

Ringling and Ringling: Showmens' Bells, Chimes and Related Novelty Instruments—Part I

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Introduction

The ringing of bells and chimes elicits joy, celebration and duty. Their sounds once represented a commitment to life's primary rituals, worship and work, school and feast, emergency response and time of day. Bells have been used to communicate, to announce and to bring pleasure with their melodies. In some ways, the bells, chimes and related novelty instruments that were utilized by circuses, carnivals and other showmen decades ago fulfilled all of the same purposes. Some were not mounted on or in vehicles, but many of them were housed and transported in wheeled conveyances that enabled them to be moved about the country and serve double duty for the outdoor showman. This paper explores their largely undocumented history.

Bells were commonly used to bring order to the lives of human beings. They are remembered today in the form of city hall, church, school and fire bells, but they were also used to call workers to their place of employment. Large factories eventually replaced bells with steam whistles that marked the passage of time to a broader area and with greater force. Carillons that provided musical enrichment for residents were well known in Europe long ago, originating by the sixteenth century. They did not become frequently encountered in North America until the early 20th century, when memorial carillons became more common. The lack of these musical devices here cannot be explained in light of the establishment of American bell foundries by the 1780s. It may have been an issue of funding more than technology. Carillons have been worked by both manual claviers and also by large cylinders that have moveable pegging, permitting different tunes to be mechanically programmed on them. Among the European makers of carillons was Giacomo Gavioli (1786-1875) of Modena, Italy, scion of the family that later gained fame as builders of fine mechanical organs.

Automaton Bell Ringers

It was the justifiably famous show impresario P. T. Barnum (1810-1891) who first exported and then aggrandized a group of Swiss Bell Ringers in the United States. He did this in 1844. The challenge was that the group was of British heritage. In the showman's fecund mind, a Swiss origin would be more impressive to the public and thus the decision was made to garb and present them with a Swiss heritage. They were a group of seven, with an eighth ringer for back up and a violin player to accompany them. Barnum, who was then in England, first made them available to friend and fellow museum proprietor Moses Kimball (1809-1895) in Boston. The Lancashire Bell Ringers, or "Campanalogians" as Barnum termed them, are also commented upon briefly in his broadly distributed autobiography.¹

If people could ring bells, then inventive mechanics reasoned that a machine could also do it. This belief in mechanical and electronic ingenuity continues in March 2004, with the

demonstration of a Sony-built automaton director that led the Tokyo Symphony during a recent performance. There were several presentations of automaton bell ringers in 19th century America. The first of record are the "Automaton Swiss Bell Ringers" at Horticultural Hall, Worcester, Massachusetts on December 24, 1856 (Figure 1). The handbill documenting them has an engraving depicting seven human figures in native wardrobe endlessly ringing handbells of the commonly known



Figure 1. Little more than a decade after P. T. Barnum sent a group of faux Swiss Bell Ringers to the US, an automaton set of them was a traveling attraction in America. This handbill supported an 1856 appearance. Author's collection



Figure 2. Wesley Jukes probably fabricated the Automaton Bell Ringers that were a feature of the Barnum circus museum tent in the 1870s. They're shown here in the 1872 show courier.

Circus World Museum

variety. The cut shows the bells being lifted from the table in front of them, giving the figures a rather complex grasp, lift, ring and set-down action. More than likely individual handbells were affixed to each of the figure arms, which were then set into motion by some type of barrel operation.

With a museum background behind him, Barnum made certain that his new circus, the P. T. Barnum Great Traveling World's Fair of 1871, had a strong museum department as one of the attractions, in addition to the circus performance that justified the entire operation. One of the features therein was "The Young Lady Bell Ringers." The show's advertising courier depicts seven demure maidens with a beater in each hand, striking silver bells. They were one of several mechanical figure attractions that populated the Barnum show museum. The grouping was expanded to nine for 1872, with a larger engraving showing what appears to be small metal hammers in their hands that were used to strike saucer-shaped bells. The "Automaton Bell Ringers [playing] Silver Bells of Ravishing Sweetness" lasted as late as 1876 in Barnum show advertising materials (**Figure 2**). The mechanically inclined Wesley Jukes may have devised these and other mechanical bell ringer presentations.

Not one to be outdone, even by the great Barnum, a similar set of seven female automaton bell ringers was a side show attraction of Adam Forepaugh's large circus in 1872 and 1873. An engraving illustrates seven maidens holding a beater or hammer that was then struck against a bell to make them sound. They were described as "a party of female bell-ringers who, with perfect accuracy, execute a variety of pleasing melodies on silver bells." This type of mechanism would have been easier to construct than one that had the figures moving bells, as would human bell ringers. One imagines a pinned barrel lifting the beaters away from the bells, with a spring action then propelling them against the bell for greater striking power. When Forepaugh's winter quarters burned on December 17, 1873, among the losses noted were the seven automatic bell ringers. Despite the loss, Forepaugh continued to advertise the feature in the same way for 1874. P. A. Older and J. M. Chandler's small but large titled circus, the Great Transatlantic Exposition, Museum, Hippodrome & Grand Menagerie of 1873, billed a similar set of seven Automaton Bell Ringers as the lead feature in their newspaper advertisements, displayed in the museum tent with other mechanical figures. Nothing has been learned of this assembly.²

A Marine Chime

The enterprising duo of Gilbert R. Spalding (1812-1880) and Charles J. Rogers (1817-1895) were the first circus impresarios to utilize a set of bells as an instrument to announce the arrival and presence of their show. The bells were not mounted upon a wagon, but placed on their Floating Palace, a large, wooden river barge upon which an elaborate performance hall had been erected for ring performances (**Figure 3**). It was "towed," actually pushed, by a steamboat between different western river communities where business was conducted. In the days before the steam calliope, the bells called patrons to performances on board their river showplace. Of them, Spalding's one-time employee and later adversary Dan Rice

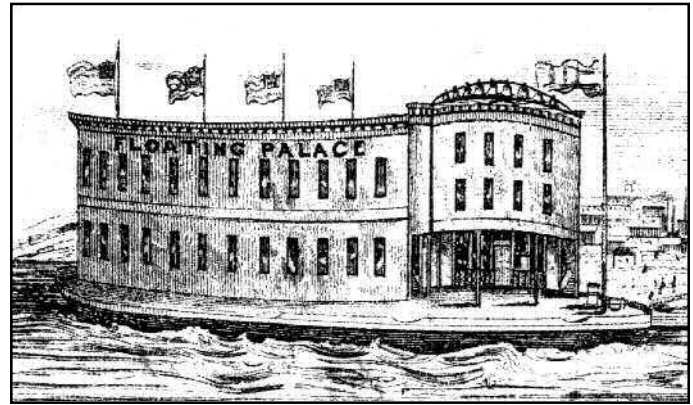


Figure 3. The Coffin chime of 20 bells can be seen at the top leading edge of the Floating Palace in this engraving from an 1853 Spalding & Rogers letterhead. Circus World Museum

(1823-1900) poetically sang "They try to ring the public in/By a church-bell chime."³ The Palace held a full sized circus ring, with seating to either end of the barge, along with balconies. A large pipe organ, made by Henry Erben (1800-1884) and modified and installed by Cincinnati organ man Mathais Schwab (1808-1862), provided the musical accompaniment to the ring show.

The Palace was built in Cincinnati, Ohio during the winter of 1851-1852. The bell installation was outdoors, on the so-called hurricane deck, or roof, at the front edge of structure. It must have taken special structural work to support the heavy line of bells in such an elevated position. An initial description stated that they were "arranged upon a huge arch," perhaps layman's language to describe a structural truss. The bell installation can be seen in an engraving of the Floating Palace published in *Gleason's Pictorial Drawing-Room Companion*, April 1853, in the firm's letterheads and handbill engravings, and were also depicted in an enhanced mounting in 1850s lithographs by Sarony & Major.⁴

George Washington Coffin (1814 -1880?), founder (1837) and proprietor of the Buckeye Brass & Bell Foundry in Cincinnati, Ohio provided a set of 20 bells, ranging from 50 to 700 pounds, aggregating some 6,000 pounds in weight. The Coffin firm was claimed as the largest in America at the time of the commission, larger than Meneely's in Troy, New York, and the only one that cast bells "upon purely scientific principles, and made to conform rigidly to the laws of acoustics."⁵

Research would suggest that the Spalding & Rogers innovation was the first large assemblage of bells seen and heard in the western rivers area. It was the first traveling chime in America, if not the entire world, but is largely unknown to the bell and carillon community. Indeed, the largest set of bells in all of America in 1849 was the chime of nine at New York's Trinity Episcopal Church, cast at the Whitechapel, England bell foundry. To qualify as a chime, a set of bells must consist of "at least eight tower bells arranged in a diatonic (or partially chromatic) series, and upon which tunes can be played by some means." The first American-made chime, with eleven bells, was installed in Charleston, South Carolina in 1849-1850. The second chime cast in the United States (1850) was made by another Cincinnati foundry, that of George Lucas Hanks (1813-1859), who exhibited them at the Cincinnati Mechanics

Institute. That exposure might have sparked the initial idea for the river chime. The first American carillon, defined today as comprising “at least 23 tower bells in at least two octaves of mostly chromatic series,” did not exist until a drum-operated French-made instrument was installed at Note Dame University in 1856. No American foundry cast a carillon until Meneely did it in 1928.⁶

The Coffin chime was sounded by a system of ropes and pulleys, placed into action by a keyboard activated by a human player. It was not stated whether the bells were fixed in position or if they were mounted on yokes and moved. The initial description of the action would favor the former arrangement. Initially it was reported that the creation of the instrument demanded that a distinguished “artiste,” better than any in America, Mr. Morrison from Canterbury, England, had been retained as the player. Because of Coffin's pride in the commission, he “contrived to adapt a kind of double piano forte action” so that even sprightly airs could be rendered with ease. In describing it, a reporter stated “The action combines two complete sets of keys and hammers, one set muffled, so as to admit of the most subdued notes. In this way a national strain at sunrise, or the vespers at sunset will produce an effect upon the water we would vainly attempt to describe.” Another reporter described the mechanism as involving ropes and pulleys between the keyboard and the bells. An 1851 account lauded the Coffin design, stating “An ingenious invention, on the principle of a set of keys—original with Mr. Coffin, has been introduced in playing upon chimes of bells, made in his establishment. By this, the connection of which with the bells, is out of sight, musical pieces are played as on a piano or any other keyed instrument. Obviously, this is a great improvement on the old and awkward mode of ringing by ropes.”⁷

A gentleman named Karl Fuhrman, the keyboard artist at the Erben/Schwab pipe organ inside the Palace, was the initial carillonneur. The “pretty” young man that rang the bells in 1855, perhaps the same Fuhrman, also played the piano in the concert room. He reportedly broke the hearts of all the country



Figure 4. A companion to the deKleist tubular piano was this one featuring piano-type hammers sounding a set of flat metal bell bars.

Smithsonian Archives

girls that came to the show and went on to become a popular composer in St. Louis by 1869. The Floating Palace was used for thirteen years, according to one account, and then dismantled in New Orleans after its useful life had been reached. The demise may have coincided with the dissolution of the Spalding & Rogers partnership in 1865. The disposition of the Coffin chime remains unknown. The river bells were still remembered as being a novelty six decades later by men that had witnessed them as young boys.⁸

Bell “Pianos”

Through the years, inventive Americans devised various ways to play upon bells and chimes. An inventor named Buttkeleit was granted an 1871 U. S. patent for a keyboard instrument that sounded a set of bells. Eugene deKleist apparently devised two, one-of-a-kind barrel-operated musical instruments. One caused a set of hammers to play upon a set of tubular chimes while the other played a set of flat metal bar bells. The tubular chime piano with at least 27 tubes was housed in a gothic revival wooden case (**photo, front cover**). It may have been inspired by the tall case clocks with tubular chimes that were then being sold for residential use in the United States. No examples of this machine are known to exist today. It is only because a single photograph of the instrument survives that we have any knowledge of it. Presumably it was made sometime in the 1890s, but it is not mentioned in any deKleist document known to the author.⁹ The story is the same for the flat bell piano, intelligence about it lacking save for a singular image in the Wurlitzer archives (**Figure 4**). It had at least 23 bars. In form it resembled many early roll-operated pianos.

Charles S. Batdorf of New York, New York received U. S. patent 635,416 on October 24, 1899 for a roll-operated instrument that used pneumatic powered beaters to strike bells (**Figure 5**). The bells were of the common handbell shape. Later instruments of both the mechanical and hand-played types used bell bars. They included the roll-operated Resotone Grand, of which one example survives (Sanfilippo collection), and the manually played Deagan Piano-Vibraharp, of which two examples from the six reportedly made in 1921 are known to exist (Sanfilippo collection and one last known to be in Florida).

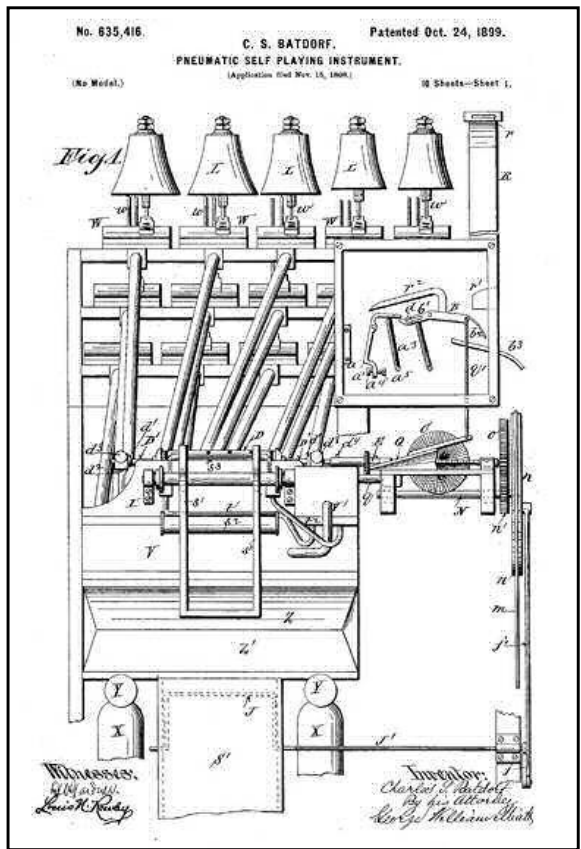


Figure 5. The details of Charles S. Batdorf's roll-operated bell piano of 1899 are partially revealed in this patent drawing. Courtesy U. S. Patent Office

Band Organs and Bells

Mechanical figures that automatically played upon triangles and small bells were added to military style barrel organs by the 1870s. They were activated by pins on the barrel, presumably specially applied for the purpose because these organs generally lacked any other installed percussion devices. Some larger military style instruments had literally a forest of such animated figures, but whether they played in unison or different notes, with tuned bells, is unknown.

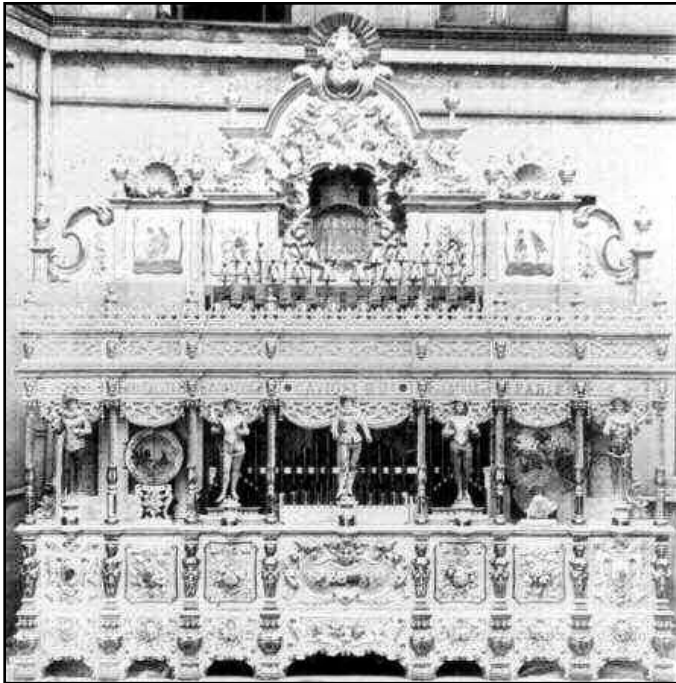


Figure 6. A set of pneumatically struck handbells were placed atop this 57-key Gavioli with an elaborate facade.

Print courtesy Marcel van Boxtel

Bells of the “hand bell” shape have only infrequently been placed upon band organs in larger numbers, as for an entire register. One Gavioli factory photo (Figure 6) documents a 57-key organ, likely from the late 1890s, with a set of 18 bells mounted above the entablature, all sounded by pneumatically operated hammers. Many years later, about 1975, Paul Eakins retrofitted a similar bell installation on the 100-key DeKleist organ known as “Sadie Mae,” when he altered it to Wurlitzer 165 roll operation. His recordings of the instrument in that configuration provide an opportunity to hear the device.



Figure 7. The top panel of the Stubbmann Bruder was outfitted with a set of handbells, matching the set on another larger Bruder with the same Coney Island carousel. Ron Yost photograph

The Stubbmann family of Coney Island carousel fame acquired one very large Gebrueder Bruder organ in the 1910s that had a similar “nested” set of bells located in the top decorative piece over the main organ case. The Stubbmanns retained the B. A. B. Organ Company to outfit their second, smaller Gebrueder Bruder organ of about 66 to 69 keys with a set of bells, akin to large hand bells, in the 1920s or 1930s. The apparatus was similar to that on the larger organ and may have been desired because the smaller organ had no glockenspiel. The bells were surface mounted to the face of the facade, an “Elite Orchestra ‘Apollo’” model from which the Wurlitzer 165 facade was derived (Figure 7). During a recent restoration of the instrument the added bell feature was eliminated.

Glockenspiels, composed of tuned, flat metal bars, as opposed to xylophones with bars made of wood, were introduced on band organs in the 1890s. They added brightness and carrying power over longer distances, higher frequencies attenuating less than lower ones. Glockenspiels, as they are often called, had only become part of the orchestral percussionist’s arsenal of instruments in the 1880s. Organ makers did not lag that far behind in adding them to their instruments, especially when one considers that an entirely new organ control system, perforated books, was instituted first. Usually the organ bells were external to the case, mounted on the detachable facade in either a vertical or horizontal configuration as desired, for both visual effect and tonal augmentation. They were a European addition, possibly French, and perhaps by Gavioli & Co. of Paris. The first ones are found on their orchestral-style instruments that appear in the mid to late-1890s.

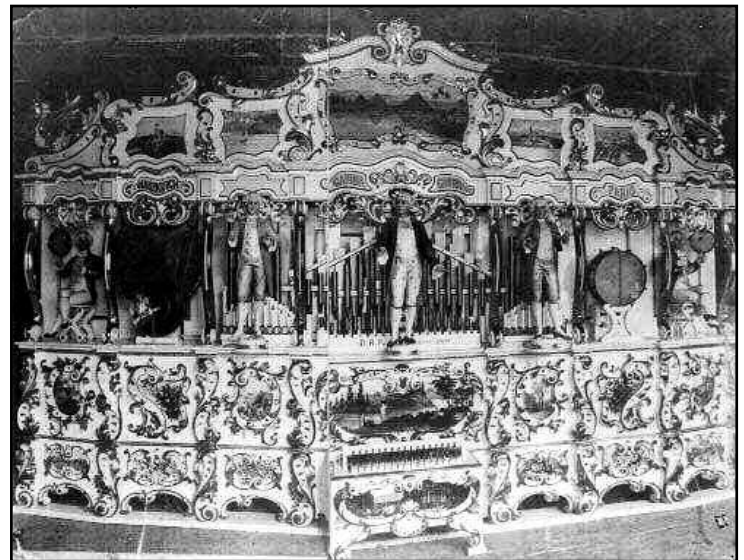


Figure 8. Early Gavioli bell installations were located on small stools extending out from the front of the lower facade, as with this circa 1898 Waldkirch-built 87-key instrument. Print courtesy Marcel van Boxtel

Two Gavioli posters, one released by 1898 and the other by 1903, reveal early bell systems favored by Gavioli. In the earlier one a set of seventeen bell bars are mounted horizontally on a little stool in front of the facade of an 87-key instrument (Figure 8). The arrangement is the same as seen in the factory

photo of the circa 1898 “Lange Gavioli” of Utrecht, Holland. The French language description termed the device a “Xylophone.” In the later poster the bell register has been placed on the “shelf” of the lower facade, what the Dutch term the “belly,” of organs available in 62, 87 and 89-keys in size (**Figure 9**). It would appear that Gavioli overwhelmingly preferred their bells in a horizontal mounting. Bell registers can readily be found in the same position on 50, 56, 57, 65, 87 and 89-key Gavioli instruments from the 1900-1905 era. On at least one of the large 110-key giants built circa 1906-1908 the bells were at the shelf position but mounted vertically. They were designed to play on the higher melody notes of a scale, usually with the piccolos, brought into action by the forte key.



Figure 9. In later instruments, Gavioli placed their bells on the shelf above the “belly,” to either side of the band leader, as on this altered 89 No. 4 scale instrument. Author’s collection

German organs included glockenspiels by 1903, when A. Ruth & Son of Waldkirch, Germany included them on their newly introduced Model 38 instruments. It was one of the added features that differentiated that design from the slightly less grand Model 37 Ruth. In some cases the glockenspiels were situated on little shelves or extensions in the lower portion of the facade, while later they’re positioned vertically behind the bandleader. In the Ruth scale the glockenspiel plays on the higher melody notes and is brought into action by a continuous or chain perforation register in the music. Ruth may have been the first builder to place bells in a vertical position, behind the director, giving them a highly visible status to draw the attention of listeners (**Figure 10**). Gebrueder Bruder also included glockenspiels in their organs, sometimes placing them in a horizontal arrangement, inside the case, when swell shutters were

employed to modulate instrument volume. Even Ruth, in their final design, the Model 39, placed the bells inside the extra deep case of that instrument. Americans have generally accepted the German name for the device because of the German immigrant heritage of the United States. They fostered the common use of candle-powered “glockenspiels” literally “bell plays,” to celebrate Christmas.

