1913," discussed the matriarchal role of women in the home as well as "... women's moral imperative to provide music (as culture) in the home in the form of quality entertainment and education ..." [19]. Fig. 1, for example, shows an ad from *Harper's Magazine Advertiser* in which The Edison Phonograph was described as a musical educator, a phrase that helped to reassure women that they were meeting the moral mandate to musically educate their children.



Fig. 1 An ad featuring The Edison Phonograph as a musical educator.

Bowers included a statistic in his dissertation with respect to women spending 90% of the family income [20], and according to Emily Thompson's findings, they must have been spending some of the family income on buying phonographs: "In 1896 the Edison phonograph was first offered for sale to the public, and as early as 1900 it was recognized as 'a familiar object in our modern home life'" [21].

Bowers incorporated a number of advertisements in his dissertation to support the claim that women were in charge of the family budget, and he found that advertisers promoting the phonograph "... increasingly focused on women as the primary consumer who made all purchases for the home" [22]. He also noted, "Edison in particular realized this truth and in a number of his phonograph ads, he offered a book free to every woman, which addressed the moral imperative of providing music for the household" [23]. Fig. 2, an ad from *Public Opinion*, also exhibits that the National Phonograph Co. recognized the need to market Edison products to the female population for both amusement as well as instruction.



Fig. 2 An ad highlighting The Edison Phonograph for amusement and instruction.

In addition to advertising to women because of their matriarchal role in the home, Bowers relayed that companies also targeted women for their recreational interest in playing music: "Recognizing the fact that women were primarily the ones making amateur music—due primarily to a cultural and moral mandate to teach and provide music within the home, as well as aspirations of fame in the professional and semi professional music world—all provided a need for formal vocal training among the female population." According to Bowers, it was not Edison who conquered this market, it was the Victor Talking Machine Company that profited from this business opportunity [24].

Evidenced by his advertisements, however, Edison did recognize that women were the matriarchs of the home and that they were in fact responsible for the education of their children. As may be observed in Figs. 1-3, Edison understood the female role in the home that Bowers described in his dissertation, where he noted that women "... established a recording culture in America, one that continues to affect the way we consume music a century later" [25].



Fig. 3 An ad using The Edison Phonograph to promote the creation of homemade records.

### 3.4. Correspondence Schools

Additional home uses of the phonograph occurred as a result of the correspondence schools that existed during Edison's time. According to Fonder, "As late as 1922, the idea of musical instruction by mail was still widely accepted as legitimate" [26]. Evidenced by recordings housed at the Thomas Edison National Historical Park, the Edison phonograph was utilized by the Siegel-Myers Correspondence School of Music as early as 1906, functioning as an educational tool for distance instruction that allowed both teachers and students to record themselves. While Bowers thought that advertising the recording feature of the Edison phonograph to the general public was "wasted print," he did not consider that this function was being used for music instruction in this capacity and the home [27].

One of the reasons Edison promoted the recording feature of his phonograph to consumers was because it was unavailable on a Victor Talking Machine: "Edison tried to compete with the Victor company, arguing that the ability to record a voice for later review by a teacher brought educational progress to the student." Victor, on the other hand, focused on promoting the recordings of the most popular artists, yet Edison specified, "There was little benefit in simply listening to pre-recorded opera stars" [28].

Some music educators of the time agreed with Edison's argument that the recording feature was indeed important, and the ability to receive recorded feedback from teachers was evidently well received. In reference to the Siegel-Myers Correspondence School of Music. Bowers reported. "Manv students have 'enthusiastically' written to Edison saying. [sic] 'Your Voice Lessons, with the aid of the Phonograph, are a revelation; just like having the living teacher at my side. Have corrected the faults that retarded my progress, and am now succeeding beyond my expectations [sic]"" [29].

In his article, "Band Lessons by Mail: A Look at Musical Correspondence Schools of the Early Twentieth Century," Fonder published that "One of the most successful schools, the Siegel-Meyers School of Music in Chicago, started its music correspondence school program in 1903." Fonder also documented that this school was international in scope and even awarded a bachelor of music degree [30].

Albert Nelson Marquis, in *The Book of Chicagoans*, provided brief biographical information on both Samuel Siegel and Harry Thomas Myers. According to Marquis, Samuel Siegel "Originated Siegel-Myers method of teaching music by correspondence and wrote [the] first course (mandolin) taught by this school," [31] and Harry Thomas Myers "... conceived the idea of a correspondence music school and [was] a founder, 1903, and since vice-pres., sec. and dir. [of the] Siegel-Myers Correspondence School of Music, Chicago" [32].