Belgian organ makers similarly added bells to their instruments around the turn of the century. The best known, Hooghuys, included them sometime after making their first entirely new book organ in 1901.¹⁰ Marc Hooghuys advises that his family termed the bell attachment a “carillon,” not to be confused with an organ pipe stop of the same name. They were always placed horizontally, on the shelf, as in the Gavioli style, though later alterations have been made by others that placed them vertically. The Hooghuys carillons are activated by a register and play on the upper melody notes.



Figure 12. Ruth placed many of their glockenspiels in a vertical position behind the central figure, where they quickly became the focus of attention. This is a Model 36. Author’s collection

Glockenspiels were not introduced on American-made organs until over a decade after they had appeared on European machines. Wurlitzer offered their first “bells” on the new Style 165 in 1914, though they were not mentioned in the original catalog specification. The new addition was derived from a Gebrueder Bruder instrument that passed through the Wurlitzer

organization. They were included on most Wurlitzer 165-roll controlled instruments offered thereafter. The 22 “bells” played on the upper 22 notes of the melody, added to the pipework by register action. They were always placed in a vertical orientation, usually in a visually prominent location to add to the volume. When the Style 153 was first offered in 1916, the 150-roll scale was enabled to also play upon sixteen “bell bars.”

For the Style 166 of 1915, Wurlitzer included not only a 22-note glockenspiel but also a 22-note set of what were termed “uniphone bells” (**photo, back cover**). The Style 180 of 1922 was fitted with 30 “Uniphone Bells” that played in the same manner, a regular set of bells apparently judged to be superfluous. To the best of our knowledge, these were the only band organs, domestic or foreign, that were fitted with a reiterating bell action, meaning that the attachment played constantly and at a rapid rate of repetition so long as the roll arrangement called for them to be sounded. All other bell actions were single stroke operation, each movement caused by a specific perforation in a book or roll.

Based on a recent inspection of the only intact Wurlitzer 180, it appears that Wurlitzer essentially derived their new feature from the recently introduced Deagan Unafon, perhaps without formal license. The Wurlitzer bars were routine, flat, rectangular bells, and not contoured or augmented by resonance chambers, as are those in the Deagan instrument. The Wurlitzer action is totally pneumatic, with the reiteration feature accomplished by an action similar to that used in some pianorchestra chests and pneumatics.¹¹



Figure 11. Artizan's very late Air Calio had a set of flat bar bells mounted on the panel behind the whistles. This photo shows the one existing instrument fitted with them. Author's photo

Artizan Factories, Inc. was the only other American band organ manufacturer to include a glockenspiel as initial equipment on one of their instruments. A set of sixteen bells was included in their largest offering, the 61-key Style D, which was first available sometime 1922-1925. Perhaps the most unusual employment of bells came with Artizan's Air Calio of circa 1926 (**Figure 11**). In addition to the typical brass calliope pipes, a 29-note set of bell bars could be played in unison by register addition. Small pneumatics with a little round bar attached to a wooden arm play upon the bells. One of the two extant Air-Calios is equipped with them (Gilson collection).



Figure 12. Charles Heal's four abreast gallopers in Great Britain had an 89VB-scale Marenghi organ with a grelotphone to provide riding music.

Author's collection

Charles Marenghi followed the Gavioli design of horizontal bells on the lower facade shelf, but by 1910 he had invented and applied an unusual bell-type register called the “grelotphone” (**Figure 12**). “Grelot” is French for “bell.” It consisted of a set of tuned sleigh bells, the spherical, enclosed kind associated with wintry, horse-powered sleigh rides. Depending upon the size of the bell, between two and seven of them would play each pitch of the scale, the lower notes having the larger diameter. Each group of bells was attached to a vertical leather strap, housed in a box that was placed at the top of the front case opening. A pneumatic moved the strap in the center, in an action like bending a knee, repeated movements replicating the sound of jingling sleigh bells as heard on trotting horses. This specialized attachment is most commonly associated with Marenghi 89 and 98-key violin-baritone scale instruments. The grelotphone was brought into play by a register and played on the higher melody notes, like typical glockenspiels.

In the 1920s, tubular chimes became popular with the public. They were built by firms such as J. C. Deagan and installed in churches, bell towers and the like, often as memorials of one type or another. This surge of popularity spurred a number of mechanical organ builders, rebuilders and showmen to retrofit or include them in their largest instruments. Tubular chimes can be found in the 114-key organ made in 1920 for a Wetteren, Belgium dance hall by the Gaudin brothers (Gilson collection). They are located on top of the main case and have their own register key to add them to playing notes. At least one 110-key Gavioli, the one built for British showman Randall Williams for 1906, was altered to feature tubular chimes directly in front of the main case by 1934. At the time it was serving in Pat Ross Collins three-abreast gallopers. Carl Frei, Jr. included similar chimes in two major organ expansions, when he converted two 89-key Carl Frei, Sr. made instruments into 112 and 125-key-less machines in 1967 and 1976, respectively. Because they were designed as traveling instruments housed in wagons, the

chimes are located in side chests to the main organ case. Contemporary Belgian builder Johnny Verbeeck has included tubular chimes in some of his larger instruments.

The Circus Parade

In real estate the cry of “location, location, location” is all-important. In the circus business a century ago the parallel descriptive phrase was “day and date.” It was heralded in a grand, free street parade on the day and date specified. The circus street parade was a disruptive event in the communities through which it passed. It was the final event in a weeks long marketing and advertising campaign that was initiated when the show had planned the season’s tour. Thereafter the show’s agents would visit the community, in advance, renting the show grounds, arranging for newspaper advertisements, contracting for supplies, purchasing the licenses and eventually plastering the city and surrounding area with flaming, imaginative posters that announced to everyone the impending arrival of the circus for one day.

The circus parade started in 1797 as the simple passage of performers on their ring horses through the principal streets of the city. In 1835 several menageries took what appeared to be ordinary dray wagons and pressed them into service as band-wagons, which then led their caravans into the city. They were trailed by the show cages and baggage wagons. A circus soon followed the practice and it became a standard and expected circus action on “Circus Day.” A British showman caused the first ornamental circus parade wagons to be built in 1843, with the first examples constructed for use in America in 1846.

The organ wagons fabricated for two traveling shows in 1849 and 1850 were the first purpose-built music conveyances to be added to the daily march. They were followed by other organ wagons, the steam calliope, bell wagons, chimes wagons, air calliopes and Unafon wagons. These various musical novelties enlivened the street parade, enhancing both the visual and

audio experience. Their tunes were interspersed with those emanating from several bands. In the larger shows, the big top band was often split into two sections, each filling a wagon. They were augmented by the side show minstrel band, a ticket sellers band and a clown band, with added novelty from bagpipers, Jubilee singers and other groups. The circus march provided a festive, happy interruption in the lives of Americans until they were discontinued following the 1939 summer season.

Circus Bell Wagons

The earliest circus bell wagon for which documentation survives was the one owned by the 1875 Van Amburgh & Co. Golden Menagerie. It was described as a tableau car with a chime of six bells, drawn by six horses. The February 20, 1875 *New York Clipper* reported that it was to travel in advance of the show as a bill or advertising wagon. The bells called attention to the advance agent's work, enabling him to distribute handbills to any assembly and to draw attention to the title upon the side of his vehicle.

Another circus, the Howes Great London, added what they termed an Egyptian Chimes wagon for 1875. It housed a chime of eight bells, weighing in aggregate 2,500 pounds, mechanically operated, all intended to represent the chimes of Trinity Church in New York City. The description was offered in the show's handbill, or “quarter panel” in circus terminology. This circus never owned a steam calliope and perhaps the pleasing notes of the bell wagon were the means to close the parade and draw patrons to the show grounds in pied piper fashion. Sets of eight bells were somewhat common in America by this time.

Circus owner Adam Forepaugh (1831-1890) also claimed to have a bell wagon in 1875, but other than a short mention in the *Clipper*, no confirmation concerning its existence has been found. His 1876 advertisements promised many parade features including “an octave of beautiful chime bells playing popular airs and anthems.” The device sounds like a mechanically played instrument, likely so because it was also accompanied by other mechanical figures.¹²

Cooper & Bailey’s Great London Circus carried a bell wagon in the late 1870s, a fanciful depiction of it appearing in some of the show’s lithographs (Figure 13). In 1880 their No. 1 advertising car was fitted with a set of bells, thirty in number, the largest weighing 442 pounds according to a pre-season account printed in the April 30, 1880 *Clipper*. There were only three carillons in America by 1883, so the Great London and similar circus chimes of the 1880s would have been the first to be seen by many citizens as they traveled across various states.

The first knowledge of a bell apparatus with the P. T. Barnum circus of the 1870s comes with the listing in a late 1875 auction catalog of “1 Chime of Bells suitable for a small church.” Barnum’s new partners for 1876-1880, three men known as the “Flatfoots,” may have bought them at the sale that signaled the end of



Figure 13. The circa 1880 Great London chime wagon had a very agile player, one that could maintain his balance while beating out a tune on bells in a circle. Note the steam piano (calliope) in the foreground. Ray Dirgo collection

Barnum's earlier partnership with William C. Coup and Dan Castello. As early as 1876 the P. T. Barnum show was parading a bell wagon. In 1877 a newspaper reporter described it as "a tableau car containing a massive set of chime bells, which are sending forth in perfect time and harmony *Hold the Fort, Ninety and Nine*, and other emotional melodies." The June 13, 1876 New Bedford (MA) *Evening Standard* reported it was automatic, suggesting the bells were operated by a pinned cylinder mechanism. Two years later a reporter described the feature as "a fine chime of bells, from whose throats were evoked 'golden molten notes' at the hands of a skilled performer, who produced the music by means of keys, similar to those of a piano." In 1878, and perhaps in preceding years, after the street parade the bell wagon, steam calliope, an organ wagon, a brass band and other mechanical contrivances filled one of the show's museum-type tents. Many years later someone advised that the bells were the workmanship of James Gregory, a known bell maker who had a foundry at Cannon and Stanton Streets on the Lower East Side of New York City.¹³



Figure 14. Barnum couldn't buy the Liberty Bell, so he had a huge, oversized replica fabricated and placed it on top of a decorated tableau and used it as a street parade feature in 1876. Circus World Museum

1876 was the same year that the Barnum show carried the "Chariot of Liberty," an 1868-built telescoping tableau upon which was placed a larger-than-life-sized replica of the Liberty Bell (Figure 14). It was just a small item in the show's planned celebration of the centennial of our declaration of independence from British rule. The wagon's lifting mechanism had originally elevated a gilded figure of Mazeppa, the Wild Horse of the Tartary, in the center of a seated band. That novelty had worn off by the early 1870s and the wagon was converted to Liberty Bell duty for two or three seasons. P. T. Barnum gave some insight into the concept of the wagon in a letter that he penned to friend Samuel L. Clemens (Mark Twain). On March 20, 1876, the great showman wrote about his special centennial edition of the circus, "We take along a pack of cannon, and at the starting of the great street procession, about 9 o'clock, we fire a salute of 13 guns. In the procession we carry & ring a big church bell, and we intend to give such a patriotic demonstration that the authorities will gladly let the public bells join in half an hour's jubilee." There were even more patriotic ele-

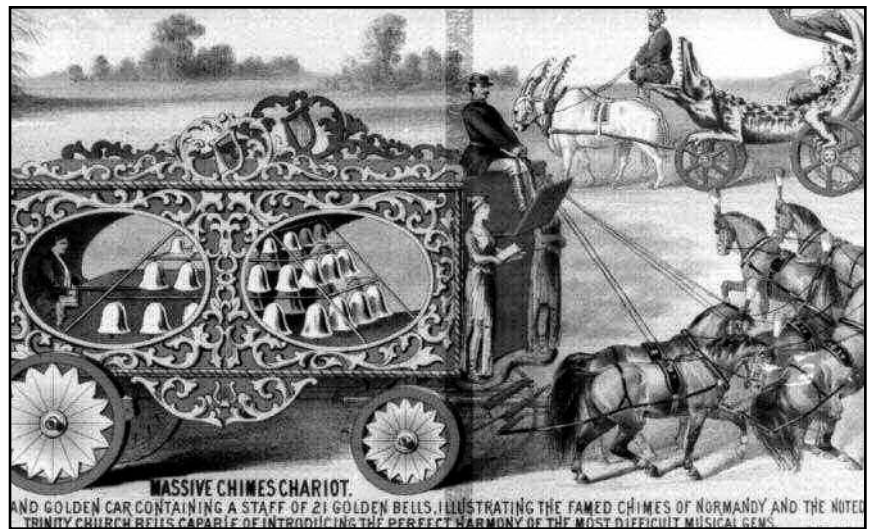


Figure 15. The Barnum & London circus of the early 1880s had a chime mounted in an A-frame, played from a clavier at the rear of the wagon. Howard C. Tibbals collection

ments, all envisioned to stir up the populace and have credit bestowed upon the show in the form of increased ticket sales.¹⁴ The Liberty chariot was altered again for 1879, when it became the famous Barnum "Orchestmelochor" organ wagon.

The earliest bell wagon about which a reasonable amount of information survives is the vehicle that was on the Barnum & London show by 1881. If it dated back to the 1870s it's assured that it was either the Barnum show or Cooper & Bailey chimes chariot. It continued to serve as a rolling carillon through at least 1897. The wagon had the typical enclosed box shape with two large ovals in each side through which the bells could be seen and heard. The physical arrangement of the chassis and the decorative style, hallmarked by a multitude of finely carved and gilded scrolls, suggest that it was made in New York City, likely by the Fielding Bros., a known builder of fine quality circus parade vehicles. An early Barnum & London lithograph depicted the bell wagon as having a large number of small to medium sized bells, suspended from an A frame support (Figure 15). Show publicity described it as the "London Bow-Bell Chimes, after the manner of those of Queen Anne's time, and evolving in the accurate gradations the most charming music. This grand reproduction of the Sacred and Solemn Airs of the Church in marvelous perfection never before attempted, requires three full Octaves or 24 bells; three times as many as were ever before gathered and graded into one collection." An 1881 report stated that the chimes were played by means of a keyboard resembling a piano, while one from 1884 indicated they were sounded by "a man who thumped on a large keyboard with might and main." For a number of seasons, including 1881, 1883-1886, 1889 and 1894-1897, Charles W. Bernard (Figure 16), the show's musically inclined head usher, played the



Figure 16. Charles Bernard's principal role was as head usher for Barnum & Bailey, but he was also the man that coaxed tunes out of the show's chimes wagon.

Author's collection



Figure 17. The Barnum & Bailey chime wagon was an elegant vehicle, adorned with four corner images and an array of finely sculpted scrolls.

Author's collection

Fairfield, Connecticut in 1937. Two others are currently on display at the Circus World Museum, rescued from the Bridgeport winter quarters by John M. Kelley (1873-1963), longtime Ringling attorney and founder of the Baraboo, Wisconsin institution.

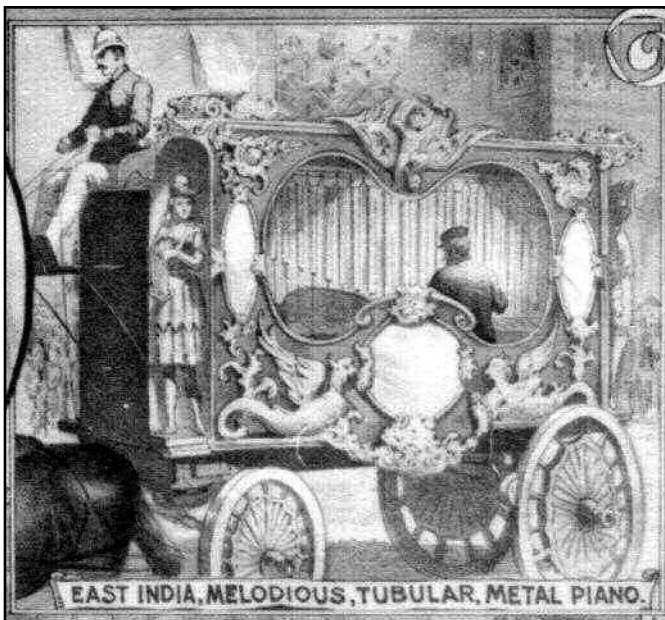


Figure 18. The Barnum & Bailey steam calliope wagon housed a tubular bell instrument of uncertain design in 1889, one of many musical features with the show.

Author's collection

For the season of 1889, Barnum & Bailey co-owner and manager James A. Bailey (1847-1906) decided to remove the steam calliope instrument and boiler from its normal vehicular housing and to replace it with something that show bills termed the "East India, Melodious, Tubular, Metal Piano" (Figure 18). The single available observation about the instrument is contained in the *Middletown* (NY) *Argus*, which described it as manufactured in England and consisting of a set of musical tubes from six inches to four feet long, played from a keyboard. The new feature was illustrated in a special lithograph created for 1889, but the details of the instrument itself are misleading. The shorter tubes are on the player's left, when they should by convention be on the right.

The "tubular piano" application came shortly after John Harrington of Coventry, England secured patent coverage for a

chimes, "doubling in brass" as the circus saying goes.¹⁵ The Barnum & London bell wagon went to Europe with the show from 1898 to 1902. Converted by 1903 into an organ wagon, the last year it was paraded was 1904. At a later date it was apparently dismantled, with three of the corner images salvaged and preserved (Figure 17). One, holding a lyre, was offered for sale by an antique dealer named Whitlock from

tubular bell clock chime in 1884. Medals were awarded to him at various expositions in succeeding years, gaining great attention for the invention. Walter H. Durfee, a Providence, Rhode Island antiques dealer, commenced a business relationship with him in 1886, sustaining the manufacture of long case clocks with tubular chimes in them. One suspects that all of the interest in these devices may have resulted in the commissioning of a special instrument for Barnum & Bailey application.¹⁶ It's also possible that chime clocks may have inspired Eugene deKleist to manufacture his unique tubular chime piano. The instrument was still a novelty at the time.

The 1889 Barnum & Bailey chimes wagon itself was well known, a fine steam calliope vehicle fabricated in 1883 for the John B. Doris Circus by Henry Ohlsen of Cincinnati, Ohio. It became a Barnum show property via the early 1888 auctioning of the chattel of the failed Doris show. The exact origin and manufacture of the traveling instrument housed in it has never been determined. One would sense that it was made of metal, rather than wood, to give it greater resonance and carrying power, especially since it was being played outside and in the midst of a circus street parade. The wagon may also have been parked inside the ethnological congress tent for playing during the come in to the big top performance. The application, though featured on a special 1889 poster, lasted just a season or two at most. By 1891 there was a calliope instrument back in the former Doris wagon. Following his purchase of the Barnum family's interest in Barnum & Bailey, James A. Bailey raised some much needed cash by staging a general winter quarters clean out and sale. Listed in the auction catalog for the December 11, 1894 sale was "1 set of bells, frame and handles for musical wagon." This sale marked the end of the line for the East India tubular metal piano apparatus from 1889. The buyer has not been discovered.

Another of the great circus troupes of the 19th century was that of John Robinson, from the Cincinnati, Ohio area. In the 1880s they upgraded their show with an organ wagon and a steam calliope. They also added the "Car of Juggernaut with its Chime of Silver Bells" for 1883 and 1884. Nothing further has been discovered about this parade attraction other than a review terming it a "moving glass palace." Presumably the sides were either of plate glass or featured a number of mirrors, a commonly used wagon decorative technique.¹⁷

The Sells brothers of Columbus, Ohio fielded two large railroad troupes in the 1880s. Their second show, named for brother-in-law Sheldon H. Barrett, had a bell wagon with it in 1884 and perhaps other years. It was dispensable, though, for an entry in the season's route book on May 14 of that year declares that it and the steam calliope were sent back to winter quarters and replaced by two additional cages of wild beasts. The Sells show was then in the midst of featuring a 50-cage menagerie and the replacement vehicles became part of the widely advertised total.

Starting in the circus business the same year as the Ringling brothers, 1884, was Peru, Indiana livery stable owner Benjamin E. Wallace (1848-1921). For the inaugural season it was claimed that this show had both a steam calliope and a chime of bells, the latter played by Horace McLane. No confirmation of the bell wagon has been discovered to date.¹⁸

A number of different circuses made a variety of claims regarding bell wagons in the 1890s. Geneva, Ohio showman Walter L. Main stated that he had one in the era of 1893-1894. Sells & Rentfrow, a red hot grift operation, put out a release in 1894 to the effect that their cathedral chimes would be played by Anna Bell Holton. Similarly, McDonald & Reichold's World's Fair Shows of 1894 planned to feature a chime bell wagon. Nothing has been located that can verify any of these claims and most are thought to be pre-season press agent puffery.¹⁹

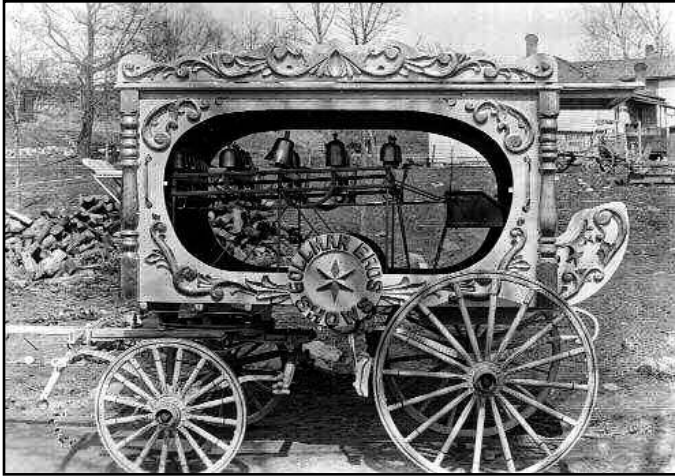


Figure 19. The 1890s Gollmar Bros. Bell Wagon was a modest-sized wagon with what may have been a largely homemade bell instrument housed inside it. The Gollmars were very self-reliant.

Circus World Museum

There are two 1890s bell wagons that can readily be verified. The four Gollmar brothers, first cousins to the Ringling brothers, operated a modest overland circus out of Baraboo, Wisconsin commencing in 1891. By 1896 they had a diminutive chimes wagon that was billed as the "Golden Chimes Chariot of Ancient Persia." Baraboo circus star Elbridge Vinton Hocum (1870-1926), a circus bareback rider with musical skills, played it.²⁰ In general it was about the size and shape of one of their small cage wagons. It housed a set of bells that were activated from a keyboard. They may have been inspired by the larger vehicle of their cousins to build their own musical feature (**Figures 19 & 20**). The novelty of the device had worn off by 1899, for on January 5th of that year they sent a letter to another group of Wisconsin showmen, the Holloway brothers of Montello, advising that they had for sale a "very nice bell wagon, this is very easy to learn to play as any one that . . . [remaining text missing]." One suspects they advised that anyone that could play a piano could learn to operate the bell wagon keyboard.



Figure 22. Small boys always tagged along behind the circus steam calliope, but with one lacking in the Gollmar march they found it convenient to follow the bell wagon to the show grounds.

Circus World Museum

In the late 1890s another circus float was altered into a bell wagon. The featured wagon elements started their existence as the top-most decorative pieces of a telescoping tableau wagon titled the "Gem Bossed Car of Freedom," fabricated in 1878 for the Adam Forepaugh Circus by the Sebastian Wagon Company of New York City. The pieces consisted of a wooden globe of the earth flanked by four carved figures representing different continents or races, with a living Goddess of Liberty usually seated upon the globe. The elevating mechanism and the features it moved were deleted from the tableau by 1889 and made into a small float. It was eventually acquired by Leon W. Washburn when the excess holdings of the Forepaugh circus were being liquidated in the late 1880s. He converted it into a bell wagon by 1897, advertising his device as cathedral chimes played by Amy Bell Fuller.²¹ The Great Wallace Shows, the circus from Peru, Indiana, acquired the wagon for 1898. A photograph taken at Neenah, Wisconsin on May 31, 1898 confirms that the original globe had been discarded and replaced by a set of bells. It remained in this configuration through the season of 1899 and was dismantled thereafter, the carved statues being reused in the construction of a new hippo den for the 1900 Wallace show.

The last circus bell wagon of record can be associated with the Welsh Bros. circus. They were in possession of one in 1902 and 1903. Nothing is known about it, other than its mere existence.²²

The Ringling Bros. Bell Wagon

The most famous circus bell wagon ever built was fabricated new for the Ringling Bros. World's Greatest Shows of 1892. It underscored their commitment to providing a broad array of quality music to their parade viewers and show guests. The five Ringling brothers were truly proud of this innovation. In 1894, Alf T. Ringling wrote in their route book that it was "the most famous and magnificent musical feature ever introduced in a street parade." Thankfully it is still in existence today, occasionally serving in the same service for which it had been constructed over 112 years ago.

The best available evidence suggests that the bell wagon was the first major parade wagon constructed especially for the Ringling Bros. World's Greatest Shows. Following a typical circus practice, the Ringlings purchased their first wagons second hand from fellow showmen. The construction of the wagon marked a significant change in Ringling policy and denoted one step in the path that led to their eventual domination of the circus business. Within a decade after the bell wagon's construction the Ringlings became generators of surplus and second hand assets that were peddled to lesser showmen.

The designer of the Ringling bell departed from the typical box body precedent, creating an open framework design that accentuated the bells instead of the carved housing. This was made necessary by the size of the bells, their scale being sufficiently large to prevent them from being obscured in the overall design. When these bells were rung, everyone in town was going to hear them. Based upon documents surviving from later transactions, it is likely the Ringlings acted as their own general contractor for the wagon, parceling out various portions of the new vehicle to trade specialists. They selected a triumvirate of Wisconsin businesses for the work, with one firm furnishing the bells and support framework, another constructing the wagon and a third supplying the carvings to decorate the vehicle. Surprisingly, the final result held together very nicely from an aesthetic point of view.



Figure 21. Even foundries and machine shops sent out correspondence and invoices with fancy letterheads, as this 1890s Centennial Bell Foundry statement confirms. Courtesy Clyde Holmes

The work probably started with the ordering of the bells, along with a frame on which to hang them and a mechanical keyboard from which they could be played. A sign on the side of the newly completed device in 1892 announced that the Centennial Bell Foundry of Milwaukee, Wisconsin had produced it. The name G. Campbell & Sons is also given. Milwaukee directories indicate the firm was composed of a father, Scottish immigrant Gardiner Campbell (1835-1892), and his two sons, George G. (1856-1898) and Henry E. (1858-1932) Campbell. The elder Campbell and his parents left Dunfermline, Scotland and arrived in Milwaukee on August 3, 1850. After two years of farming in Waushara County, Campbell left for Chicago and spent eight years learning the foundry trade. He then relocated to Milwaukee, worked in foundries, operated the first steam-threshing engine in Wisconsin, built and sold another foundry and in 1876 established the Centennial Bell and Iron Works with his sons (Figure 21). Their foundry and machine shop was located at 238-256 Oregon Street in Milwaukee's industrialized Menominee River valley. In addition to the high profile Ringling commission, in 1895 the firm cast and machined the large eleven-ton bell nicknamed "Solomon Juneau" that hangs in the top of Milwaukee's impressive 393-foot tall City Hall. Upon the completion of their Ringling commission the bell makers posed with their handiwork (Figure 22). The large apparatus was ready to set upon a heavy-duty wagon frame.²³

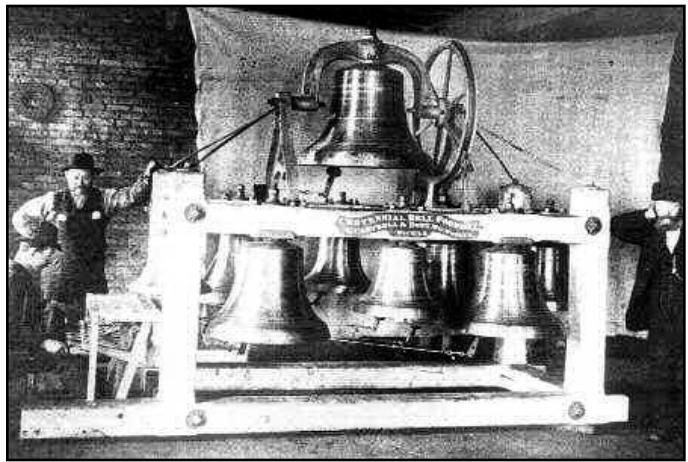


Figure 22. Proud builders, Gardiner Campbell on the right and sons George (standing) and Henry on the left, posed with the heart of the Ringling Bell Wagon in their shop in early 1892.

Circus World Museum

Baraboo's *Sauk County Democrat* of February 25, 1892 reported that the bell apparatus had arrived in Baraboo three days earlier and that it was being placed in storage at the Ringling quarters until the wagon was built. The March 3, 1892 *Democrat* announced the bells were out of tune and would have to be recast. Whether this action was actually undertaken is not known, the surviving bells exhibiting no evidence of alteration or re-manufacture. However, there is definitely something amiss in the musical scale as represented by the surviving bells that challenges musicians new to its clavier. Recent communication with David SaLoutos, Circus World Museum's resident performance artist, confirmed that the chime was designed to be played in the key of C. The provided notes are C, D, E, F, F#, G, A, Bb and high C. The F# was apparently incorrectly cast or tuned, because it is so similar to the F bell as to be useless. Were an F# note available, it would expand the variety of tunes that could be played upon the instrument. Another Campbell bell, from a previous city hall, now stands before the current Baraboo City Hall. Whether it relates to the Ringling commission or not is unknown.

In a 1949 communication with Richard E. Conover, Henry Moeller, Jr. recalled that "Keem Repski" of Milwaukee furnished the carvings to decorate the bell wagon. The Milwaukee directories of the 1880s do not list an individual or business with this name. It is our belief that the name Moeller spoke was a misinterpretation of the names Kuehns and Papke, the owners of the Milwaukee Ornamental Carving Co. (hereafter MOCC), the firm that usually supplied the carvings applied to Ringling wagons. The MOCC was founded in 1886 primarily to do interior and exterior decoration in both wood and plaster for homes and businesses. Their proximity to Baraboo, and economical prices as compared to Chicago, Cincinnati and New York decorators made them an obvious choice to do the carving for Ringling vehicles being built by the Moellers.

Carl V. Kuehns was the artistic member of the firm and Otto H. Papke (1856-1943) handled the accounting and financial aspects of the business. Originally there was a third partner, Joseph Grauvogel, but he dropped out by 1896. When the wood carving business was diminished, the firm concentrated on its ornamental plasterwork, decorating such Milwaukee show-

places as the Oriental, Pabst, Palace and Wisconsin theatres, the Milwaukee Auditorium, churches, public buildings and various palatial mansions (Figure 23). The firm was liquidated shortly after Papke's death.

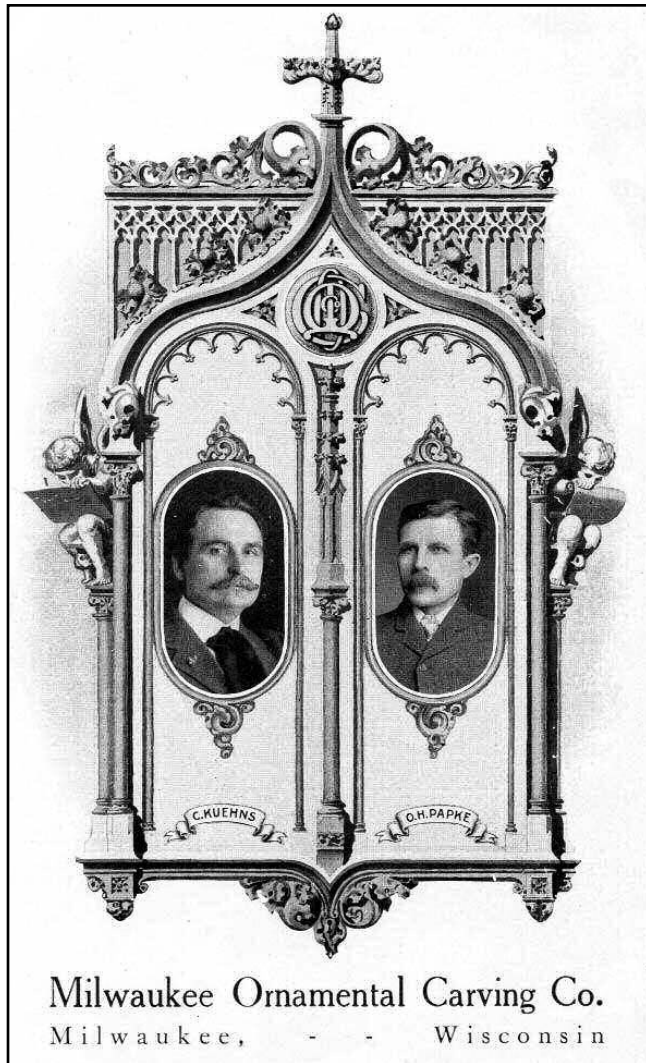


Figure 23. Carl Kuehns and Otto Papke supplied many circus wagon carvings for Ringling wagons between 1892 and the 1910s. They were the principals of the Milwaukee Ornamental Carving Company.

Circus World Museum

The pieces for the bell wagon were among the earliest carvings supplied by MOCC to the Ringlings. During the next two decades the MOCC artisans furnished the carving for a multitude of Ringling parade wagons. Included in this output were the decorations for about ten 1893 tableau cages, several Ringling tableaux of the mid-1890's, and a dozen or so floats and new wagons for the 1903 upgrading, the Paradise cage, the Swan bandwagon of 1904, and numerous cage wagon corners and skyboards. Working from verbal descriptions or cuts clipped from periodicals and books, MOCC carvers contrived decorations for wagons that were being built 120 miles away. Most carvings were done on a time and material basis, the labor rate being forty cents per hour, ten cents higher than the wagon builders charged. In some cases drawings and models were fur-

nished for criticism. One drawing for the Paradise cage and a New Orleans Mardi Gras poster clipping for the Egypt Float are preserved in the Fred. D. Pfening III collection. A few pieces of the Ringling-MOCC correspondence from the 1902 to 1914 period have survived, but nothing survives that reveals additional information concerning the bell wagon carvings. Presumably upon completion they were freighted to Baraboo by train and applied to the completed wagon.

A comparison of the bell wagon decorations and other early Ringling vehicles reveals a repetition of several design elements. The similarity is most notable in a bandwagon that was referred to as the "White Bandwagon" in the 1890s route books. Both vehicles featured centrally located masks with carved swags or garlands to either side. The bell wagon had bare breasted and winged maidens at the corners of the bell frame while the White Bandwagon was fitted with dragons having similar cleavage and wings. Additional duplication of design can also be found in the minor carvings. The repetition of the same concepts suggests that both were inspired by the same pattern book or guidelines, or executed by the same artisan.

With bells and carvings in hand, the final task remaining was the fabrication of the chassis to hold and haul it all across the country. The Moeller brothers of Baraboo, first cousins to the Ringling brothers, fabricated all of the new wagons used by the Ringling show except for six big wagons built at Cincinnati in 1903. The business dealings between these two firms spanned over four decades, a tribute to the economical and quality vehicles that rolled out of their shop on Baraboo's Third Avenue. Prussian immigrant Henry C. Moeller, Sr. (1828-1908) came to the United States in 1852, living initially in Milwaukee but relocating to Baraboo in June 1856. That year he established his wagon shop in connection with a blacksmith shop owned by Gottlieb G. Gollmar (1823-1914) on Fourth Street. Moeller, Gollmar and the father of the Ringling boys, August (1826-1898), married three Juliar sisters, relating them together as brothers-in-law. In 1872 the business was destroyed by fire, but it was rebuilt and then ceased operations in 1877. Moeller started anew in 1880. During the years of 1873-1876, 1890-1891 and perhaps others Moeller was in partnership with fellow craftsman Christian Thuerer (1847-1919) in the making of carriages. His two sons, Henry C., Jr. (1868-1957) and Corwin G.

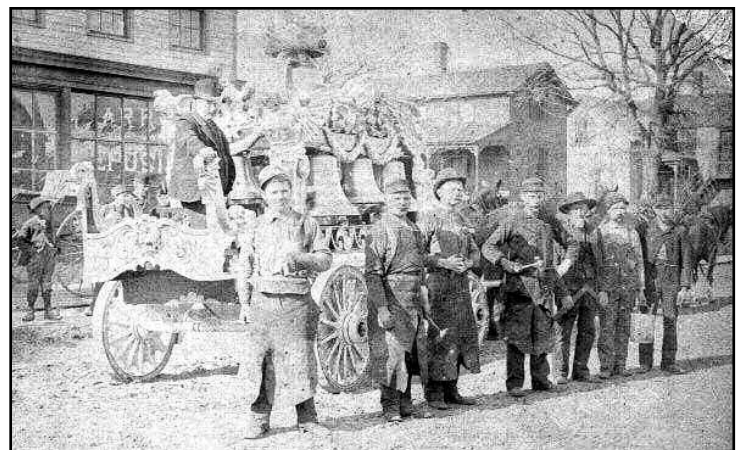


Figure 24. The Moellers and their shop men posed with the new Ringling Bros. Bell Wagon in 1892. Lead man Henry Moeller, Sr. is third from the right, sons Henry to his right and Corwin to his far left.

Circus World Museum

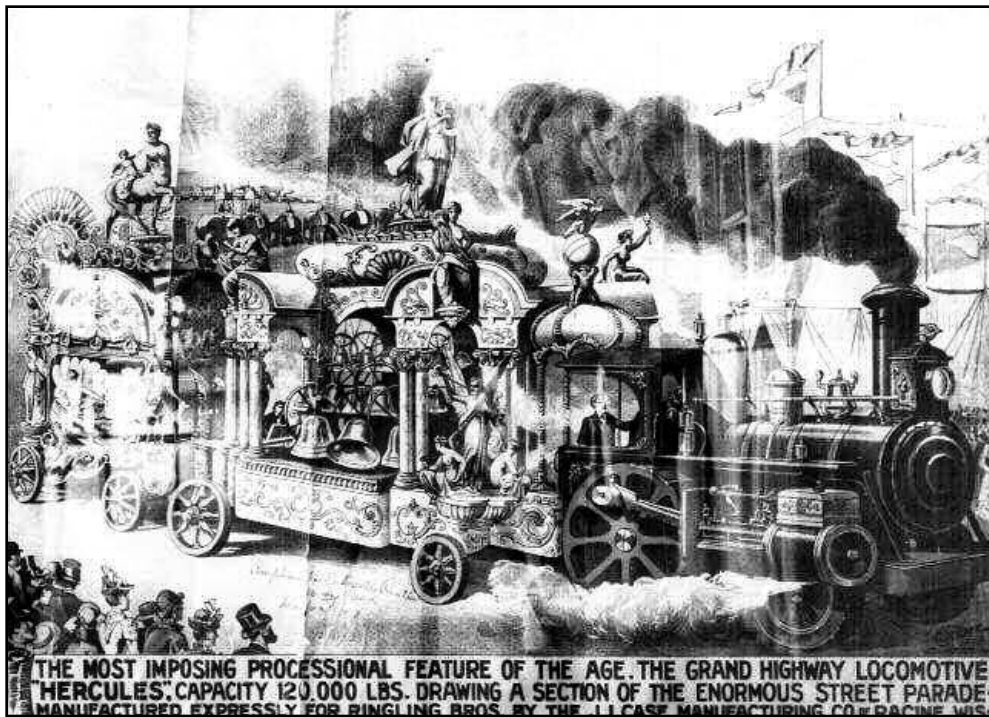


Figure 25. Imaginative lithograph artists envisioned the Ringling bell wagon dwarfing city hall as it rolled into town behind a giant steam traction engine. The real appearance wasn't quite that overwhelming. Circus World Museum

Moeller (1872-1946) entered the firm and in 1891 the name of the business became Moeller & Sons to acknowledge their involvement. The substantial Moeller shop still stands on Baraboo's Third Avenue, in the first block off the city square.

According to notes made by Henry Moeller, Jr., the Moellers entered the circus wagon business in a small way in 1884, the first year of the Ringling brothers circus. These early wagons were more on the order of heavy-duty carriages than circus wagons. By 1890 the Moellers were repairing full sized railroad show wagons and eventually went on to make at least one of every major type of wagon used by a large railroad circus. The breadth of their Ringling work eventually made them perhaps the most experienced shop in the country in circus wagon construction.

On February 25, 1892 the *Sauk County Democrat* reported that nine men in the Moeller shop were working on Ringling wagons. The problems with the bells may have caused them to temporarily halt the bell chassis project until a solution had been proposed and accepted. Henry Moeller later acknowledged that they often built unusual circus wagons "by guess and by gosh," and the same may have been true of the bell wagon. No one had built one quite like it before. They succeeded, essentially building a heavy spring platform wagon chassis under the Campbell bell framework, adding a driver's seat in front and a player's rest in the back. It came out looking a bit stubby, but it served well for a decade. Upon completion, the wagon was rolled out front of the Moeller shop, where the men that had fabricated and assembled it posed proudly for the camera with the tools of their respective trades (Figure 24).

Having invested considerable money in their new feature, the Ringlings naturally made a big play on it in their advertising. Engravings used in newspaper ads, couriers and litho-

graphs depicted a feature of Bromdignagian proportions, towering in colossal majesty above parade spectators (Figure 25). This was no ordinary bell wagon in their eyes, but "The Colossal Cathedral Chimes of Moscow's Famous Kremlin Tower." In an early description printed in the April 2, 1892 *Clipper*, the Ringlings claimed that the wagon was so tall that a special railroad car with a cellar, or depressed platform, had to be constructed to haul it. While such cars were actually built by two other circuses, one glance at the bell wagon places this claim under the fable, and not the fact, column. It was a big feature, however, as the publicity and enjoyment it created more than compensated the Ringlings for their expense. Americans experienced real bell sounds up close when this one went into use.

An advertising cut and a special poster depicted the bell wagon being drawn by a self-propelled steam traction engine, a device referred to as the "Mammoth Highway Locomotive 'Hercules'" in publicity materials. The Ringlings did indeed have such an engine, a nickel-plated ten horsepower unit built by the J. I. Case Co. of Racine, Wisconsin. Available accounts do not concur with the engraving as the engine was actually used to pull a string of animal dens. It endured just a single season with the circus, the limited speed and great weight of the engine making it more of a liability than an asset, or a threat to the show's several hundred head of baggage stock.²⁴

The only mishap in the ninety two-year existence of the bell wagon occurred during its first season. The September 10, 1892 *Clipper* reported that it had tipped over on a bridge approach, landing on its top in a trench. It took all day to upright the vehicle due to the great weight of the bells. Fortunately no permanent damage was incurred. During a recent weighing the wagon was found to tip the scales at 10,380 pounds. The bell wagon was typically pulled in parade by six to eight Percheron horses, a responsible driving task for any veteran driver.²⁵ The bell wagon was now part of a growing Ringling parade. By 1893 their parade featured four bandwagons, several tableaux and floats, a hippo den, a score of cages, an organ wagon, a steam calliope and the relatively new bell wagon. It continued to grow in length and splendor as the Ringlings prospered in the circus business (Figure 26).

The bells ranged from nineteen to thirty six inches in diameter at the bottom, and from fifteen to twenty eight inches tall. Although it is the only one mounted in a yoke stand, the top-most bell did not rotate, but was fixed in position, as were the other bells. A manual clavier, positioned at the rear of the

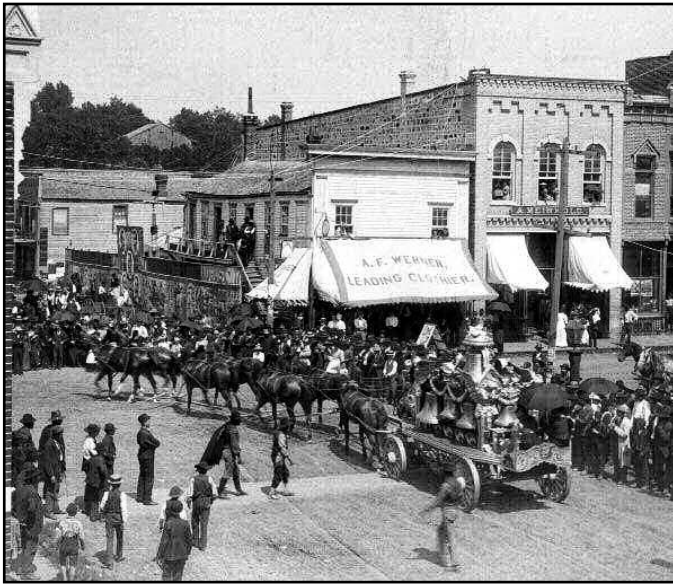


Figure 26. The business end of the Ringling Bell Wagon was the carillonist's seat, at the back of the wagon. When he played it sounded as though the church steeple was coming down the street.