Gerald Fabris, Curator of Sound Recordings at Thomas Edison National Historical Park, noted in a personal email to the author that there are fifteen different vocal recordings associated with the Siegel-Myers Correspondence School of Music currently identified in the collection [33]. The National Park Service currently features one of the aforementioned recordings on their website: "Siegel-Myers School of Music - Vocal Record F. Record format: Edison Gold Moulded cylinder. Release date: c. 1906. NPS object catalog number: EDIS 103642" [34].

Other correspondence schools were also doing business during this period. Fonder documented that "Other than private study, when it was available, relatively few places existed for those interested in studying band instruments or conducting beyond high school." Because of this and other reasons such as travel limitations, Fonder added, "These conditions created a market for a new and unique entrepreneurial venture: the correspondence school in music' [35].

In a more recent article entitled, "The Patrick Conway Military Band School, 1922-1929," Fonder revealed, "Many correspondence schools eventually sent instructions on how to become a bandmaster. Correspondence courses in band instruments and directing were offered by Frederick Innes, H. M. VanderCook, W. M. Eby, and Fortunato Sordillo, among others" [36].

### 3.5. New Pedagogical Approaches

In an article entitled "Making America More Musical through the Phonograph, 1900-1930," Mark Katz noted, "Some teachers even employed the phonograph as a pedagogical tool." One approach mentioned by Katz was that of Oscar Saenger, who "... published a course of vocal study in which the student listened to and then imitated various exercises on several specially made discs ...". He revealed that additional methods were written with a similar approach in mind for other instruments [37].

Katz also documented one testimonial that was particularly informative, that of an amateur violinist named Marie Chaffee. In 1921, she wrote, "I often learn how to interpret a piece by listening to Mr. Spalding play it on the Edison-then I play it along with him" [38].

With these new approaches to learning music and studying music appreciation, the music education community began to grapple with the pros and cons of the phonograph in general and music instruction in particular. "As singing and piano playing were being replaced in the home (and schools) by records," Bowers noted, "the definition of musicianship needed to be altered. Cultivating an intelligent enjoyment of music, rather than applied musical skill, became the highest goal of educator and student" [39].

Bowers chronicled some thoughts of Louis C. Elson, an educator "... who questioned the validity of teaching singing to everyone in public schools. A type of musical appreciation being inserted in the curriculum promoted—in his view—an understanding of the elements of musical culture, an increasingly important idea in the growing humanistic education" [40].

Universities also incorporated the phonograph into their music programs. According to Bowers, "The use of a

talking machine debuted in the University classroom at least as early as 1913 when Mount Holyoke purchased a phonograph and a number of records for use in their music courses" [41].

## 4. EDISON PHONOGRAPH MONTHLY

The *Edison Phonograph Monthly* was a publication designed to inform Edison dealers about product updates, stories concerning the use of the phonograph, talking points with which to engage customers and other general items of interest. Distributed between the years of 1903 to 1916, this periodical contained a variety of applicable data, addressing areas such as the recording feature of the Edison phonograph, the Edison School Phonograph and the many ways the phonograph was utilized to facilitate music instruction. The monthly was also composed of articles that appeared in other publications so dealers could reference them to potential customers as well.

A humorous story, reprinted from *Popular Magazine*, appeared in the May 1905 publication about an amateur musician who heard a recording of himself for the first time. In this entry, titled "Heard Himself As Others Hear Him," a sales attendant noticed a potential customer carrying a flute and encouraged him to give the recording feature a try. The amateur agreed, and the salesperson played back the recording. The flutist then asked, "'Is that an exact reproduction of my music?'" Acknowledging this to be the case, the sales attendant asked if he would like to make a purchase. "'No," the disheartened flutist replied, "'But I'll sell the flute'" [42].