Circus World Museum wagon, was connected via wires and pulleys to moving clappers that sounded the fixed bells. The small number of bells, nine, limited the player to only the simplest of tunes. The 1894 Ringling route book indicates *The (My?) Old Kentucky Home* and *Nearer My God to Thee* were played, in addition to anthems, hymns and popular airs. A 1941 correspondent of the *Billboard* reported that he had played *Rock of Ages*, *Greenland's Icy Mountains* and *Dixie* on the bell wagon in 1893.

Usually more than one person was qualified to play the bells. In 1892 it was Harry Ashton and Charles Clark, a concert musician, while in 1893 Lottie Aymar and Charles Spivins handled the duties. Two of the anecdotes about the bell wagon are ascribed to 1894, when sideshow marionette performer Barry Gray was asked to sit at the claviers. He initially substituted for Clark one day when the latter went to attend his father's funeral in Milwaukee. When he didn't appear again, Al Ringling stipulated that Gray alternate on a routine basis with Clark because he especially enjoyed his hymn playing. The anointed man was playing the bell wagon in Pittsburgh, Tennessee when a "hillbilly" rode up to him and ordered him to play *Dixie*. Gray responded that he didn't have enough bells to do so. After the rider fired off three shots over his head Gray quickly determined a method whereby he could

fulfill the request. The hill man gave out a "Rebel" yell and triumphantly rode off to the circus show grounds.²⁶

Tracing the history of the bell wagon presents no major problems, primarily because it was never sold to another circus. For 112 years it has been a possession of the Ringling show or its descendant organizations, the longest period of single ownership in circus history. Beginning in 1892, the bell wagon was featured in Ringling parades for the next 18 years. A 1910 parade order included it, whereas a 1912 list does not, bracketing the last year of usage as 1910 or 1911. Presumably it was dropped from the show because it served only one purpose, the parade, and could not be used to carry baggage, as was the case with all other parade wagons except the traditional calliope.

The only attempt by the Ringlings to sell the vehicle is recorded in a 1912 sale catalog offering the assets of the defunct 1910-1911 Forepaugh-Sells show. It was described as "One large Tableaux wagon carrying a set of big chime bells as are used in cathedrals and churches; wagon heavily carved; bells to be played by one man." The price, \$700, was the highest in the catalog, \$300 higher than the Forepaugh-Sells steam calliope, suggesting the Ringlings would sell it but only if a purchaser was willing to pay a considerable amount for it. The inclusion of the bell wagon on the Forepaugh-Sells list, the only identifiable ex-Ringling show wagon appearing on it, may indicate a transfer in 1911; however, the extensive investigations Richard E. Conover and Fred D. Pfening III conducted concerning the Forepaugh-Sells parade wagons, along with subsequent research in recent acquisitions failed to confirm its presence on the 1910-1911 reissue.

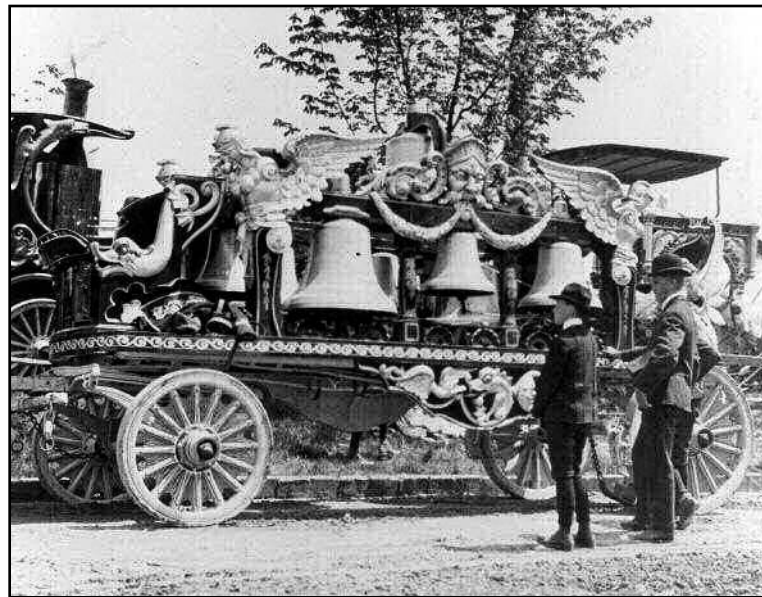


Figure 27. Thirteen years of hard, daily use caused the Ringlings to have the bell wagon rebuilt for their 1905 tour. The revised arrangement was aesthetically more pleasing than the original design.

Howard C. Tibbals collection

The great weight of the bells had caused the wagon's frame to become swaybacked by 1900. The Moellers extensively rebuilt the bell wagon for the 1905 tour (Figure 27). The Ringlings took advantage of the repair necessity and extended the scope of the work to implement other changes. In addition to rebuilding the frame, the carvings and woodwork that comprised the driver's and player's seats were modified and swapped. The claviers was also changed. In lieu of pushing the handles downward as in a conventional setup, L-levers were installed so

that the player pulled them back. One suspects that the seated position, as opposed to a standing posture, and its limitation on force application had brought about the modification. The center bell was lowered and turned ninety degrees and the carved cap that adorned its top was permanently abandoned. These modifications combined with a lengthening of the platform to

over seventeen feet resulted in a more aesthetically pleasing appearance than the original stubby looking design. Succeeding generations have viewed the wagon in this rebuilt configuration.

From 1911 or 1912 until 1934 the wagon remained in storage, either at the show's Baraboo winter quarters or perhaps via a transfer to the Sarasota, Florida quarters that came into use in 1928. When the Ringling show played Baraboo in 1933, the year of its golden anniversary, a few old Ringling and Forepaugh-Sells floats were rolled out of the Ringling barns to the delight of visiting fans. It is surprising that the bell wagon was not displayed at this time, suggesting that it may have already been gone. The quarters were sold for alternative uses shortly thereafter and no mention was made of the departure of the venerable old wagon.

Jess Adkins (1886-1940), manager of the Ringling owned Hagenbeck-Wallace Circus, asked for the Ringling bell wagon and the Five Graces bandwagon to be sent to Peru, Indiana to join his show for the 1934 season. Both may have been sent north from Sarasota, where the Five Graces was located, but that's only conjecture. Adkins, a great lover of circus traditions, was an employee of the Ringling show in the 1910s. That Ringling affiliation may have been how he originally became aware of the wagon's existence. In addition to the usual bandwagons, tableaus and cages found in most circus parades, Adkin's mammoth 1934 display also included one steam and two air calliopes, an Unafon and the old Ringling bell wagon, an array unmatched in any previous street pageant. The wagon was fitted with new wheels, slightly heavier than the originals, and received a coat of paint and a fringe for the player's canopy. It was a fine and unique addition to the great Hagenbeck-Wallace parade lineup.

After the 1934 season the bell wagon returned to Peru with the remainder of the Hagenbeck-Wallace operation. Though the title and much of the same equipment were leased to others for tours in 1937 and 1938, the bell wagon did not go out with them. Photos of the wagon while stored at Peru are nonexistent, but the late Gordon Potter measured the wagon at the quarters about 1936, indicating it was still housed there. It was definitely in Peru in late 1940, when show owners hatched a scheme to put it back into service.

John and Henry Ringling North, nephews of the original Ringling brothers, secured control of Ringling Bros. and Barnum & Bailey Combined Shows by 1938. Having been raised in Baraboo within the oversight of their famous uncles, they were well schooled in the family's circus heritage. After dealing with other challenges for a few years, they were able to focus on some fun aspects of their productions. On December 7, 1940, Henry "Buddy" North wrote show designer Norman Bel Geddes that he hoped the artist could put two revered circus artifacts, the bell wagon and a steam calliope, to profitable

use. North wrote, "perhaps you do not know exactly what a bell wagon is. It is a big wagon with enough large bells on it all connected to handles and operated by a musician who can wack off some amazing tunes. We wanted to pull these pieces around the hippodrome track some time during the performance, not only to bring back pleasant memories of a by-gone age, but also to show off some beautiful big draft stock we are purchasing. Could this be worked into your opening spectacle?" Bel Geddes liked the idea, responding on December 9, 1940 "I think the idea of reviving the calliope and bell wagon, proposed in your letter of December 7th, is splendid. Besides working them into the opening spectacle, it might be worthwhile to use them in the midway before the show, to build up the well-known circus feeling. What do you think?"²⁷



Figure 28. The Ringling bell wagon as it has appeared in recent Great Circus Parades in Milwaukee, Wisconsin.

Ron Bopp photograph.

To facilitate daily use of the bell wagon, the show craftsmen replaced the 1934 applied wooden wheels and undergears with steel members and dual pneumatic wheels. This modification significantly altered the wagon's appearance, but the fact that it was going to be used ensured its survival for another generation. The bell wagon was utilized in nine out of the next twelve years, absent only between 1943 and 1945. It was used in the show specs, frequently being adorned with artificial decoration inspired by the spec theme.

Retired from the road following the 1952 tour, the wagon sat at Sarasota winter quarters until about 1956 when it was placed on exhibit at the Ringling Museum of the Circus. The wagon was a museum feature for twenty-three years, reverting back to direct Ringling control via a 1979 agreement between the State of Florida and Ringling Bros. and Barnum & Bailey Combined Shows. Until it was brought to Baraboo in 1985, the bell wagon was stored in a Bradenton, Florida warehouse. The wagon was restored and redecorated in the Circus World Museum shop and has been featured in various programming activities staged by the museum, including the Great Circus Parades in Milwaukee, Wisconsin from 1986 to 2003.

Contemporary Bell Wagons

There have also been bell wagons constructed outside of the circus. One of the best known is the "Old Bell Wagon" once located at the Cyclorama in Eureka Springs, Arkansas. It had a bell arrangement that recalled the layout of the Barnum & Bailey bell wagon. Several decades ago an LP recording of this device was issued, featuring Dave Workman as the player.

Since 1992, a traveling bell wagon has been making the rounds of the bigger state fairs, presented and played by John and Tola Pearson of Houston, Texas. They adorned a standard golf cart with a large number of hand played bells and gave a musical atmosphere to each of the many venues that they visited.²⁸ The Alpenrose Dairy of Portland, Oregon also has a bell wagon of sorts amongst its interesting holdings.

Notes

1. *Selected Letters of P. T. Barnum*, A. H. Saxon, ed. (Columbia, 1983), pages 25-27; *Struggles and Triumphs* (1871 edition), page 364.
2. *New York Times*, December 23, 1873; *Evansville (IN) Daily Journal*, April 4, 1873.
3. John H. Glenroy, *Ins and Outs of Circus Life* (Boston, 1885), page 95.
4. The Palace's history is covered extensively in Penelope Leavitt Moy, *Spalding and Rogers' Floating Palace 1852-1860*, Ph.D., Washington State University, 1979, and other documents.
5. Charles Cist, *Sketches and Statistics of Cincinnati in 1851* (Cincinnati: Wm. Moore & Co., 1851), pages 172-173. The Coffin business was eventually taken over by his 1838 apprentice and 1856 partner, Ezra W. Vanduzen (1825?-1911), and since 1967 has been part of the I. T. Verdin Company.
6. The chime and carillon history and quoted definitions are from the website of The Guild of Carillonneurs in North America, www.gcna.org.
7. Cist, page 173; *New Orleans Daily Picayune*, October 12, 1852; *Cincinnati Enquirer*, April 23, 1852, a much appreciated reference from John F. Polacsek.
8. *Atlantic Monthly*, XXIV (July 1869), page 83; Davenport (IA) *Democrat*, June 3, 1885; Gallipolis (OH) *Tribune*, March 26, 1910.
9. deKleist documentation is part of the Wurlitzer collection housed in the Smithsonian Archives.
10. The date of 1896 inscribed inside of a existing Hooghuis arranging barrel suggests that the family had actually attempted to build book organs several years prior to the completion of the first one. They surely examined the Gavioli book organs that came into their shop for repairs in the interim.
11. Special thanks are extended to Jerry Biasella for the 180 information. The assembled status of the organ, and the concealment of the bells behind a metal screen, limited the access to the device.
12. Advertisement in *Ohio State Journal*, August 19, 1876.
13. Bloomington (IL) *Pantograph*, August 11, 1877; Columbus (OH) *Dispatch*, May 17, 1883 and August 21, 1878; *Billboard*, September 16, 1933, page 27. The firm was James & William Gregory, 106 Cannon. They specialized in marine, brewers and distillers brass hardware, also making yacht guns and steam whistles, according to their ad in the 1880-1881 New York City directory, page 603.
14. As transcribed in *Selected Letters of P. T. Barnum*, A. H. Saxon, ed., (Columbia, 1983), pages 196-197.
15. 1881 Barnum & London courier, page 11; *New York Tribune*, March 27, 1881; March 11, 1884; entries from show route books.
16. Further information about Harrington, Durfee and tubular chimes is accessible at <http://www.TowerBells.org/TubularBells.html>.
17. *Inland Tribune* (Great Bend, KS), October 19, 1883; Strong City (KS) *Independent*, November 7, 1883.
18. *Clipper*, February 13, 1886, page 759.
19. *Clipper*, February 3, 1894, page 767; May 5, 1894, page 133.
20. 1896 newspaper ads and *Clipper*, April 24, 1897, page 125.
21. *Clipper*, February 20, 1887, page 819.
22. *Clipper*, January 18, 1902, page 1032; July 11, 1903, page 454; *Billboard*, April 11, 1903, page 5.
23. Researcher Judy Griffin and Campbell descendant Clyde Holmes kindly made available information on the Campbell family. See Andrew J. Aiken, *Men of Progress*, Wisconsin (Milwaukee: Evening Wisconsin Co., 1897), pages 519-520. Additional information on the Campbells and their work can be found in the *Milwaukee Journal*, January 23, 1995 and the *Milwaukee Journal-Sentinel*, November 23, 1999.
24. See the author's article, "Early Circus Motive Power," *Heritage Eagle*, 21 (Winter 1992-1993), pages 1-2.
25. *Billboard*, July 17, 1937, page 30, contains a letter about the bell wagon teams and drivers.
26. *Billboard*, September 13, 1941, page 41.
27. Correspondence in Ringling Bros. and Barnum & Bailey Combined Shows business records, Circus World Museum.
28. *Amusement Business*, August 26, 2002, page 4.

Ringling and Ringling: Outdoor Showmens' Bells, Chimes and Related Novelty Instruments - Part II (in the next issue of *The Carousel*)

will cover other novelty bell instruments such as Aluminum and Organ Chimes, the Unafon, the electric calliope and E. R. Street's Tango Bells and Daniel Barton's Autola, as well as a biography of inventor and manufacturer J. C. Deagan."

Fred Dahlinger continues to research and document hand organ, band organ, hackbrett and street piano history in America, and welcomes contact and communication on these topics.

Note: Rally Date Change

Rally #5 in Franklin, PA in September has been changed to Rally #3. Same place—DeBence Antique Music World, Franklin, PA but now July 16-18, 2004.

Rally registration has been sent out!

Call Lynn Zilmer (814-432-8350) for information!

Ringling and Ringling; Showmens' Bells, Chimes and Related Novelty Musical Instruments Part II

Fred Dahlinger, Jr.

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—Musical Novelties —

Americans have an insatiable appetite for new novelties. Showmen, who earn their living by catering to this nation, are ever on the search for something novel to offer to them and thereby keep the admission revenues flowing. From the 1840s to the 1950s, the outdoor traveling shows provided venues where musical novelties found a natural home. The circus and carnival side show was a place where the “normal” was the unusual, unique and not infrequently, bizarre. The proliferation of dime museums in the latter part of the 19th century and the rise of vaudeville provided thousands of new stages where musicians could demonstrate their considerable skills, especially if they were novel in presentation or method, or by the instruments they utilized. Later showmen that followed in their wake learned much from their predecessors in embracing novelties for attracting or entertaining an audience. Derivatives of this heritage can still be seen today.

There were numerous circus, museum, stage acts and artists that presented public demonstrations on a variety of novelty instruments. Included among the devices they played upon were sleigh bells (played by hands and feet, alike), four-in-hand bells, staff bells, wrist and ankle musical bell cuffs, various stringed and brass instruments, musical lyres (rub chimes), handbells, musical glasses (including the Glassophon), xylophones and marimbas, musical bottles (filled partially with water) and rattles, along with the Buzzimba, Musical Crickets, Musical Cow Bells, Musical Disks or Coins, Tubaphones and

sound effects apparatus. These were all instruments that required considerable dexterity and skill to achieve satisfactory musical results. An electrical instrument, the space-age sounding Theremin, was a later addition to this arsenal of novelties.

Specialty instruments were fabricated by a variety of domestic makers. They included: Alois Brauneiss (born Vienna, 1867?-1937, active in New York and Brooklyn, NY, who reportedly perfected his musical glasses in 1893); Barney Chambers (fl.1887-1893, Cromwell, CT and Providence, RI); Rowland H. Mayland (1848?-1916, Brooklyn, NY, business established 1866), and son Edward Mayland; Arthur H. Miller (New York, NY, fl. 1915); Edwin R. Street (Hartford, CT, founded 1885); and R. T. Williams (fl.1886-1887, later Williams & Lucas, 1888, Fall River, MA). Nearly all of these talented instrument fabricators are forgotten today, with only J. C. Deagan having something of a following because his instruments survive in larger quantities and some, such as his later carillons, remain in contemporary use. Mayland is remembered by an older generation of symphony percussionists, but is quickly fading from memory. The other names are known only to historians and specialists.

Circus Novelties

One of the earliest musical instruments to be featured at the circus because it was musical, and not a technical novelty, was the “weirdly, sweet ‘Marimba’” (sic, also given as “Miramba,” spelled today as marimba) with the 1886 Barnum & London Shows, then one of the two largest traveling circuses in America. It was actually billed as the Marimba Band because several men, usually three, played it simultaneously. They were identified in some advertising as the “Barbarian Band of Native Guatemalan Performers,” cited by name in the 1886 season route book as Balantine, Barillaz, Coronado, Manuel, Orantex and Patrico (Figure 29). Newspaper advertisements and other show circulars illustrated the device, which was an early marimba. Dr. James Strain advised that the instrument was assuredly of Guatemalan origin, largely handmade by an unknown artisan and was typically played by three people. The pointed and inverted “pickets” beneath the bars were actually square cross section resonator tubes to amplify the sound. The ensemble was situated in the center of the show's museum tent, midway between the mounted hide and skeleton of the famous African male elephant, Jumbo. We know this because a rare photograph taken in 1888 shows the museum tent interior, including the early Marimba. Positioned as it was between this “double Jumbo,” the demonstrations of the instrument were always assured of having a significant audience. The Marimba and its players complemented the array of ethnological displays that were presented by traveling shows and static international exhibitions in the latter part of the 19th and early 20th centuries. Several years after the circus feature, a nearly identical instrument and complement of players were presented at the 1895 Cotton States and International Exposition in Atlanta, where an engraver for *Harper's Weekly* committed a representation of the attraction to history (Figure 30).

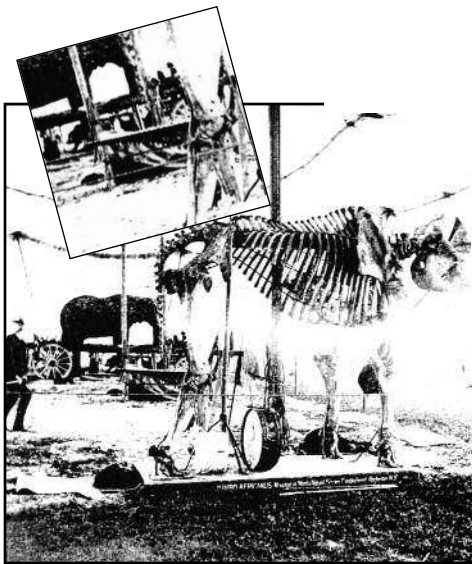


Figure 29 (inset). An early Marimba was situated between the “double Jumbo,” his mounted skeleton and hide, inside the 1888 Barnum & London museum tent.

Card photograph, Circus World Museum.

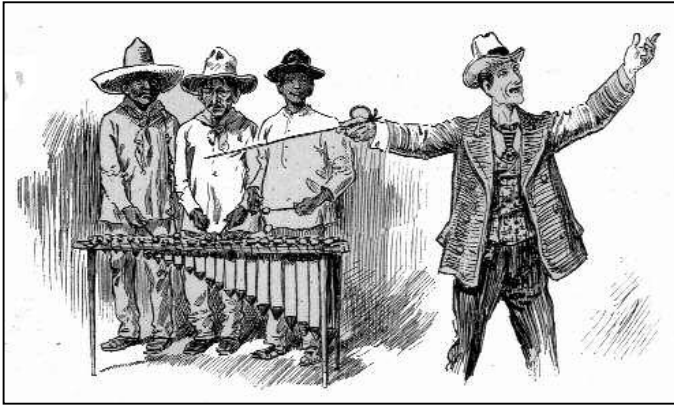


Figure 30. This 1895 engraving from *Harper's Weekly* illustrates the actual presentation of a marimba band as it was seen at the big fair in Atlanta. Author's collection.

No less a showman than Al Ringling (1852-1916), the oldest and most experienced of the famed Ringling brothers, stated that the 1894 Rooster Orchestra was their finest side show feature ever. Imported from Germany, it was illustrated in the season's side show banner line. Another crowing cacophony on the Sells Bros. Circus the same season was decried by one reporter. He wrote "The grandest fake of the season was the 'rooster orchestra' at the side show . . . The figures were of tin with rooster heads stuck through them and the playing was done by machinery." Presumably Al Ringling, who had a good sense of quality music, a well developed sense of humor, and a knack for spotting and staging great shows, was intrigued by the novelty of the apparatus and the impact that it had upon the farmers that formed the largest portion of their Midwestern audience. Walter L. Main's Circus had another Rooster Orchestra in 1895 while the 1897 Great Wallace Shows went with a Cat Orchestra (Figures 31 & 32). Whether crowing or screeching, circus visitors must have been charitable in their appreciation of poultry and feline produced tunes. It has been more commonplace to witness the ponderous or chattering music of elephant and monkey bands, as well as virtuoso seals blaring on special Wurlitzer-made horns, at the circus.¹

Professor Richard Karsey and his wife presented the Myriophone in the Barnum & Bailey Greatest Show on Earth



Figure 31. Residents that attended the June 25, 1895 Walter L. Main Grandest and Best Shows on Earth were able to enjoy the crowing of his rooster orchestra. Author's collection.