In contrast to this amateur flutist's discouraging experience, other people used the recording feature of the phonograph to improve their musicianship. The work of the Siegel-Myers Correspondence School of Music, for example, was highlighted in the June 1911 issue. The author of "To Teach Vocal Music with the Phonograph" included a description of how a teacher incorporated the phonograph as an aid in the instructional process of a vocal lesson. It was reported that the teacher would send the pupil a recording of himself singing a song. The student would then listen to the recording, follow along with the score and examine the teacher's instructions. Afterwards, the student would use an Edison blank cylinder to record her performance of the song and mail it to the teacher. Upon arrival, it was then noted that the teacher "... [criticized] the student's work, [made] suggestions, etc., and [wrote] a

letter embracing them, which, in time, [found] its way to the student, who also [got] back her Record that she may understand the comments made by the teacher." The writer also disclosed that the Siegel-Myers Correspondence School of Music was employing an Edison Fireside Phonograph, along with hearing tubes and Edison blank cylinders [43].

Because of the money generated from the sale of extra items required to make records, dealers were encouraged to promote the recording feature of the Edison Phonograph. In the May 1905 printing, for instance, the author announced, "Dealers should learn how to make Records, not only to sell the Phonograph itself, but because when used for Record making a sale also includes a recording horn, shaved blanks and other accessories." In this entry titled "A Good Talking Point," the writer suggested, "Every Dealer who desires to make a success of the Edison line should study up the matter of making Records in order to be able to demonstrate it to his customers, and he should never lose an opportunity of presenting it as a selling argument" [44].

Uniform statements of the same nature appeared in the September 1909 issue. In a write-up entitled "Home Recording," the author urged dealers to publicize that they were "... in a position to supply the equipment for making Records at home and [were] prepared to shave the blanks." The writer subsequently remarked that recording at home was a "... fascinating amusement and once started it grows on one," and, since the Edison Phonograph was "... the only type of Phonograph on which Records can be made at home," it was thought that this unique feature would lead to more sales [45].

In keeping with the imperative to promote the exclusive recording feature of the Edison Phonograph, the author of the entry titled "Home Recording a Strong Feature" declared that this hallmark characteristic "... puts the Edison in a class by itself." Writing in the August 1913 publication, the author impelled dealers to "... procure at once a complete Edison Home Recording Outfit and familiarize himself with the making and shaving of records" [46].

The process of making Records was deemed "... extremely simple, and the use of the hand-shaving machine [would present] no difficulties, if the instructions [were] followed out." Dealers were warned that if they had the "slightest difficulty" making records in front of potential buyers, customers would regard the process as too arduous and would not buy the product. In order to prevent this from happening, Dealers were prompted to practice and to obtain two free brochures, one of which is seen in Fig. 4, published by Edison on recording at home to assist in the record-making process: 1) "To Hear Ourselves as Others Hear Us; or, Confidences Concerning the Modern Blarney Stone" (Form 2290). 2) "One of the Many Pleasures of the Edison Phonograph" (Form 2216) [47].

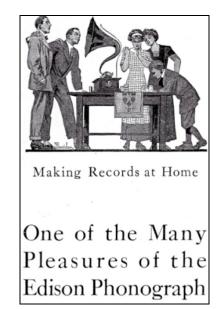


Fig. 4 Brochure: "Making Records at Home."

After equipping themselves with the knowledge of making records, dealers were then exhorted to tend to the business of organizing a concert where they were to "[l]et the Home Recording feature predominate." A singer, an elocutionist and a comic were among the suggested talent to be secured from around the local area. The performance was intended to attract local schoolteachers, clergymen, Sunday-school teachers and families. Particular interest was shown to the musical education of the older boys and girls in the families: "Does the boy play the banjo, the guitar or the mandolin? Let him make a record and find in it not only a source of amusement to others when he is not at home, but a means of learning better how to play these instruments. Does the girl take piano lessons? Her instructor will gladly assist her in making a record, or better yet, play the piano as it should be played, and then let the record thus made by the Phonograph be her guide to further practice" [48].

In tandem with promoting the home recording feature of the Edison phonograph for instructional purposes, the Edison School Phonograph was specifically designed for and advertized to the school market and was announced in the December 1912 monthly in an entry titled "Edison School Phonograph." As may be observed in Fig. 5, the machine was placed on a mobile rolling cart for easy transport from classroom to classroom, and multiple drawers were included for prerecorded music and blank cylinders. The "exclusive" recording feature of the device was once more touted as "... placing the Edison far in advance of any other sound reproducing instrument," and, as a result, "Interclass singing contests and other interesting exercises [could] be worked out in connection with the recording feature" [49].