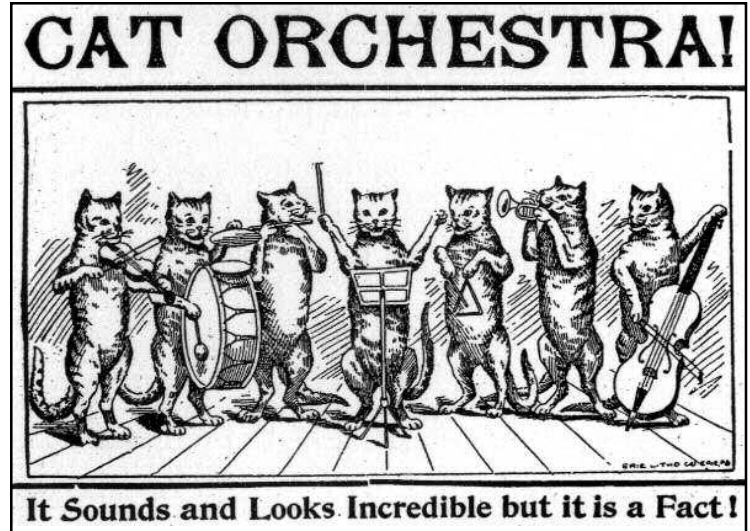


Figure 32. There have been other representations of "cat-o-phones," but the felines that were portrayed in the Great Wallace Shows 1897 Cat Orchestra seem to have been more human than any other cats. Author's collection.

side show in 1903. While an illustration of the instrument survives, how it produced music is not readily understood. It appears that a set of 25 disks, each presumably constructed to provide a particular pitch, were set into rotation to produce their sounds. They may have been constructed on the principle of a siren, but were capable of being sounded at lower rotational frequencies. The novelty came in the specialized ability of the Karseys to deftly move among the disks to create a tune, something akin to Vanna White's turning of letters in a word puzzle. It was plate spinning turned on its side, with a dose of musical aptitude thrown in for good measure. The apparatus was likely more suited to an indoor setting than the rough, uncontrolled and often hostile outdoor circus showgrounds (Figure 33).

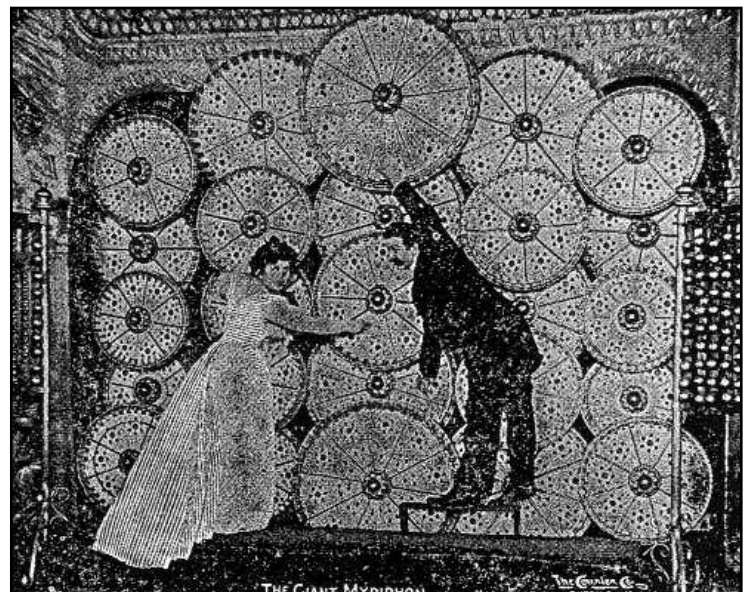


Figure 33. The Myriophone of 1903 was a true musical novelty that combined musical talent with gymnastics, all in the form of a duet. How it made sounds has not been determined. Author's collection.

J. C. Deagan

John Calhoun Deagan (1851-1934) was a widely respected, influential and financially successful manufacturer of percussion musical instruments. Along with his many inventions, patents and other accomplishments, he promoted and secured approval of the universally embraced 440 Hz “A” in 1910, a standard that has impacted literally every musician and musical instrument made since that time. Deagan instruments were of the highest quality, well engineered and manufactured with select materials with pride by a dedicated corps of employees. They continue to be prized by skilled musicians and collectors today (Figure 35).



Figure 35. J. C. Deagan was a painter, musician, inventor and manufacturer who created fine musical instruments and applied his developed talents for the improvement of music throughout the world.

Courtesy Dr. James A. Strain.

A brief biography prepared by percussive arts historian and authority Dr. James A. Strain for Deagan’s inclusion in the Percussive Arts Society Hall of Fame states “over the years a bit of mystery and legend has developed regarding his abilities and achievements, resulting in a somewhat elusive pursuit of this most influential musician.” Developing an accurate biography of Deagan is indeed a challenge. The situa-

tion is complicated by the fact that many of his papers were lost in a fire that devastated his personal residence. Today, there are few accessible, primary source documents to clarify several significant aspects of his life story.²

More inventor than marketer, it appears that some of the biographical materials issued by the firm were not entirely accurate concerning Deagan’s life experience. The company publications were essentially building an image of Deagan for marketing purposes rather than for later historical scrutiny. In hindsight, it is our assessment that Deagan experienced several decades of personal and professional growth that ultimately led to multiple triumphs after he established himself in Chicago and earned recognition as an authority in the percussion musical instrument business and audio arts. While some people associated with him, and having his best interests at heart may have been reluctant to divulge and acknowledge his humble origins, in actuality the path he trod makes his achievements even more remarkable. His journey stands as a great American success

story, readily justifying further study and significant appreciation.³

Deagan’s parents were Irish immigrants, Michael (1820/1825?-August 18, 1902) and Mary (nee Meagher or Maher) Deagan (1825/1830?-October 7, 1901). The family name is encountered as Dagan, Dagen, Dagon, Dugan, Duigan, and Deegan, with Deagan being adopted as the preferred spelling by the father by 1882/1883. Both parents were born in Ireland and emigrated to the United States in 1840, according to the 1900 census schedules. They reportedly met in Jefferson County, New York. It is thought that they were married shortly after the 1850 census canvassing. According to the 1870 census, neither of them was literate, nor was the second oldest son, Thomas, who became a teamster by age 16 (1870). The father toiled with his hands, listed as a laborer between 1850 and 1870 and later as a teamster (1880 census, 1882-1890 city directories). His \$300 in real estate and \$50 in personal assets grew to \$3,000 and \$300, respectively, between 1860 and 1870, testimony to his industriousness and the family’s thriftiness. His wife was a housekeeper, staying at home to care for their large family. Both of Deagan’s parents were Roman Catholic, with his mother especially devoted and devout. The family relocated to Syracuse, New York by 1853 and then moved to Youngstown, Mahoning County, Ohio sometime after March 1855, where Michael became a naturalized citizen on September 16, 1856.⁴

John Calhoun Deagan, the oldest child of ten, was born at Hector, Tompkins County, New York on November 6, 1851. Whether his parents named him for the recently deceased Senator John Caldwell Calhoun (1872-1850) of South Carolina, an ardent supporter of slavery is unknown. The 1860 census, the oldest public document to establish his birth, gives his age as nine, inferring 1851. 1853 is the year often given for the event, however, two of his sisters were both born in 1853, Mary Ann on January 13 and Elizabeth on September 22, excluding that possibility. Despite the seeming improbability, two children from the same mother in one year are biologically feasible, especially with the second being born prematurely. The birth dates for the sisters are confirmed by surviving baptismal records accessed by the family.

Data that Deagan or family members furnished later in life to census canvassers ascribed his birth to 1854. The 1900 census gives John C. Deagan’s birth year as 1854. Consistent with that date, his age was given as 57 in the 1910 census and 66 in 1920, both yielding a mathematical 1854 birth year. Deagan declared in the 1930 census that he was thirty years old when he was married on November 20, 1884, which also supports an 1854 birth year. Earlier data for his younger brother, Thomas F. Deagan, point to a conflict with 1854. Thomas’s age was first given as six in the 1860 census, establishing it as probably 1854. The 1870 census enumerator initially wrote 17 and then re-wrote it as 16 for Thomas, further suggesting an 1854 birth year. Some have provided a birth date of March 12, 1855 for Thomas, but that might be from later sources. While total resolution is likely not possible, the author’s primary conclusion is that a birthday in 1853 or November 1854 was likely not possible for John C. Deagan, given the births of his siblings, Mary Ann, Elizabeth and Thomas.

Young John Deagan attended school in Youngstown. Later biographies state that he attended Raines College, though the specific time and identity of that institution of higher learning have not been established in any primary source. The National Archives contains a record of a three-year enlistment on August 6, 1870 in the U. S. Navy at Philadelphia for "John C. Dagon." He was described as a 21 ½ year-old man, perhaps exaggerated to meet a minimum age requirement or to avoid parental consent. He was a painter, born in Tompkins County, New York (where his city of birth, Hector, was situated), grey eyes, brown hair, fair complexion and standing about 5' 8 ½" tall. The hitch brought an assignment to duty on the USS Brooklyn and reportedly a home berth in Great Britain. There actually was a ship of that name, launched in 1858, commissioned in 1859 and remaining in service until sold in 1891. It was a wooden screw sloop, a combination steam and sailing vessel. One summary indicates that it steamed around European seas 1871-1873 and served in the North Atlantic in 1874, all during Deagan's service time.

While in England, secondary and tertiary Deagan sources indicate he had the opportunity to study at the University of London. A later family member said that he received a university degree, but there is no evidence of one being awarded to him. Some accounts state that Deagan attended lectures in London by the famous German scientist Hermann von Hemholtz (1821-1894), whose musical theory had a lifelong impact on him. There's difficulty with the Hemholtz affiliation. Hemholtz did not deliver any lectures in London during the time that Deagan was in the U. S. Navy. The noted scientist definitely visited Glasgow, Scotland in 1871 and gave a London lecture honoring Michael Faraday in 1881, but none of this supports the claim that Deagan heard a lecture series there by the acclaimed scientist, or studied with him. It might simply be the case that Deagan, like Alexander Graham Bell (1847-1922), was intrigued and attracted by Hemholtz's work and read as much as possible about it. Bell's admiration and application of Hemholtz's works eventually led to the development of the telephone. Perhaps Deagan favored himself as having had the same illustrious inspiration. In a 1916 corporate publication, it was related that Deagan had visited Europe a number of years previous and studied under Hemholtz, having also made trips to Greece, Egypt and elsewhere to study ancient musical instruments.⁵ A check of the readily available Ellis Island records, covering passages through New York harbor from 1892 to 1924, records only two entries by Deagan, in 1911 (Germany) and 1923 (England). The limited passages may only mean that he favored another port other than New York City for his travels abroad. For the moment, the Deagan-Hemholtz affiliation and travel abroad remain to be defined with greater clarity.

Deagan was discharged from the U. S. Navy in 1876, after an apparent re-enlistment, and returned home to Youngstown. Though we have been unable to confirm accounts that characterized Deagan as an accomplished or concert clarinet player, it was not unusual for musicians of the time to have a trade or technical skill that supplemented their artistic abilities with other income earning capability. In 1877 Deagan was listed in the Youngstown city directory as a carriage painter, a trade also designated by the phrase "carriage trimmer," and one shared in

common with an aspiring showman, the young Al Ringling. Directory listings for 1878-1880 place Deagan in Bradford, Pennsylvania, where he labored as a sign painter and musician. The entry is the first to confirm any musical skill. The mere occupational listing suggests some time having been expended in learning it. One wonders if clarinet playing skill might have been acquired while serving in the U. S. Navy. Despite repeated attempts, no researcher has been successful in locating John Deagan in the 1880 U. S. Census schedules. He may have remained in Bradford or moved elsewhere other than Youngstown. There are no John Deagan listings for 1882-1883 and 1884-1885 in Youngstown directories.

Deagan reportedly took over the orchestra at Niblo's Garden and later Tony Pastor's Theatre, two well established New York City performing venues. The only "open" time in his life story when this could have happened is 1881-1883. Again, the story seems uncertain because there's no available confirmation of achieved musical prowess that would have enabled him to assume the baton at either venerable showplace. Neither New York nor Brooklyn directories of the period contain any John C. Deagan entries, though there are numerous listings for John Dagan, Deagan, Deegan and Degan, but none of them as a musician or in a related profession. There are also no Deagan references in reliable resources such as George C. D. Odell's *Annals of the New York Stage* or the *New York Times*. Another stock story states that he played with Haverly's Minstrels and then moved to St. Louis, where he became the musical director at the Grand Opera House (512-518 Market Street, south side, near Broadway). While there, reportedly by 1878 or 1880, he formed a musical instrument manufacturing business. Later Deagan corporate documents from the 1920s and 1930s declared "Established 1880." A Deagan family tradition maintained that Deagan abhorred off-pitch sounds and proceeded to tune an errant glockenspiel while other members of his orchestra enjoyed their beer, which he detested. The proficiency with tuning the specialty instruments reportedly led to his building of a cottage industry for their repair and the abandonment of his clarinet playing career. Glockenspiel, in this case, is thought to indicate the metal bar xylophone, and not the small devices of German Christmas tradition.

No known variation of the Deagan name is listed in the St. Louis city directory for 1882 or 1883, but that for 1884 establishes him in the music business. Unfortunately, he's not in the 1884 classified listings and one can only guess at what he was doing under the simple occupation heading of "music." Presumably he worked as a musician, but not as a music teacher, and simultaneously maintained some type of instrument repair or manufacturing activity at his home address.

Deagan met and married Sophia Katherine "Sophie" Funck[e] (April 11, 1863-November 14, 1953, Riverside, CA) of Belleville, St. Clair County, Illinois on November 20, 1884. Belleville was just across the Mississippi River from his St. Louis residence and presumably their paths crossed at some event in the city. The 1880 U. S. Census indicates that Sophia was born in Illinois of immigrant German parentage. Her parents were probably Frederick and Wilhelmina Funcke, both aged 52 and resident with her older brother and younger sister in Belleville at the time of the 1880 census. Then about seven-

teen, she was engaged as a “servant” in the Belleville home of William and Josephine Knoebel, who were also American born children of German immigrants, he being a millwright and she keeping house with two children under five years of age. It was not then uncommon for households to have a live-in young lady to help with the necessities of everyday life, someone that might be termed a nanny, governess, or an au pair today. The marriage of John and Sophia Deagan produced four children, Jefferson Claude (born April 4, 1886, Missouri-June 4, 1924), Frederick Waldo (November 30, 1894, California-April 25, 1912), Michael Roy (died in infancy) and Vita M. (June 6, 1901, Chicago -June 21, 1961).

For the period 1885-1887 Deagan was in the publishing business with George R. Olney. One assumes music publishing, but we’ve not seen sheet music with their imprint to date nor are there any examples in the St. Louis Public Library. The 1880 census places Olney, age 32, occupation musician, as living with his parents, carpenter H. W. Olney and wife Amanda, keeping house, in St. Louis. They were all Ohio natives. As early as 1881 Olney was residing at 515 Spruce Street. Olney, with “music” as his occupation, and was later listed as residing at 908 South 4th Street in 1883. That became Deagan’s residence in the 1884 enumeration. In 1885-1886, their joint office or shop was located at that same address, 908 S. 4th Street, Deagan’s residence being given as 928 Morrison and that of Olney as Elm, the southwest corner of 6th Street. For 1886-1887 they relocated the business to 622 Locust, Olney’s new location, with Deagan residing at 1004 Market Street. They split and went their separate ways in 1887, both with a “music” occupation, Olney having relocated to 1225 Pine. Nothing else is known of Olney.

By mid-1888 Deagan moved into instrument manufacturing. He was selling a newly invented derivative of the xylophone, something that he termed the “Pipelaphone.” It was for single and duet playing, with or without accompaniment. It was announced by his first advertisement to the performing trade in the *New York Clipper*, June 23, 1888 (page 243). His shop location in 1888 and 1889 was given as 1004 Market Street, the same as his 1886-1887 residence. He had already published his first catalog, according to the printed offering, but there are no known copies in existence. His business flourished, but whether solely by his own hands, hired labor, or as agent for other manufacturers is unknown. By 1889 Deagan was offering to sell to performing artists a variety of musical specialties including Musical Sleigh Bells, Cow Bells, Staff Bells, Swiss Hand Bells, Orchestra Bells, Musical Glasses, Xylophones, Steel Bells, Pipelaphones, Bottles, Flower Pots, Paving Rocks (known elsewhere as a “lithophone”), and Organ Pipes, being a full fledged dealer in percussion musical novelties. He termed them the “Finest tuned goods in the market.” One suspects that he made everything that he sold, given that individualistic claim. The diversity of offerings also speaks to his mastery of the many manufacturing talents necessary to produce so many different instruments.⁶

Deagan was a prolific inventor, with numerous patents for advances in music technology being granted to him throughout his life. Most of them pertain to instruments outside the scope of this paper. He applied for his first patent on April 18, 1888,

when he was residing in St. Louis. On August 6, 1889 he and someone named Joseph Carroll were granted U. S. Patent 408,655 for a musical device they called a “Pipelaphone (Figure 36).” Little is known about Carroll, who assigned his share of the rights to Deagan. His occupation was listed in the city directory as “music,” but he was not listed in the classified section and it’s not possible to determine what aspect of the art he pursued. In 1888 he resided at 1013 Market Street, just a few doors down and across the street from Deagan, but moved to 209 North 15th Street by 1889 and then 2205 Walnut by 1891. More than likely he was involved with, or perhaps employed by Deagan in his musical instrument business.

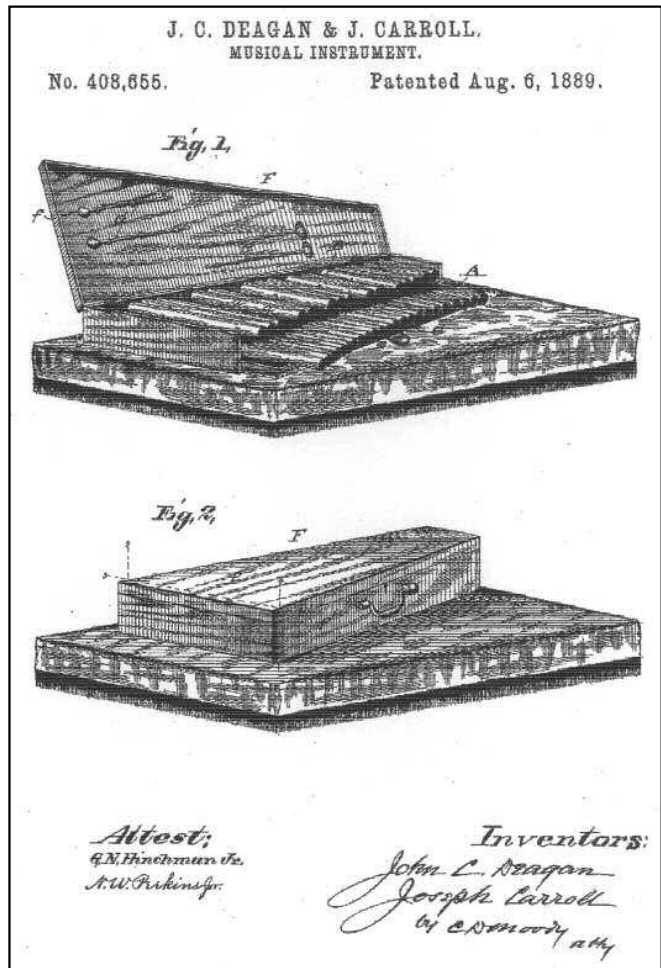


Figure 36 The Pipelaphone, patented in 1889 is the first Deagan percussion instrument that can be illustrated.

As Deagan and Carroll described it, the Pipelaphone had 38 round brass tubes, one inch diameter and one-sixteenth inch wall thickness being recommended for best sound properties. The low-C tube measured about twelve inches in length and the high-C about six, with the other tubes graduated so as to furnish a chromatic scale of about three octaves. Whether the raw tubes were made by a seamless process, or rolled and then soldered, is unknown. The most popular Pipelaphone dropped the five lowest notes while another of just 25 notes was also available. The case and frame were so constructed so as to make a portable and simplified carrying arrangement for the musician. The lower set of tubes slid out from under the upper, making

them accessible for playing, but yielding a compact package for transport. In later years, the Deagan device marketed as the "Tubaphone" had a marked resemblance to the Pipelaphone. Another patent was not granted to Deagan until a decade later, but what is not known is whether he had attempted to gain coverage for other developments in the interim but was rebuffed by the patent office.

A relocation to 3629 Sullivan Avenue in St. Louis occurred by late 1890, when he offered imitation Church Chimes, made with his patented pipelaphones, or "long tubes" as his advertisement termed them. A secondary source indicates that he had received a patent for cathedral chimes in 1886, but it has yet to be located. Presumably Deagan had experimented with different alloys, heat treatments, hardness and dimensions, until he determined the combination that provided the most musically advantageous combination that he then incorporated into his instruments.⁷ Deagan remained at the Sullivan Avenue address, making his "Musical Specialties" through the time when the 1893 city directory was compiled. Trommer dated Deagan's departure for Los Angeles, California as taking place on June 24, 1893. Neither Olney nor Carroll apparently followed their one time associate.

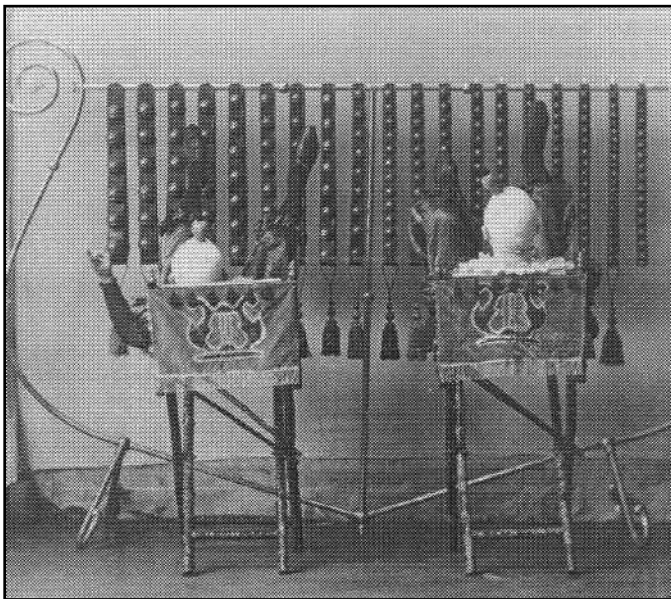


Figure 37. The Deltorellis played not only with their hands, but were equally adept at playing a sleigh bell on their backs and with their feet. Musical novelty succeeded, sometimes at the expense of quality. Author's collection.

Deagan went on to San Pedro, according to Trommer. Another source says he became leader of the Catalina Island Band in 1893. He is not listed in either the 1893 or 1894 Los Angeles directories, but perhaps it excluded Catalina Island residents. From spring 1895 through at least part of 1897 Deagan was in San Francisco, initially as a musician and later as a manufacturer of musical novelties, living and doing business at 4 Lily Avenue. In advertising, Deagan stated that he made the musical instruments used by the Deltorelli Bros., a known musical novelty act that did vaudeville and circus work.⁸ (Figure 37) They were among his many customers in the performance arena. Trommer sets Deagan's departure from

California as September 18, 1897, but provides no explanation for the move.

Chicago might have been the source of his metal supplies or perhaps judged desirable as a central business location for the continental United States. By the time the 1898 city directory was prepared his shop was at 318 Dearborn Street and a residence was located at 2438 Wabash Avenue. Trommer says that he previously had rented shop space in the landmark Monadnock Block (built 1893) at 53 West Jackson and also 2419 Wabash. He moved to 358 Dearborn by 1899. The family resided at 459 South State Street in 1900.

The amusement business was thriving, with the proliferation of recreation time and disposable income in America fueling great expansions in popular entertainments and creating much new business for suppliers to the trade. A new catalog was offered for 1901. Deagan relocated the shop to 2157 North Clark Street, where he erected a factory about 1904. The location was renumbered about 1909 to 3800-3810 N. Clark St., corner of Clark and Grace. A 1912 image shows a two-story brick structure with a circular tower on the corner of the second story (Figure 38). The business was booming and he needed the additional space to fulfill the many orders for his broad product offerings. Another catalog of 100 pages had just been issued. In the spring of 1910, it was announced that he had broken ground for a new factory, adjacent to his current plant. It would add 35,000 square feet of space to his factory operation and was stated to cost \$50,000. Deagan claimed that it would be the largest single factory in the country for making musical instruments.⁹

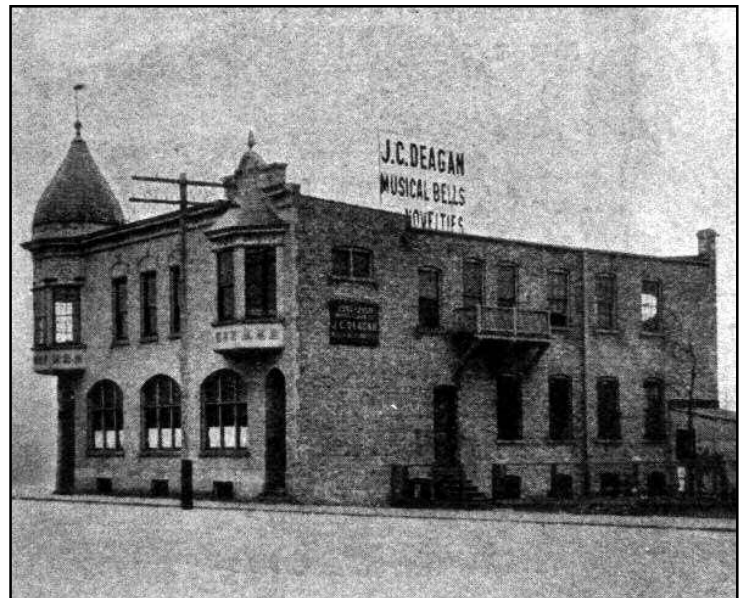


Figure 38 Deagan's factory occupied this structure, complete with his name on the roof, between 1904 and 1912. It indicated the size to which his manufacturing business had grown in two decades.

Author's collection.

Real estate opportunity knocked and Deagan revised his expansion plans, taking possession of the impressive and modern looking structure erected at the intersection of E. Ravenswood Park and Berteau Avenue. It became the Deagan Building, where he relocated his firm by 1912. The street

address became 1760 (and 1770) Berneau, with 4203 Ravenswood Park Avenue also being cited. The Deagan Building was an impressive five-story masonry structure with a tall tower (Figure 39). It reportedly represented an investment of \$415,000, including the land on which it stood. Measuring 100 by 160 feet, there was 80,000 square feet of space inside for manufacturing purposes.¹⁰ The business, per Trommer, was incorporated in 1913 as the J. C. Deagan Musical Bells, Inc., with Deagan as President, and then renamed J. C. Deagan, Inc. on April 14, 1916. The former name is found in some mid-1918 advertisements, while the latter can be found in those of 1921. Simply his name, J. C. Deagan, had sufficed through 1916 in marketing materials. Incorporation brought some aspects of legal protection with it, as well as the possibility for further expansion. It does not appear that Deagan ever brought partners into the firm for access to additional capital.

By early 1913 Deagan catalog “D” had been issued covering 126 types of orchestra bells. Catalog “E,” offering 160 different xylophones, was in print and “F” was on the presses, offering a variety of novelty instruments. The business prospered, with particularly substantial growth in carillon installa-



Figure 39. The impressive Deagan Building still stands today. High quality Deagan-made percussion instruments are still being repaired on the premises by the Century Mallet Company. This is a 1912 image.

Author's collection.

tions beginning in 1916. Other developments followed, assuring a substantial amount of work for the firm and a financially secure existence for Deagan and his family. Throughout his life he remained the president of his business and brought his family in to manage and perpetuate it. He eventually yielded day to day leadership to others, including members of his family, all of whom were very competent in guiding the business. Deagan moved back to the balmy climate of the Los Angeles area about 1926 and for the last years of his life resided comfortably at the

Surf and Sand Club, Hermosa Beach, which later became a Biltmore Hotel. A set of Deagan Tower Chimes was later installed on Catalina Island and perhaps he enjoyed their melodies on occasion. He died in California after a brief illness on April 28, 1934, at the age of 81.

The Deagan firm was sold and resold several decades after the death of the founder. The I. T. Verdin Company of Cincinnati, Ohio, bought the tower chime and carillon division about 1972. Verdin is now part of a Dutch operation. The remainder of the Deagan operation was purchased by Slingerland Drum Co. in 1978. Owner C. G. Conn sold Slingerland/Deagan to the privately held Sanlar Corporation in November 1984 and it declared bankruptcy in January 1986. Yamaha International Corporation's Musical Instrument Division acquired the Deagan mark and assets shortly before the end. The archives (ledgers, blueprints, company records) were generally relocated from their Grand Rapids, Michigan office to Japan. A few items may remain in Michigan. Other Deagan documents, testimonial letters, etc., were reportedly removed from the business files before they were destroyed. These, including a ledger listing the carillon installations, may still be in the possession of the Deagan family. The Deagan Building now houses the Century Mallet Instrument Service Company, founded in 1980 by Gilberto Serna. He maintains a business of repairing and selling percussion instruments, including those made by Deagan, and also has possession of some Deagan documentation. By his work the heritage of J. C. Deagan continues in the location where the name was made world famous.

Deagan Organ and Aluminum Chimes

An Indonesian musical instrument, known commonly as the “anklung,” served as the basis for Deagan's Aluminum and Organ Chimes. The foreign device consisted of a set of tuned bamboo tubes, each sounding a selected pitch in octaves. The sound was achieved by the shaking of two or more vertical tubes of a prescribed length, one end of which was restrained by a similar horizontally disposed bamboo section, all loosely connected so as to retain their form while enabling a sort of rattle motion. Rather than assembled on a rack, as were the later Deagan instruments, the constituent pieces of the anklung were distributed among a group of people, who then played together like a musical ensemble (Figure 40).¹¹

Already in 1897, Deagan was offering “Bamboo Chimes, Musical Hit of the Century” to the amusement trade. A competitor, Edwin R. Street, was offering his version, which he termed the “Bamboophone.” No description or image of either item has been discovered, but it's likely that both men had modeled their apparatus after the anklung. It's possible that they had independent knowledge of the Indonesian instrument. They might have seen it presented at one of the ethnological displays at a world's fair midway or in the Ethnological Congress that was part of the Barnum & Bailey Greatest Show on Earth in the 1880s and 1890s. The Four Luciers, a vaudeville act, were making a big hit with their bamboo chimes, the latest novelty, in 1898. Presumably their set was fabricated by either Deagan, given the name that was used.¹²



Figure 40 Both Deagan and Street likely based musical instruments that they built on the Indonesian anklung. It was largely made from a native growing material, bamboo.

Someone's Collection

Deagan started using "Aluminum Chimes" by 1899, perhaps suggesting the somewhat rare metal as being the primary material used in their manufacture. Bamboo was not a readily available material nor could it be engineered in ways that were amenable to consistent manufacture and audio properties. Patent coverage had been applied for on September 11, 1899, with U. S. Patent 664,817 granted to Deagan on March 6, 1900 (Figure 41). Hopkin's paper on the topic also specifies a 1901 patent date as being on an instrument, however, the sole 1901 issue to Deagan, 674,604 dated May 21, 1901, generally covers xylophones and marimbas. In the patent narrative, Deagan advocated the use of cold-drawn steel tubing, the same as used in bicycle frames, for the musical tubes. It presumably had the best acoustical characteristics as a result of the altered grain structure of the material. The patent description and drawing of the device incorporated four sound tubes, which confirmed Deagan's further development of the instrument. The largest tube was tuned to the fundamental tone, the second an octave higher, with two more pitched at the double octave of the fundamental. It produced the most pleasing sound of any combination. Plugs were inserted into some of the tubes, thereby creating a double column of air, increasing the volume and making the best tone. The base of each chime was termed the sounding board and was fabricated from hardwood, such as hickory, bored out and stopped at the ends, again for best acoustic development.

The chimes were described as "Made entirely of metal, but not a metallic tone in them; finely plated." Deagan stated they were triple tone, meaning that there were three specially sized and contoured vertical

tubes for each pitch. In racked instruments, the naturals were on a lower level, with sharps and flats hung above them. They were priced at \$30 per octave of eight triple-toned chimes, on a plated frame that weighed in at just eight pounds. That made them attractive to traveling musicians, who had to lug around whatever they played. Aluminum Chimes were offered about 1920 in seven different tone sizes (15, 20, 25, 27, 32, 37 and 44), all chromatic, in both low and high pitches.

The Orrin Bros. of the Gran Circo Teatro in Mexico City had a set in 1899, terming them "The Best Instrument We Ever Had For The Bull Ring, Where All Other Instruments Sound Dead," and two chromatic sets of three octaves each were shipped to the 1900 Exposition Universelle in Paris, France.¹³ One set of Deagan Aluminum Chimes was utilized by the musical trio of Haile, Wills and Haile on the Barnum & Bailey Greatest Show on Earth from 1903 through 1906, as part of their novelty musical act in the center of the menagerie tent. Their presentation also included a Bilhorn traveling reed organ, four stringed instruments and a marimba. The fabrication details of their chimes support frame confirm it to be of Deagan manufacture. Either their act, or a similar one, was later offered on a stage in the Adam Forepaugh and Sells Bros. Enormous Shows United menagerie about 1907. For reasons unknown, the Deagan factory had accumulated 27 sets of second hand Aluminum Chimes by 1910. After thorough overhauls, they were offered for the bargain price of \$88 each.¹⁴

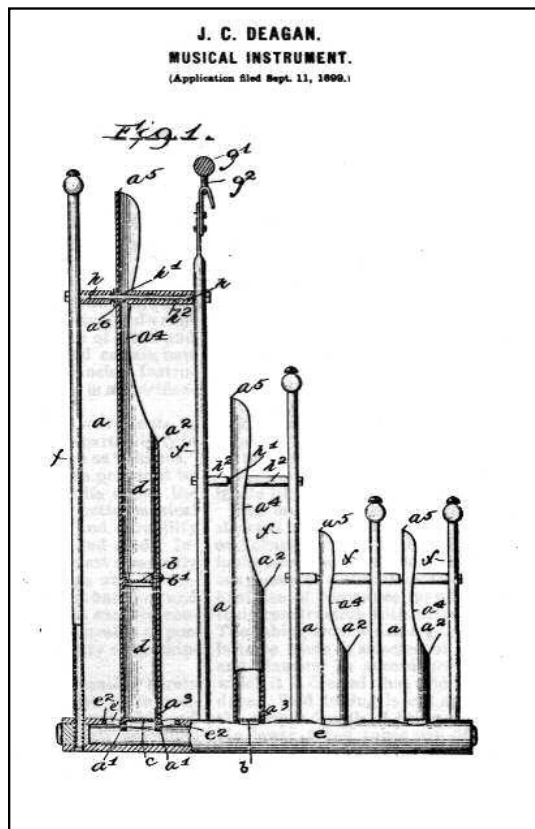


Figure 41. Deagan's 1900 patent delineated the technical details and claims for his chimes. The four-tube design became known as Organ Chimes, though the patent text utilized the phrase "aluminum chimes" for explanation purposes.

Deagan's subsequent Organ Chimes were an enhanced version of the earlier Aluminum Chimes. They incorporated four vertical tubes with each note. Nickel plated, the additional tube nominally increased the volume of music created. They appear to have been made available by 1900. Deagan Catalog "H," issued about 1916-1920, offered low and high pitched Organ Chimes in seven different sizes (20, 25, 28, 32, 38, 44 and 49), all of them chromatic and in low or high pitch.

The largest set of Organ Chimes ever manufactured may have been the seven octave group possibly painted or plated a gold color and termed the "Great 7 Octave Golden Organ Chimes (Figure 42)." It was employed by the "Roney's Boys" Concert Company of Chicago, organized by Henry B. Roney. The device was part of their Christmas 1904 presentation in the White House in Washington, D. C., perhaps the only time Organ Chimes were played in that famous location. Made in 1903, they were available for purchase for \$350 two years later. The lowest notes were huge by comparison to

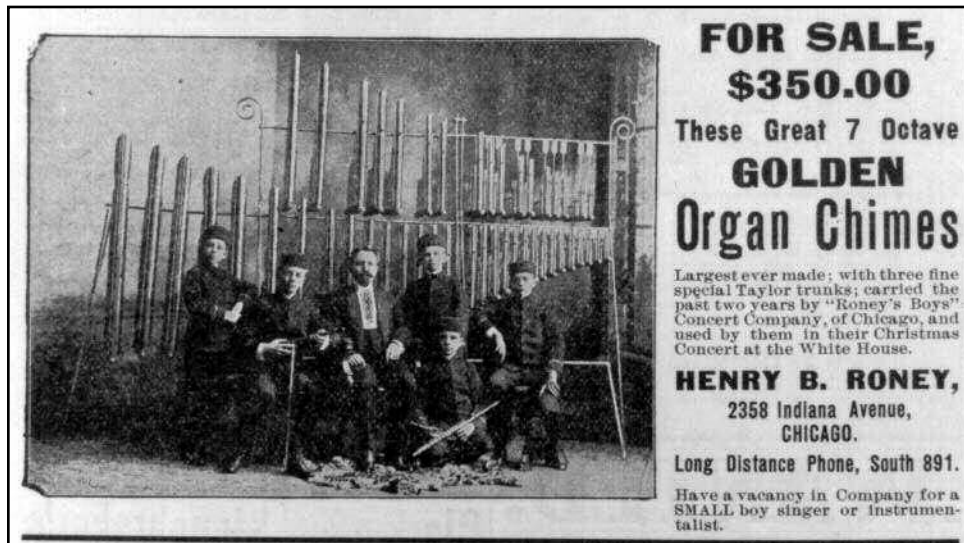


Figure 42. The set of Deagan Organ Chimes used by the Roney's Boys Concert Company is the largest that has been discovered. They are shown here in a 1905 sale advertisement.

Author's collection.

**FOR SALE,
\$350.00**
These Great 7 Octave
**GOLDEN
Organ Chimes**

Largest ever made: with three fine special Taylor trunks; carried the past two years by "Roney's Boys" Concert Company, of Chicago, and used by them in their Christmas Concert at the White House.

HENRY B. RONEY,
2358 Indiana Avenue,
CHICAGO.

Long Distance Phone, South 891.

Have a vacancy in Company for a SMALL boy singer or instrumentalist.

set of Deagan rattles that they presented on stage. Another set of Deagan chimes was installed on the C. W. Parker carnival show front that bore the title "Pharaoh's Daughter." Likely it was a variety show. The most novel presentation of chimes was by "The World's Greatest—Colonel Fred—The Horse with a Human Brain and a Musical Education." Featured in the 1920s on a stage circus framed by Andrew Downie, Fred showed his equine intelligence for music by playing specially made sets of chimes, sleigh bells and hand bells. Each instrument was fitted with an extension that Fred could grasp with his mouth (Figure 44).

those in regular sets. The Wells Brothers and Smith, a vaudeville musical trio, also had a large set of Organ Chimes, but it was not as visually impressive as the Roney setup (Figure 43). A chromatic set of 44, to be played by three or four people, was offered for sale by Deagan in 1906.¹⁵ An extra large three-octave set of Organ Chimes is preserved at Circus World Museum, with the possibility that several dozen other sets survive in preservation elsewhere.

Performing artist Rose Munro presented a musical novelty act in the 1909 Cole Bros. Circus side show and included a Deagan instrument in her presentation. A faithful representation of it was painted on one of the side show banners. Rose also played the bagpipes. She may have also been known as German Rose, having an act on the Gollmar Bros. Circus that included a set of chimes, a ukulele and a set of Brauneiss musical glasses. The Wintermute Bros. Circus of Hebron, Wisconsin had a set of chimes that was used as part of the big top performance, along with a musical lyre and other novelties. The Hocum family of Baraboo had a set of chimes and also a

The Bentley Electric Calliope

A bell wagon was both a costly investment and a heavy piece of apparatus to move on a daily basis. They were valid reasons for showmen to seek an alternative, just as they had previously for the steam calliope and devised the pneumatic equivalent. A number of people attempted to manufacture a pneumatic calliope between 1890 and 1910 and several finally succeeded. Others chose another path, using the new agency of electric power. The first time the term "electric calliope" has been encountered was even earlier, 1897, when the Electric King Concert Company owned by Dr. Al Beeson claimed to have such a device. What form the new device embodied is unknown.¹⁶

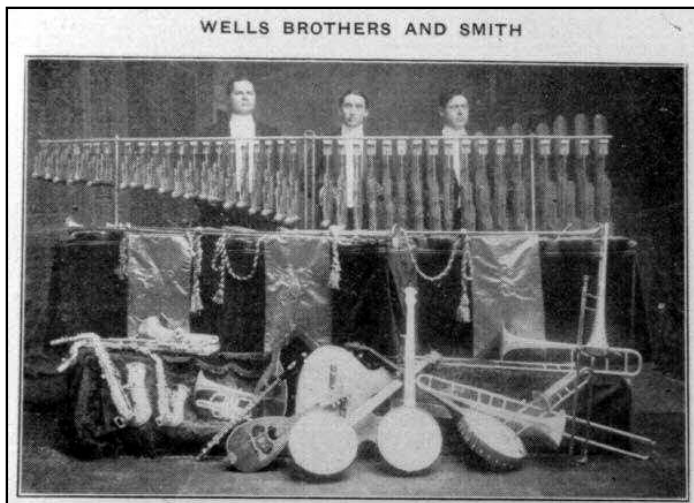


Figure 43. Multiple players playing duets and trios have always made the Deagan Organ Chimes more enjoyable. All of the naturals, sharps and flats were in line in the set used in 1906 by the Wells Brothers and Smith. Author's collection.

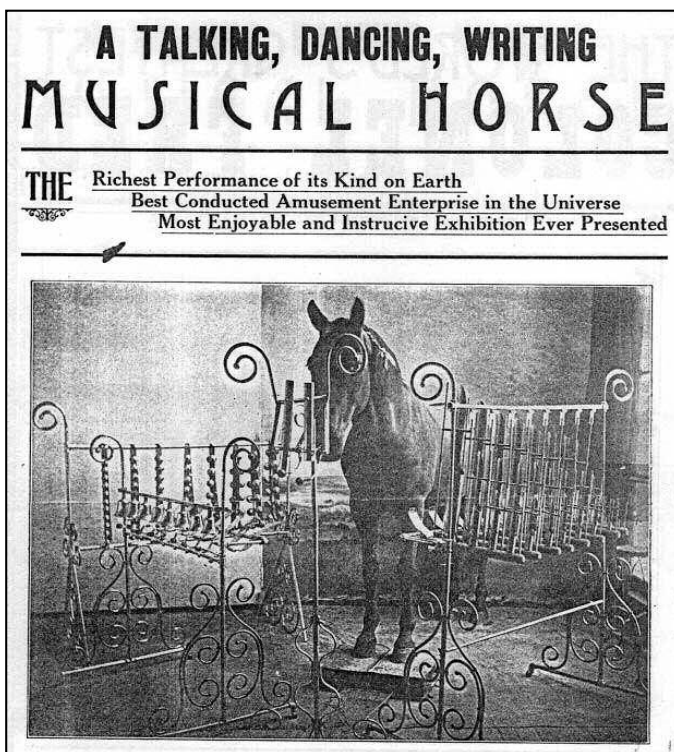


Figure 44 Human musical novelties were great, but trained animals added another element of delight. "Col. Fred" had a particular sense of skill when it came to operating Deagan percussion devices. Author's collection.

Another alternative on the same theme was devised for 1912 by Charles H. Bentley (1861-1950, real name Charles H. Benton) of Eaton Rapids, Michigan (**Figure 45**). Raised as a farm boy, Bentley was touring as a showman by 1873, presenting trained animals and stereopticon shows. He had a tent outfit as early as 1887 and eventually operated a complete overland circus, sometimes with a partner and at others with only his wife, Nettie E. Bentley (-1952). He played vaudeville and when moving pictures came into being he acquired his own set-up to project them. At one time he and Fred L. Godding staged a wild west operation, suggesting that he was an avid, well-rounded showman.



Figure 45 Charles A. Bentley has been forgotten as a traveling showman, but his own invention of a novel electrically powered xylophone has given him a touch of immortality. This is an engraving from a 1915 quarter sheet.

John Zweifel collection.