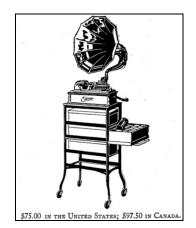


Fig. 5 Drawing of the Edison School Phonograph.

The development of a phonograph specifically designed for the school market seemed logical, especially since Edison phonographs were being utilized in the schools long before the introduction of the Edison School Phonograph. The St. Louis Exposition, for example, featured recordings of the singing abilities of public school children in 1904. In an entry entitled "Phonograph Records as Part of a School Exhibit," the author reported on a competition between an Edison dealer and "another talking machine company" to earn the business of school officials in Milwaukee, Wisconsin, to make records of students' work. Despite incentives from the opposition, the contract was awarded to McGreal Bros., an Edison dealer: "This contract [was] a distinct endorsement of the Edison product, for the school authorities went over the matter with unusual care, finally selecting the McGreal Bros.' proposition at a higher figure than offered by the competing company" [50].

Edison phonographs were even endorsed by music teachers themselves. In an article in the July 1914 issue entitled "An Orchestra Leader and Violin Teacher Praises the Disc," Leo B. Schoob, a violin teacher in Fall River, Massachusetts, and conductor of the Savoy Theatre Orchestra, was quoted as saying the following: "As a teacher of real, true music in the home, to children or others, there is no single instrument, and there is no individual music teacher who can bring so much of all that is best, to the ear that is hungry to learn." He also thought that Edison's new disc phonograph could "... even teach the teachers of music if they [were] willing to listen and to learn" [51].

# 5. THE RECORDING FEATURE OF THE EDISON PHONOGRAPH

One of the main differences between Edison phonographs and the phonographs of his major competitor was the type of media used on their respective products. While Victor's talking machines employed flat discs, Edison's phonographs utilized cylinder discs, thereby providing the ability for people to record themselves on blank cylinders. Fig. 6 shows Edison looking at the recorder that inscribed sound indentations onto blank cylinders. A similar, but separate, part was employed to playback recordings.

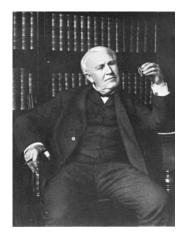


Fig. 6 Picture of Edison looking at a recorder.

Recording allowed users to evaluate and critique their own performances. In a booklet entitled "Edison and His Phonograph," J. Lewis Young noted that "Actors and singers may likewise rehearse their parts with all the advantage of hearing themselves as others hear them, and thereby correcting or improving the style, tone, pronunciation, and articulation, which would otherwise be impossible" [52].

Music educators employed this new method of selflearning as well. F. W. Wodell, for instance, indicated that he was "... now specializing in the use of the sound-reproducing machine in his studio as a means of giving pupils an opportunity to 'hear themselves as others hear them,' to a considerable extent" [53]. The stratagem Wodell incorporated into his response was extracted from a previously mentioned Edison brochure about home recording entitled, "To Hear Ourselves as Others Hear Us" [54].

#### 5.1. Recording Techniques

Several pamphlets were printed that included instructions for using the Edison Phonograph to make records at home. One of the earliest, dated March 1, 1903, was published by the National Phonograph Company and was titled "The Art of Making Phonograph Records." Two subtitles appeared on the cover as well: "How to Make Records at Home" and "Methods Employed by our Experts" [55].

The author of this brochure opened by divulging the following: "It is no easy task to impart to the uninitiated the secret of successfully making Phonograph Records." The writer then encouraged the amateur to experiment and acknowledged, "The best professional makers of Edison records frankly admit that there is still much that they do not know about the art ...". Nonetheless, the pamphlet contained advice based on experience for selecting a recorder, adjusting the phonograph, using blank cylinders and choosing appropriate horns for recording [56].

Similar to the ways in which a modern recording engineer would select and use a microphone, horns, as well as the appropriate distances from the horns to be observed when recording, were recommended based upon the type of material to be recorded. When making a vocal recording, for instance, the Edison experts prescribed the following: "The horn selected is usually six inches in diameter at the large opening, twenty-six inches long, tapering down to five-eighths of an inch." Placement of the horn was also crucial: "This horn is connected to the machine by a rubber tube and allowed to point upward to the mouth of the singer. It has always been found that a horn pointed upward gives much better results for vocal music than if pointed perfectly horizontal, and the singer placed from five to eight inches from the mouth of the horn" [57].