[Michigan]. He was never idle, and during the winter, when not busy with commercial work, was manufacturing something novel for his show. . . . One of his most unique contraptions was a marimba with the sounding tubes reversed and made stationary on the top of the instrument. In front and attached to the marimba was an ordinary organ key-board or console, electric hammers being attached to each key and swung underneath the console. The operator played it the same as an organ, and when each key was touched a contact was made and the hammer was thrown upwards, striking the same key on the marimba from the bottom. The music was rich and mellow and was an attractive drawing card.”¹⁷ Photographs of the device support the general accuracy of the description (**Figure 47**). The novel instrument completely filled the small wagon that housed it. It was one of at least three Bentley-constructed novelties on his show, the others being a ticket office made in the shape of a world globe and an entire miniature city that filled a third wagon.

The Bentley winter quarters in Eaton Rapids of some 34-years use were destroyed by a tornado in July 1914 and

In 1912 Bentley’s Overland Show opened at Eaton Rapids, traveling on nine wagons drawn by 18 horses. The big feature was the new Bentley Electric Calliope played by Iris Newman, who also played the piano that accompanied the tent performance (**Figure 46**). A biography reported this about Bentley and his unique invention. “He was a natural mechanic and worked with both metal and wood, and had a well-equipped machine shop at his home in Petrieville

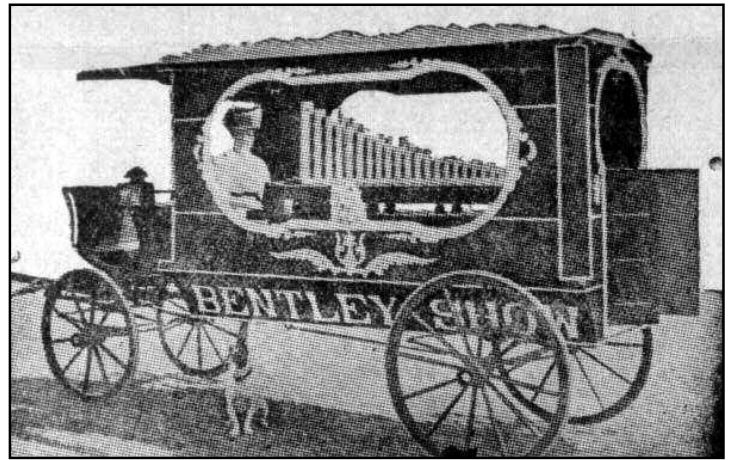


Figure 46. This detail from a circa 1912 Bentley handbill confirms the general description of the Bentley Electric Calliope. The instrument was surely appreciated in the small communities visited by the show.

Howard C. Tibbals collection.

the show never wintered there again. The 1914 tour may have finished in partnership with someone named L. H. Ranft, showman C. L. Alderfer likely being the general superintendent, before going into quarters at Belleville, Michigan. It is last recorded on tour as Bentley’s United Shows in 1915, moving into quarters at Greenville, Ohio. We have not learned what became of Bentley’s unique Electric Calliope, but Bentley himself spent his last years back in Eaton Rapids and Petrieville.

The Deagan Unafon

Branching out from strictly manually sounded percussion devices, the Deagan firm invented and manufactured a number of instruments that utilized electricity to operate them. The application of electrical control enabled some devices, such as tower and pipe organ chimes, to be played at a distance from the musician and keyboard. The system consisted basically of electrical contacts on a keyboard connected by wires to solenoids that sounded the instrument components. The latter was the basic concept of the Deagan Una-Fon.



Figure 47. The entire Bentley & Ranft United Shows operation, cast and crew, could be captured within the confines of one postcard photograph, as this circa 1914 image confirms.

Author’s collection.

When first introduced to the show trade in late 1913, the instrument was advertised as the Deagan "Unaphone." The name appears to have been specifically created for the instrument. "Una" comes from the Latin meaning one. "Phone" also comes from the Greek "phonos" and means "sounding." Obviously Deagan was trying to portray the UnaFon as having a single pure, unified tone. There were many phone-named devices at the time, including telephone and gramophone, and connecting onto their widespread appreciation as leading edge technology could enhance prospects for the new machine. Norman Baker took the same tack when he launched his Tangley "Calliaphone" the following year.

There were challenges with the new "Unaphone" name, both in spelling and pronunciation. We surmise it was intended to be pronounced "you--na--fone" or possibly "ooh-na-fone." By April 1915 it was referred to in trade accounts as the "Deagan Electric Unaphone Calliope," mimicking the name that Bentley had bestowed on his unique apparatus. In July 1915 it was offered as the "Deagan Electric Unaphone." That changed by December 1915 to "Electric Una-fon" and by March 1916 it was simply "Una-fon" (pronounced you--na-fon or ooh--na--fon), followed by Unafon, with the hyphen dropped, in 1926. Heavy competition from the relatively new,

equally inexpensive, similarly portable and automatically operated Tangley Calliaphone caused Deagan to sometimes characterize his machine as the "Deagan Electric Unaphone-Calliope."¹⁸ (Figure 48)

The heart of the Unafon was the "unit," as illustrated in the firm's catalog (Figure 49). It consisted of a specially cast and contoured bell bar mounted on a quarter-sawn oak base by means of three wood screws. The bar was concave shaped on both the exposed and concealed face, reportedly hand ground to fully develop the tone generating capacity. Above it were mounted the paired magnet assemblies that operated the mallet. Emanating downward from the magnets was the mallet assembly, including the shank and the head that actually struck the bar. A hole located in the oak base, strategically behind the bar, was covered by a stopped metal tube that contained a column of air that resonated when the bar was struck. It served to amplify the volume of the tone generated. When the magnets were alternately energized by depressing the appropriate key on the keyboard, it caused a repetitious vibration of the mallet, ringing

DRAW THE CROWDS AND GET THE MONEY

WITH **NEW**

DEAGAN

Electric Unaphone-Calliope

Greatest Outdoor Musical Attraction Ever Devised

Tone, Entrancingly Beautiful Volume, Enormous

Read What Users Say:

Washington, D.C.
"I have seen some automatic machines... but the Unaphone is a new..."
M. C. STEWART.

Anderson, Ind.
"The Unaphone is a new..."
T. D. WILLIAMS.

Jacksonville, Fla.
"Played the Savoy here last night..."
W. R. HART.

PLAYED FROM PIANO KEYBOARD



SOFT / LOUD

Deagan Electric Unaphone-Calliope No. 2308

Width 31 inches, height 30 inches, depth 12 inches.
Weight, without battery, 110 pounds.

MADE IN TWO SIZES

Mounted on floor rack—ready to play when unboxed.

No. 2308—32 Units, 2½ Octaves Chromatic.....\$225.00
No. 2310—37 Units, 3 Octaves Chromatic.....\$270.00

Prices include storage battery.

Shipped anywhere on Three Days' Trial, C. O. D. for balance on receipt of \$25.00 to guarantee transportation charges.

ORDER TODAY

J. C. DEAGAN

Deagan Building, 1760 Beretean Avenue, CHICAGO, ILLINOIS

ALSO USED BY

Ringling Bros' Circus

Wm. Hale Thompson
Mayorality Campaign
Committee, Chicago

Riverview Roller Rink
(¼-mile round),
Chicago

Columbia Dancing Academy,
Chicago

Reeds Lake Pavilion,
Grands Rapids, Mich.

Hotel Tuller, Detroit

Steamer "Catalina Flyer"
Catalina Island

Steel Pier, Atlantic City

Evans' Dog and Pony
Show

Roger Sullivan Campaign
Committee,
Chicago

Willard's Temple of
Music, New York and
San Francisco

Vernon Country Club,
Los Angeles

Winona Gardens,
Chicago

Figure 48. Deagan placed full-page advertisements in the amusement trade publication *Billboard* to promote broader sales of the Unafon. In March 1915, when this ad ran, the final name of the instrument had yet to be finalized.

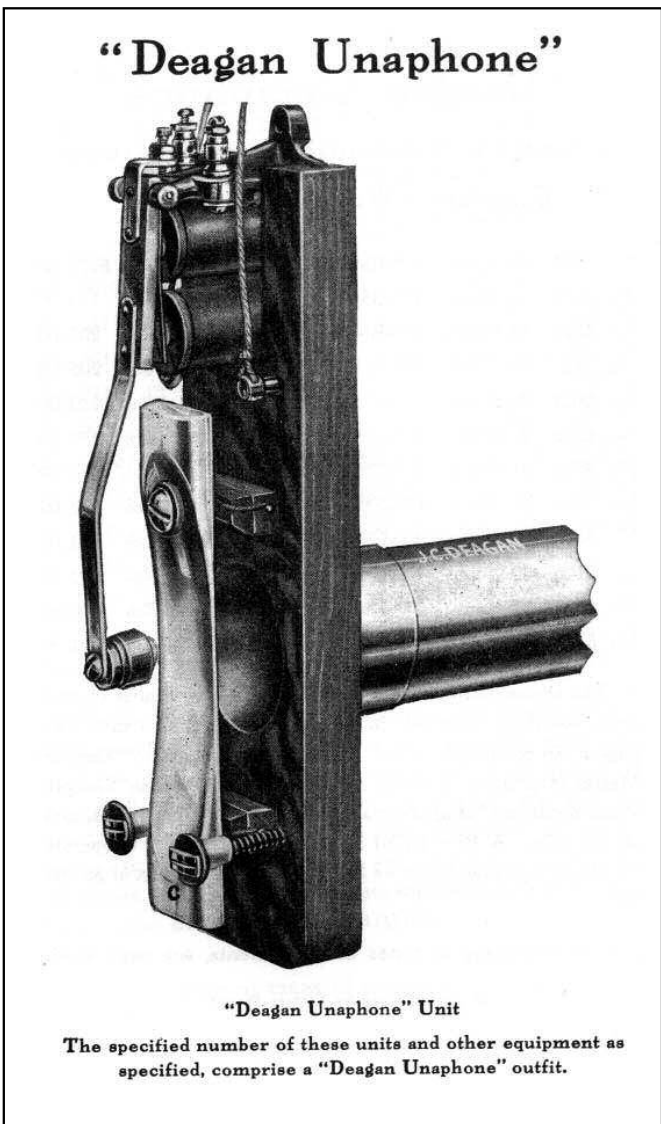


Figure 49. The "unit" was the working heart of the Deagan Unafon. It was comprised of the base, the bell and supports, hammer, magnets and the resonator tube.

the bar. The sound thereby created was amplified by the resonator tube behind it, increasing the audio power. Though not generally known, Deagan furnished all models with “loud-tone” mallets, however, a “soft-tone” version was also available upon request. The difference between the two is not defined, but one assumes that a less dense or softer material was employed in the manufacture of the softer-sounding mallets.

The units were mounted on a metal frame consisting of steel pipe and fittings, arranged with feet so that it would stand upright. Keyboards were of a standard piano arrangement, housed in oak and fitted with a cover for protection and security. A ten-foot long flexible cable, akin to multi-conductor telephone type cables, connected the keyboard to the units, which were wired on the back side to a connecting plug. Extension cords were available for installations when the instrument was remote from the keyboard. The contacts within the keyboards were tungsten coated for maximum durability. When desired, mechanical operation was facilitated by a Deagan-furnished “Pianola Attachment,” or what is generally termed a “push up” unit today (Figure 50). It totally replaced the keyboard. Within it the perforations of the paper rolls were somehow converted into an electrical pulse that operated the units. It was available only for the largest model, No. 449, because the compass of the other instruments was too limited to provide acceptable musical results. Though the roll type is not specified, it was stated to be



Figure 50. Deagan automated the Unafon by adding a piano roll playing unit. Electrical contacts were added to the device to make it functional. Similar actions can be traced back to the 1870s on orchestrions.

capable of being used on a regular piano, suggesting the typical 88-note rolls were employed. When the surviving catalog was actually distributed, “Discontinued” was stamped across the Pianola Attachment page, suggesting limited popularity or musical success.

Power for the Unafon came from either an eight-volt storage battery or a motor-generator set that could be connected to a regular 110-volt, 60 Hz power outlet. Deagan also sold a Tungar Electric Company battery charging device so that customers could readily replenish the three to four hour charge that a battery could hold. A motor driven “interrupter” provided the means to alternately make and break the electrical circuit to the magnets, resulting in the beater action. A switch on the keyboard provided the single stroke or reiterating selection.

The bell bars are shown in the circa 1921 catalog with several patent numbers stamped on them, a feature that the author has not seen in actual practice (Figure 51). They included July 21, 1914 and two other dates that are not readily discernable (possibly Feb. 8 or 9, 1911 and Feb. 2, 1912?). The first correlates with U. S. Patent number 1,104,478 issued to John C. Deagan covering resonant tubes. Perhaps the most important specific patent coverage was that for the Unafon electrical system and the unit assembly. The former was granted to

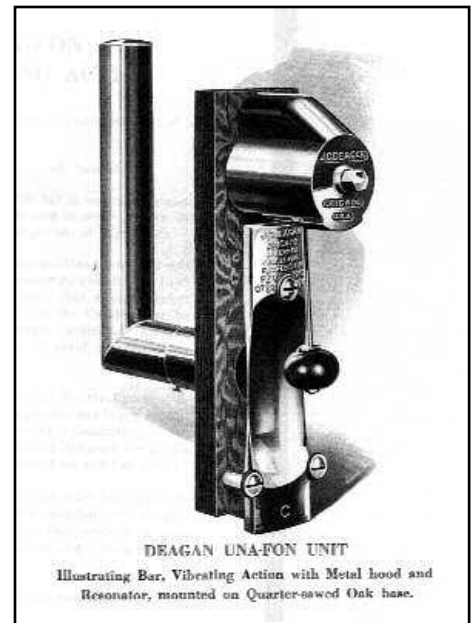


Figure 51. The unit was redesigned into a single magnet driver with a plated cover by 1919. Most of the Unafons in existence today are of this design, with the earlier two-magnet units being relatively rare.

Deagan’s son, Jefferson Claude Deagan, number 1,158,988 of November 2, 1915. It had been filed on May 12, 1913. Another was number 1,233,989, the application for which was filed on November 13, 1916 and granted on July 17, 1917, again to Jefferson Deagan (Figure 52). It covered primarily an adjustable hammer arrangement to achieve different musical effects. Jefferson Deagan has been identified by some as more salesman than inventor. Exactly why he received the recognition for the patents is unknown, but as the son of the owner of the firm and an involved manager he may have had ultimate authority.

A broad variety of different Unafon models were developed. The first illustrated in July 1915 was a two-level device with 32 bells, Model F2308, although in the accompanying cut only 22 bells are visible. Also offered was the larger 37-note unit, F2310, having a three-octave compass from F to F. There were priced at \$240 and \$270 respectively. With keyboard (having a soft-loud button), ten-foot flexible cable and storage

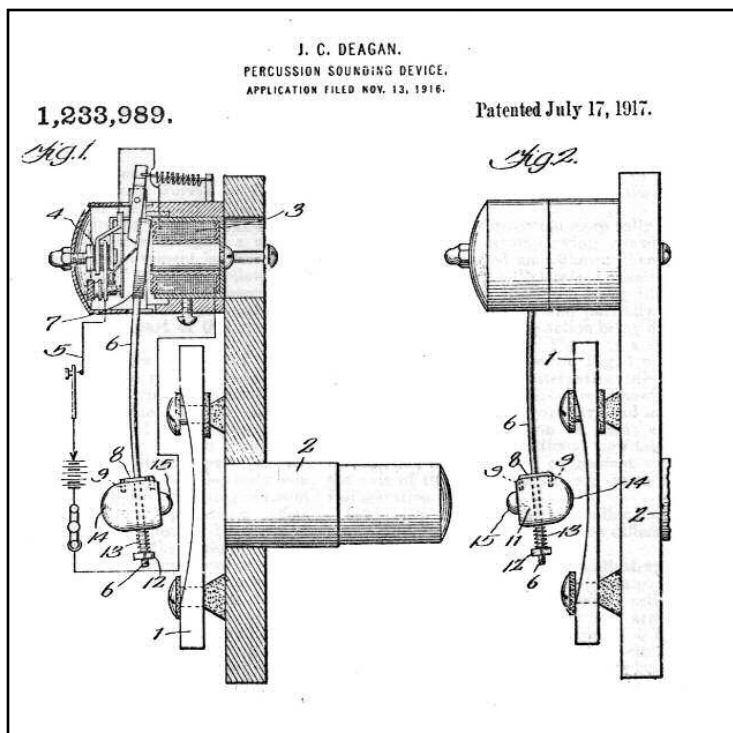


Figure 52. The 1917 patent for an adjustable hammer was the first to disclose the design of the new single magnet device within a protective cover. The design shown was not the exact one placed into manufacturing.

battery the entire rig packaged for shipment weighed in at 250 pounds. The instrument filled an area 31 inches wide, 26 inches high and eight inches deep and went about 100 pounds. The magnets were not covered by protective metal “dust hoods” at the time, but the instrument was still claimed to be “weather-proof and fool-proof.” The models offered in March 1916 were comprised of 25, 32, 37 (the three-tiered 2315 octave couplers) and 48 notes, with prices ranging from \$185 to \$400 and weights from 80 to 175 pounds. Operational cost was three cents an hour, which presumably covered only the electric power and not the player. By late that summer prices were dropped, presumably to unload excess inventory so that it would not have to be carried through the winter. The instruments were offered as follows: two octaves, \$185; 2 ½ octaves, \$240; three octaves, \$270; four octaves, \$400. By the spring of 1921, prices were established in print for: No. 425, two octaves, \$300; No. 437, three octaves, \$400; No. 449, four octaves, \$500.¹⁹ A four-page brochure from that time detailed the No. 433 with 33 units, 2 ¾ octaves with octave couplers for \$375.

The Unafon was covered in Deagan catalog “F,” first issued in late 1913. It covered a variety of electrically operated percussion instruments. Vestal Press re-printed a copy of a Catalog F that probably dated to the latter half of 1915, given the use of the term “Unaphone.” In addition to delineating different “Unaphone” models, the publication offered similar devices including Class A and B Musical Electric Bells, Musical Electric Swiss Bells and the Octaphone. (Figures 53 and 54) The last named device was similar to an Unaphone except that two bars sounding an octave were struck simultaneously. Unaphones were offered in three styles, unmounted, on

a floor rack, or in a traveling trunk. They came in nine chromatic ranges (12, 15, 20, 25, 32, 37, 44, 49 and 56 tones), and in high and low pitches. The options resulted in a total of 54 different models being offered, with model numbers ranging from 2080 to 2336. The three top of the line units were \$350, \$400 and \$425 respectively. The keyboards had switches for loud and soft operation as well as buttons to play single stroke or vibrating mode.

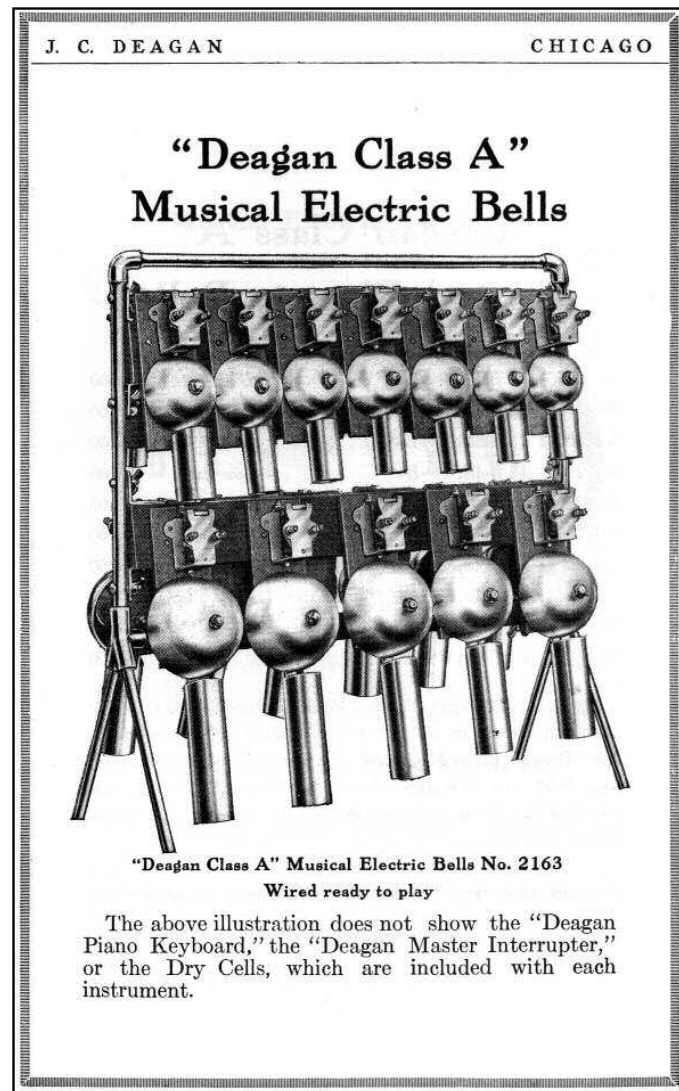


Figure 53. Deagan came close to musical doorbells with his Class A and B Musical Electric Bell Outfits. Though having a repeating action, in actuality they are quite pleasing to the ear when competently played.

The letter “F” catalog identification remained in effect in the years thereafter for later releases. At least one copy, thought to be a later edition, survives, and is completely devoted to the Unafon. The model numbers included within it would suggest an issuance date in alignment with 1921 data presented above. It likely represented an overall update and improved design for the Una-Fon, most readily recognized by the addition of cast metal dust hoods over the re-designed magnet apparatus. Early style Unafons had a dual magnet for each unit and were not covered. Later models had a single large magnet and armature assembly that was protected under the dust hood. In lieu of two

with the date 1962, when they may have been furnished as a copy. The 1921 drawings include the dust hood on the magnets. The mallet head in this set was fabricated from unspecified "AA" rubber ball material. Drawings for pre-1921 models are unknown to the author. Two pre-1921 instruments are preserved at Circus World Museum.