While this circular did not contain any diagrams or pictures, subsequent manuals on home recording did contain images to assist the reader. Fig. 7, for instance, was included in "How to Make Records at Home with an Edison Phonograph." The illustration may have proved helpful when directions had to be interpreted: "The piccolos have a position between two and three feet from the horn, and the clarinets are raised two or three feet from the floor and lined up in two rows, one on each side of the horn, blowing across" [58].

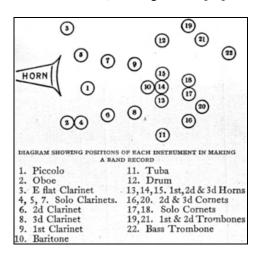


Fig. 7 Setup for making a band record diagram.

Instructions for making a solo record with piano included the diagram shown in Fig. 8. "The Phonograph should be placed with the horn pointing to the back of the piano," according to the author, "the latter being removed from the wall for this purpose." The vocalist was to "... stand between the horn and the piano, singing directly into the former," and, as may be observed, "The horn should point to the *treble* section of the sounding board" [59].

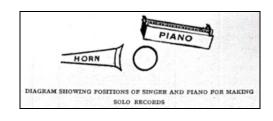


Fig. 8 Placement diagram for a voice and piano record.

A different setup for the same performers appeared in the brochure shown in Fig. 4. While the horn of the phonograph was still pointed towards the treble strings, in Fig. 9 the horn was behind the pianist, and the author dictated that "... [T]he phonograph should be moved so as to be at least five feet away from the sounding board of the piano, or perhaps a greater distance, according to the comparative volume of the singer's voice and the piano." Another key difference concerned the portion of the piano that was removed to reveal the soundboard, something that may not be inferred from Fig. 8 [60].



Fig. 9 Picture demonstrating how to make a voice and piano recording.

#### 6. THOMAS A. EDISON, INC. SURVEYS

In 1921, a questionnaire was sent to Edison owners with the intention of discovering customers' favorite tunes. It was designed to gather twenty selections and the reasons why owners chose certain pieces. Customers were also asked if they already acquired a recording of their favorite tunes, whether or not Edison had recorded them and, if so, they were asked to list their respective catalog numbers.

Thomas A. Edison, Inc. developed two very similar questionnaires to gather the aforementioned information, the main difference being the way in which the introductory material was written. One version, for instance, was composed on a more personal level, as if Thomas Edison himself was requesting an owner's favorite tunes, while the other was written from the perspective of the company asking for the details of owners' record collections on behalf of Mr. Edison. In the latter, owners were encouraged not to "... hesitate to name some simple little ballad, or dance tune, among [their] favorites, if that is the way [they felt]." According to the company, "One of the richest men in the world, who has a box at the opera and is internationally celebrated as a patron of the arts, says his favorite song is 'My Old Kentucky Home'" [61].

Both formats were straightforward, easy to complete and estimated to require about fifteen minutes to finish. One respondent, however, sarcastically disagreed with the previously mentioned time approximation. A note was included at the bottom of Marie Rood's questionnaire that indicated the following: "You really underestimated the time required for above!" [62].

In addition to remarks of this nature, owners often provided personal stories, amusing details and nuggets of wisdom. The following answer to the request to provide reasons for liking the tunes they supplied, for example, was penned by Ernest C. Wegman: "It's like asking my three year old daughter why she likes ice cream. She says she likes it but she doesn't know why" [63]. Franklin LePelley concluded, "Any machine will give you a tune but there is only one that will give you a tone, The Edison" [64]. "I never cared to own a phonograph until I heard an Edison," revealed Rev. Anderson Crain, "as the others to me are far from musical, but after hearing an Edison, I bought one straightway" [65].

A number of owners also described the ways in which they utilized the phonograph to learn music. Theron Akers, for instance, jotted down a note stating that he was an amateur saxophonist who was grateful for "... all the Edison Recreations with a saxophone player in it as it helps me in my study" [66]. Another owner, Mary L. Spaulding, wanted a re-creation of a particular song because she was working on it for a voice lesson [67].

Children played an especially crucial role in the success of the phonograph, and home deliveries like the one seen in Fig. 10 helped capture their attention. Youngsters such as Mrs. Carl Westerdoll's daughter utilized the phonograph to learn music: "My small daughter 3 years old sings what she hears. She plays the Edison herself. I should like records she could learn. Any kindergarten song would do" [68]. "I have a daughter," H.A. PrinceKing similarly attested, "that sings [songs] with the Edison" [69].



Fig. 10 A picture of a man giving a cylinder re-creation to a child.

Other Edison owners played instruments along with recordings on the phonograph. Mrs. Frank A. Eaton, for example, enjoyed accompanying "A Little More Pepper" on the piano [70]. "I can play my cornet with the record," noted F.B. Travis of Milwaukee, Wisconsin [71].

Multiple owners confirmed Edison's prediction that his machine would function in the capacity of a musical teacher. L.F. Hill, for instance, announced that "My Edison is teaching me to enjoy Classical music more and more - opening the door of a wonderful treasure house otherwise beyond my means" [72]. "I can't tell you how much good you have done to make it possible for people to hear good music in their own homes," wrote Mrs. A. B. Castator of Richmond, Indiana. She then went on to add, "It was a real musical education for my children to have the Edison" [73]. Mallgreu declared, "... [The] Edison Phonograph has been a conservatory in my house for over five years. We read the descriptive matter on the cover; study all about the piece and thus we have been able to gather a big source of musical information" [74]. Luthing closed a letter he sent along with his response with this salutation: "With renewed expression of my pleasure and delight in your increasing success as an educator of the American public in a real appreciation of good music" [75].

#### 7. THE VICTOR TALKING MACHINE COMPANY & FRANCIS ELLIOTT CLARK

A large number of the Thomas A. Edison, Inc. questionnaires housed at the University of Michigan also contained information about Edison's main competitor, The Victor Talking Machine Company. The three primary themes that emerged from the responses of Edison owners in conjunction with Victor centered on their preference for Edison products, dissatisfaction with Edison artists and unhappiness with the timeliness of Edison's releases of the latest popular songs. Numerous submissions received a response from the Vice President of Thomas A. Edison, Inc., William Maxwell, providing a wealth of details about the companies' philosophies and operations.

L.P. Hoops disclosed that he was oftentimes "... compelled to buy the Victor records to get the latest tunes, which [he objected] to very much for the Edison record [was] so much better" [76]. Maxwell's response revealed that the company was "... making a very much better showing, in the issuance of hits. [The company has] recently gotten out several numbers ahead of the talking machine people and, with the installation of a special department, now nearly completed, for handling hits." He concluded by stating, "I think you will be more than pleased with our speed" [77].

M.K. Wylelu expressed the frustration of some owners when he noted that "Edison surely has the best machine but Victor makes the best records" [78]. These types of replies provoked stern responses from the Thomas A. Edison, Inc. Record Service Department: "Please do not confuse or compare Edison RE-CREATIONS with talking machine records. The manufacture of the latter is a very simple mechanical process, requiring only a short time to complete the cycle of production; while Edison RE-CREATIONS mean an involved laboratory process calling for great care and skill. Briefly, one process results in a hastily made mechanical musical imitation and the other the work of artists actually and faithfully RE-CREATED. That this difference is fully appreciated by Edison owners is evidenced by the fact that they realize it requires a little more time to make the RE-CREATIONS and are willing to wait for them" [79].

W.E. Slocum was one of the owners who recognized the quality of Edison merchandise. He believed there was no comparison "... between an Edison phonograph and a talking machine with which the country is now flooded ...". He could easily distinguish the differences between the two competitors' products: "I just can't see how people can be satisfied with anything but the best when it comes to something musical, and the best sure spells Edison" [80].

Recording artists also proved to be a hot-button issue with Edison owners. Mrs. J.L. Mead of Norwalk, Ohio,

for example, echoed the following common complaint: "Most of the noted and popular artists are exclusively on the Victrola" [81]. Mrs. Oliver Wallace declared, "What all Edison owners want is records by our great artists. We all have to buy Victor records when we get them and how much we would like to hear a real recreation of them. Get them and in everyway the Edison will be best" [82].

William Maxwell's response may have surprised some Edison owners: "Will you believe me, when I tell you that the particular talking machine manufacturer in question has only three artists, whom we should like to have?" [83]. His retort was in keeping with Edison's own philosophy: "Great names, big reputations, mean nothing to me—it is the music itself that appeals to me" [84].

These types of complaints also helped explain why Edison struggled in the school market. Similar to Edison's lack of "great artists," there was an insufficient amount of literature about Edison's products for schools, especially when compared to Victor. G.C. Silzer, the Vice President of Harger & Blish, wrote about the need "... of some well gotten up literature from [Edison's] company on the subject 'Of the Edison in the School." This dealer wanted a "... good circular setting forth the features of the Edison as applied to school work." Silzer closed his letter of April 26, 1915 by emphasizing, "The average small town dealer finds him-self terribly frustrated as a general thing, when in competition on a school deal, by reason of the profusion of the advise, suggestions etc, contained in literature which the Victor company supply his competitor" [85].

William Maxwell's response revealed, in part, why Victor dominated the school market: "Within the past week Mr. Edison has come to a definite conclusion concerning records for school use and will proceed with a series of special records. Therefore, for the time being I do not think that it would be advisable for us to get out a special pamphlet for the use of dealers in schools, but as soon as we can announce Mr. Edison's school records we shall of course prepare suitable literature" [86].

Victor, as may be gleaned from Silzer's letter, had already developed a strong presence in the school market by this time, largely because the company organized an educational department under the direction of the noted music educator Frances Elliott Clark in 1911. With Clark at the helm, Victor promoted music instruction via listening lessons that emphasized formal and historical concepts, a practice which eventually created a rift between musical activity and music appreciation.

Writing for the Siegel-Myers Correspondence School of Music in a lesson entitled "Music Appreciation and Community Music," Clark's words outlined this new philosophical position on the purposes of music education: "Not long ago sight reading was the objective point in all of the music work; later it became tone quality and song material, and now it has developed into the question of actual knowledge of music appreciation. Emphasis is put not so much on the theory of music, as on the study of the real music itself, and the culture and growth in appreciation which comes from familiarity with the works of the great composers. Each of these objective points was in turn and in itself of value, but we are finally coming to see that the ultimate aim of all the music study is the ability to enjoy and appreciate the best music the world has" [87].

Not all music educators agreed with this transition, especially since learning to sing or play an instrument was no longer the primary aim of studying music. Listening, an essential element of musical training long before the invention of the phonograph, was valued by both schools of thought. The musical end, however, became a major point of contention.

The tenants of these diametrically opposed ideologies are still currently debated. The most notable advocates of each philosophy in the field of music education today are Bennett Reimer, the author of *A Philosophy of Music Education: Advancing the Vision*, and his former student David J. Elliott, the writer of *Music Matters: A New Philosophy of Music Education*.

## 8. CONCLUSION

The contributions of Thomas Edison to music education, as well as his phonograph businesses' contributions, were numerous, undeniable and largely unreported. Although much has been written about Edison, there were no significant studies addressing the ways in which he advanced music education. Based on the data, such as the creation of the Edison School Phonograph and his recording manuals to help people improve their recordings, there remains no doubt about Edison's connection to and interest in music instruction. Edison's phonograph business was directly associated with the Siegel-Myers Correspondence School of Music, evidenced by recordings housed at the Thomas Edison National Historical Park. The recording feature of his phonograph was therefore an educational tool that helped enhance distance learning, as it allowed both teachers and students to record themselves–an impossibility on Victor's talking machines.

Both competitors offered prerecorded music to consumers, yet Edison owners could purchase blank media to record anything from office dictations to music. Clear differences were therefore evident in the two approaches to music instruction promoted by Edison and Victor. While Francis Elliott Clark's work with Victor is rightly and widely acknowledged in the music education literature, Edison's contributions to this field have sometimes been overlooked and have mainly remained undetected. This study, therefore, detailed many of the ways in which Edison and his phonograph companies encouraged music education through student performance, self-recording and correspondence instruction.

The music education community now has more information about the musical techniques and methods used to educate people in the late nineteenth and early twentieth centuries and the ways in which Edison contributed to their dissemination. Finally equipped with a study that chronicles the interactions of the inventor of the phonograph with music instruction, the music education community can now rightly acknowledge Edison's place in music education history.

It is clear that Edison transformed much more than the teaching and learning of music with his phonograph, as he provided entirely new ways for people to hear and interact with sound. It should therefore come as no surprise that the most prolific, and arguably the greatest, American inventor in history, who considered the phonograph to be his favorite invention, felt the following about music: "Music, next to religion, is the mind's greatest solace, and also its greatest inspiration. The history of the world shows that lofty aspirations find vent in music, and that music, in turn, helps to inspire such aspirations in others" [88].

### 9. ACKNOWLEDGEMENTS

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