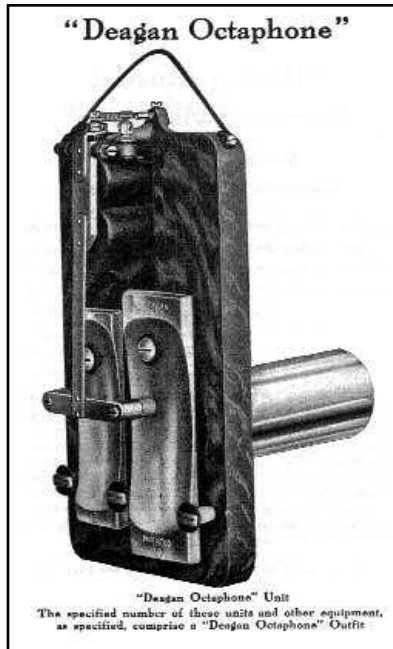


Figure 54. Variety was added to the Unafon by having paired bells playing in octaves. The Deagan Octaphone was the instrument that resulted. It is unknown if any exist today.

magnets, the new design had a single magnet that incorporated a set of contacts that were opened after the beater struck the bell, with a spring then returning the mallet to the start position and initiating the reiterating cycle again by closing the contacts. Such an arrangement can be seen in the patent of 1917 (Figure 55). The models detailed in the new catalog were reduced to just the following three, all available only in the floor rack style.

- No. 449, four octaves, chromatic C to C, 49 tones, keyboard equipped with octave coupler, bars on four levels, \$500
- No. 437, three octaves, chromatic F to F, 37 tones, bars on three levels, \$400
- No. 425, two octaves, chromatic C to C, 25 tones, bars on two levels, \$300

By 1924 the number of available Unafon styles had been reduced to just two, retailing at \$375 and \$500 each, with the largest size fitting into a Ford automobile. Portability was an advertised feature with these instruments.

As one would expect of a major manufacturer that sold thoroughly engineered products, each and every part of a Deagan Unafon was covered by its own detail drawing. A surviving set of copies of the drawings reveals that the earliest were dated 1921, with most dated between then and 1926. One replacement sheet is dated 1948, suggesting that the factory supplied individual parts at least that late. Some were stamped



Figure 55. The best known Unafon today is the large 49-note unit, playable in both single stroke and repeating modes via a keyboard switch. Several dozen of these units are in preservation today.

Author's collection.

To support sales of the Unafon, Deagan went to the extent of publishing a sample page of music for the machine in 1915 (Figure 56). It covered the full application range, having selections that included *Old German Song*, *Sacred Medley*, *Come All Ye Faithful*, *Godward (Nearer My God to Thee)*, *America*, *American Medley*, *Marching Thro' Georgia*, *Dixey* (sic), *Tipperary* and *Watch on the Rhine*. Earlier advertising confirmed that ragtime, tangos and two-steps were readily played upon it. Any number of skilled musicians have surely tried their hand at the UnaFon, but the most notable to have come to the writer's attention is Liberace, who in 1960 played a large four

SAMPLE MUSIC—HOW TO PLAY

The Deagan Electric "Una-Fon" Is Something New Under the Sun

A portable electric musical instrument, consisting of a number of musical notes, a special storage battery, and a loud speaker mounted on a piano key board. Can be played on a table, mounted on a wall, and can be used as a beautiful new kind of tone—unparalleled in quality and quantity. Approximate weight 100 lbs. For conditions on delivery see—(It can be played in connection with a special horn with whistles for loud and soft effects)—write for particulars.

The Biggest Business Booster Ever Built It GETS and HOLDS the Crowd



DEAGAN
"UNA-FON"
No. 2308

SPECIAL STORAGE BATTERY

J. C. DEAGAN

Deagan Building, Chicago, Illinois Ravenwood and Bertau Avenues

SAMPLE MUSIC FOR DEAGAN "UNA-FON" Arr. by J. C. Deagan

OLD GERMAN SONG



The Deagan Una-Fon

- Fully covered by patents
- Can be carried in any Automobile
- Has a Loud and Beautiful Tone
- In Light Weight—Approximately 100 lbs.
- Is Beautifully Constructed
- Is Easy to Buy
- Is Easy to Play
- Very Durable
- Not affected by change of Climate
- Always Stays in Perfect Tune
- Is Completely Wired ready to play when unboxed
- Requires No Wiring Permit—No Gasoline—No License—You carry your own Electric

Figure 56. Only rarely did manufacturers supply specially composed music for use with their instruments. Given the peculiar sound of the Unafon, in 1915 Deagan wisely suggested to novice players how it might be played with success by offering sample arrangements. Author's collection.

octave model that is now at Circus World Museum. (Figure 57) By 1931 the firm had also issued a "How to Play the Deagan Una-Fon" sheet, which recommended playing tunes in the lowest register possible because of the limited compass as compared to a piano.

Deagan initially marketed the Unaphone to theaters, suggesting that as an outdoor advertiser it would bring in the crowds and raise the receipts. Portability, ease of playing by either a piano player or drummer (!) and its sweet tone were offered as prime reasons to buy one. An "Unaphone in your lobby Kills Competition" and it was proclaimed "More exciting than a Steam Calliope." The overwhelming successful re-election of hometown Chicago Mayor William Hale Thompson in 1915 was attributed by Deagan officials to the ability of their instrument to draw attention to his campaign. Mounted in an automobile with banners on the sides, it also saved a great deal

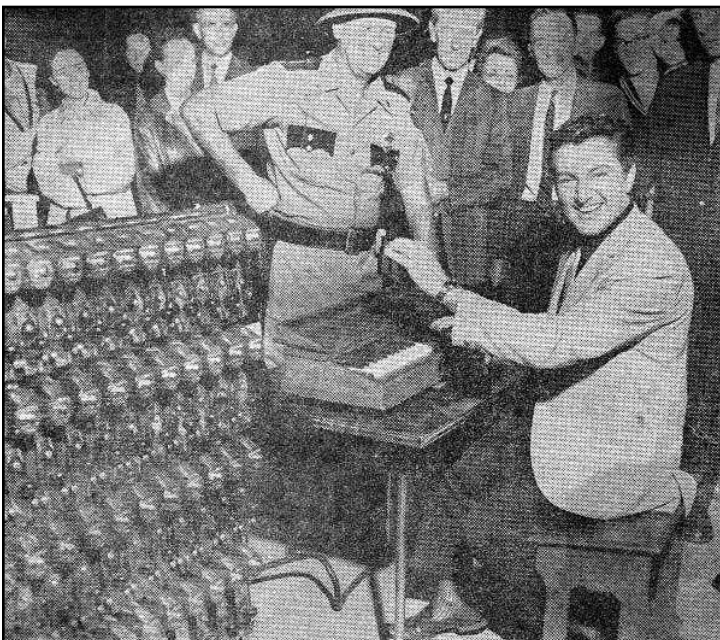


Figure 57. Always a crowd favorite, in 1960 Liberace sat an Unafon keyboard and made some of the most unusual music of his life. The famed pianist apparently didn't find the limitation of 49 notes a challenge to his playing skill. Author's collection.

of money as compared to the brass bands previously utilized. It was also embraced by the showmen operating attractions along the Zone, the midway at the 1915 Panama-Pacific International Exposition, where no less than four of them broadcast with a new Deagan machine.²⁰ The orders flowed in, to the point that by April 1915 the firm had fallen far behind in filling orders. Challenge brings success, so the firm placed a full page ad in the *Billboard* of March 18, 1916 (page 83) to further extol the popularity of the device. No less than 36 high profile circuses, carnivals, amusement parks, ballrooms, independent attractions, baseball parks, skating rinks and excursion boat companies were listed as satisfied buyers.

Despite the price breaks of late summer 1916, Deagan's spring 1917 press release claimed the invention of another new Unafon model of greater volume. No details were revealed, suggesting that it may have been simply an aggrandizement of the octave coupler feature that enabled a machine to produce greater volume by playing in octaves. Business was claimed to be so great that an entirely new manufacturing department had been created to satisfy demand. Despite the declining number of skating rinks, that public diversion was the focus of Deagan marketing in the winter of 1917-1918, when flush revenues meant a possible purchase. The same mentality applied in the spring of 1918, when traveling circuses and carnivals were the focus of new ads that claimed the instrument could be heard a mile or more. A big Deagan ad for the Unafon cited their use by all of the bigger circuses in the summer of 1921. Towards the end of large demand, the company still advocated these thoughts about the instrument: "the greatest bally-hoo in the world," "Played same as piano but has fifty times the volume, yet weighs less than one-fifth as much," "Will draw the crowd and hold it where all else fails." Deagan advertisements continued to push the Unafon as late as 1926.²¹



Figure 58. A local Baraboo, Wisconsin girl brought the Unafon on top of the Ringling Egypt Tableau to life, adding further exoticism to a parade feature that was usually pulled by the only trained team of 16 camels in the world.

Author's collection.

The Unafon never experienced as broad a use on circuses as the air calliope, but overall sales in all applications were probably greater. Ringling Bros. World's Greatest Shows, which acquired one of the first circus air calliopes in 1913, was the first to employ an Unafon in 1914. A two-level instrument was placed in the open, on top of the Egypt Tableau wagon,

where it was played by Minnie Rooney (1886-1978) (**Figure 58**). The “Electric Bells,” as they were termed by show parade order, made an even more exotic presentation of the float, which was drawn most years by a team of sixteen camels. One surmises that it was not displayed or played when inclement weather threatened the street parade. Deagan advertising reveals that the Ringlings had actually used three units in one season, perhaps all in the same application, with two serving as back-ups. The Unafon remained a parade feature through 1918 and then was incorporated in the Ringling Bros. and Barnum & Bailey Combined Shows parades of 1919 and 1920. There is nothing to indicate that the “Big One” ever used the Unafon again.

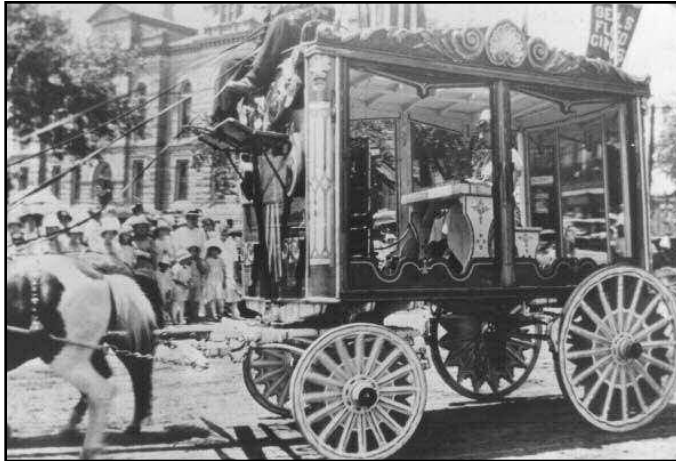


Figure 59 The Sells-Floto Unafon Wagon of the 1910s was one of the best looking such rigs and was likely constructed by altering a small cage wagon. Circus parades were always enhanced with many varieties of music. Author’s collection.

Other circuses that purchased Unafons included Al G. Barnes (1915), LaTena and Rhoda Royal (both circa 1915-1916) as well as John Robinson, Gentry Bros. (circa 1917-1918), and Hagenbeck-Wallace (circa 1918). Photographs provide the best evidence of circuses that housed their instruments inside a wagon for parade purposes. Those that have been discovered include Sells-Floto (circa 1917), Rhoda Royal (1919), Gentry Bros. (circa 1920), Hagenbeck-Wallace (1934, now in possession of the Conover family) and Cole Bros. (1935). In no case have we found where a circus fabricated an entirely new vehicle to house and haul an Unafon. In all cases, existing vehicles were adapted or pressed into service, fulfilling the general idea that they could be added at minimal cost. The Sells-Floto rig was a three-level model housed in a smartly decorated pony-sized vehicle that previously been a small animal cage wagon (**Figure 59**). The Gentry Bros. instrument was a three level model re-arranged to be only two levels high, perhaps to lower the center of gravity and make it less prone to falling over when the wagon was started or stopped with a jolt. It was rather crudely adorned but inserted another form of music into the parade at nominal expense (**Figure 60**). The Rhoda Royal Unafon of 1919 had the distinction to be the only one ever pulled by two elephants (**Figure 61**). Both the 1934 and 1935 examples noted were placed in existing air calliope wagons that were gutted to house the Unafon. Both of these wagons exist



Figure 60. This view of the 1922 Gentry Bros. Unafon Wagon clearly shows how three levels of units could be made more compact by placing two at the same level, on either side of the rack. One hopes that the player wore ear plugs to preserve her hearing. Author’s collection.

today, one at Circus World Museum (#82 Cole Bros. Air Calliope) and at the John and Mable Ringling Museum of Art (Hagenbeck-Wallace Air Calliope, the colloquially named “Harp and Jesters”). Perhaps the most unusual presentation of an Unafon was the example that concluded a center ring performance by Fred’s Trained Seals on the 1924 Hagenbeck-Wallace Circus, wherein the instrument was played by a seal. Presumably the seal was trained to hit keys on the keyboard, perhaps of a modified nature, with its nose.

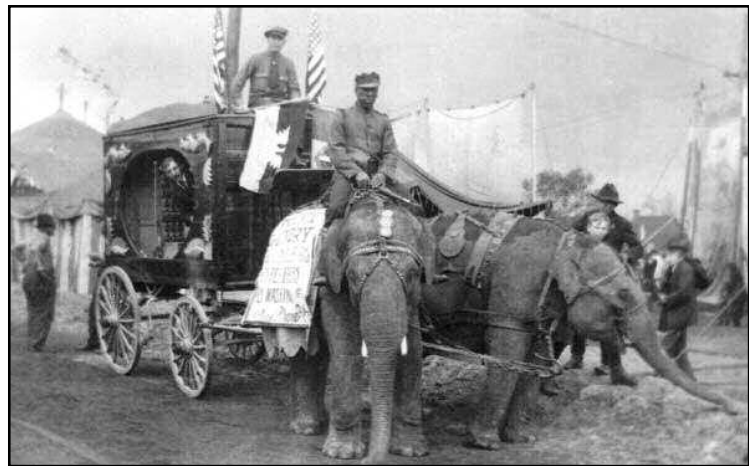


Figure 61. The 1919 Rhoda Royal Circus had an eclectic parade wagon complement, ranging from an 1868-built bandchariot to this diminutive Unafon wagon drawn by two small elephants, known as “punks” by showmen. Author’s collection.

Traveling carnivals and other types of shows found value in the instrument. The Rutherford Greater Shows (1914), Con T. Kennedy, Dreamland Exposition Shows, Gordenier Shows, Wortham Shows (all circa 1915-1916) as well as Johnny J. Jones Exposition (circa 1917) all placed an Unafon on a showfront to draw a crowd, or “tip,” in their parlance. (**Figure 62**) These were followed by S. W. Brundage, Clifton-Kelley, K. G. Barkoot, Tom W. Allen, Joseph G. Ferari, C. W. Parker and Ed A. Evans (all circa 1917-1918). Pearson’s Midgets, a single truck show that played the Southwestern Ohio Fair Circuit in 1921 had a three-level Unafon to draw guests to visit Major Tiny and his equally diminutive bride.



Figure 62. Carnival back end shows, presented under tents at the far reaches of a horseshoe-shaped midway, attracted their crowds with music. A big Unafon is shown here on the circa 1918 Con T. Kennedy Shows side show bally platform.

Albert Conover Collection.

Jim Bracken's Musical Show, a traveling vaudeville operation, contracted with Deagan for a special vertically-split four-level instrument. Each half was mounted to either side of the cowl of the Beggs Six straight bed truck that circulated about the streets of the community being visited (Figure 63).



Figure 63. One of the special Unafons manufactured by Deagan was furnished to Jim Bracken. Hopefully there were covers placed on the exposed instrument during inclement weather conditions and while traveling overland.

J. W. Beggs Collection.

Amusement parks that purchased the Unafon included Saltair Pavilion, Atlantic City's Steel Pier, Revere Beach, both Riverview and White City in Chicago and Reed's Lake Pavilion in Grand Rapids, Michigan (all circa 1916).



Above Truck consists of a Chevrolet Chassis, with a special built body, painted in a very attractive yellow. Beautifully decorated. Equipped with a Deagan Bell Company Unaphone, the only one made that plays automatic, with a roll. Five selections on each roll. Two sets of Aluminum Panels, four panels on each set. Size of side panels, 113 inches wide by 55 inches high; rear, 43 inches wide by 53 inches high. COST ME \$2,500.00. FIRST \$700.00 TAKES IT. ADVERTISING SCALE CO., Semple and St. Louis Avenue, St. Louis, Mo.

Figure 64. The only automated Deagan Unafon offered for second hand sale during the heyday of the instrument was this 1930 rig from St. Louis, Missouri. Advertisers had a field day with various portable musical instruments attracting attention to their rolling billboard trucks.

While a number of recent collectors have retrofitted a roll-playing mechanism to their otherwise manually played Unafons, only one example of an automated machine from the heyday of the instrument has been discovered. In 1930, the Advertising Scale Company of St. Louis, Missouri offered to sell a Deagan Unaphone, described as "the only one made that plays automatic, with a roll." There were five selections on each roll, suggesting that a standard form of piano roll may have been utilized. The instrument was mounted on a Chevrolet straight bed truck, upon which a large box body was built to hold advertising signage.²² (Figure 64)

Acknowledgments

In addition to those credited in the text or notes, the author is grateful to Dick Lokemoen and Carl S. Zimmermann, each of whom provided appreciated guidance and references to the author.

Notes (next page)

Ringling and Ringling: Outdoor Showmens' Bells, Chimes and Related Novelty Instruments - Part III (in the next issue of *The Carousel*)

will cover other novelty bell instruments, such as E. R. Street's "Tango Bells" and Daniel W. Barton's "Autola." Any information regarding these rare devices, or images of them would be appreciated by the author.

Fred Dahlinger continues to research and document hand organ, band organ, hackbrett and street piano history in America, and welcomes contact and communication on these topics.

Notes

1. Undated letter, circa 1954, from Frank Thompson to Tom Parkinson, Tom Parkinson papers, Circus World Museum; 1894 Ringling Bros. Route Book; *Topeka (KS) Journal*, June 27, 1894. A drawing for the Wurlitzer seal horn is in the author's possession.

2. There is Deagan coverage in *New Grove Dictionary of American Music*, (1986), Vol. 1, page 591; Hal Trommer, "John Calhoun Deagan," *Percussive Notes*, February 1996, page 84; *Manhattan (CA) Daily Breeze*, 1934 obituary; *Billboard*, May 12, 1934, page 30; *National Cyclopedia of American Biography*, (1961), Vol. XIII, pages 391-392; Dave Junchen, *Encyclopedia of the American Theater Pipe Organ*, Vol. II (1989), pages 843-864; and www.pas.org, the website of the Percussive Arts Society. These sources were augmented by personal contacts with Dr. James A. Strain of Northern Michigan University and Chuck Askins of Chicago, Illinois, who were very generous in their sharing of Deagan knowledge. Trommer's papers include some specific information unavailable anywhere else. He was a company salesman and apparently obtained details directly from Deagan or other documentary resources.

3. Dr. Strain's biography enumerates Deagan's noteworthy accomplishments. The Percussive Arts Society website, www.pas.org, is a rich source for gaining knowledge of the broad world of percussion instruments.

4. Michael Deagan family information can be found at a website established by descendant Tom Deagan, <http://home-pages.rootsweb.com/~vgdeagan/michael.htm>. It was supplemented by personal communications with him, for which the author expresses his grateful appreciation. Deagan has access to an 1886 memoir prepared by the youngest Deagan daughter, Frances. The author's analysis does not agree in all regards with the Deagan data as presented, but such differences are not uncommon in genealogical work. Census schedules for 1860, 1870, 1880 and 1900 were also consulted, kindly provided by Judy Griffin.

5. J. C. Deagan, *Fundamentals in Pitch and Tuning Musical Instruments* (1916), copyright copy at Library of Congress, courtesy Dr. James A. Strain.

6. 1889 St. Louis city directory listing and *Clipper*; May 18, 1889, page 170.

7. *Clipper*, May 18, 1889, page 170; December 20, 1890, page 652.

8. *Clipper*, May 11, 1895, page 156. The first Deltorelli brothers were Andrew and Joe, later users of the name were Max and Franz, all of whom appeared with Ringling Bros. by 1918 and later in Ringling Bros. and Barnum & Bailey Combined Shows.

9. *Clipper*, March 26, 1910, page 157.

10. *Clipper*, March 30, 1912, pages 21 and 24; *Billboard*, April 6, 1912, page 60.

11. See Bart Hopkin, "Deagan Organ Chimes," *Experimental Musical Instruments*, XI, 2 (December 1993), pages 9-15, for additional coverage of the instrument technology.

12. *Clipper*, March 13, 1897, page 32; April 24, 1897, page 130; March 5, 1898, page 5.

13. *Clipper*, November 4, 1899, page 758; January 27, 1900, page 1012.

14. *Clipper*, September 3, 1910, page 737.

15. *Billboard*, August 19, 1905, page 34; July 28, 1906, page 9; October 6, 1906, page 33.

16. *Clipper*, December 11, 1897, page 677.

17. *Billboard*, June 29, 1912, page 39. W. Scott Munn, *The Only Eaton Rapids on Earth*, (1952), page 277.

18. *Billboard*, November 1, 1913, page 63; July 3, 1915, page 30; December 11, 1915, page 13; January 29, 1916, page 29; March 18, 1916, page 83; May 6, 1916, page 28; December 11, 1926, page 118.

19. *Billboard*, July 3, 1915, page 30; March 18, 1916, page 83; August 19, 1916, page 35; March 19, 1921, page 77.

20. *Billboard*, December 12, 1914, page 50; April 24, 1915, page 23.

21. *Billboard*, October 13, 1917, page 36; November 17, 1917, page 31; May 25, 1918, page 27; July 4, 1921, page 25; March 19, 1921, page 77; December 11, 1926, page 118.

22. *Billboard*, March 29, 1930, page 186.

A Mickey Mouse Organ Grinder

In the April 3, 2002 issue of the *Antique Trader* an article appeared regarding steel toys at an Inman's Auction in Lehigh Vally, PA, on March 8 - 10, 2002. One item that caught my eye was a Mickey Mouse Organ Grinder with an original dancing Minnie and an "profusely lithographed original box." This metal toy sold for a mere \$24,200. Now, many of us collect organ grinder items but I wonder how many of us have one worth 24K?

I contacted Mr. Randy Inman about this item and he noted

"To give you an idea what condition does to the value of a toy we had this same toy a year prior to this one in near mint condition with a near mint box and it sold for a little over \$46,000."

Apparently the toys in this auction that were all-American seem to be collecting the premium prices, a trend noted by the auctioneer. Another Mickey Mouse toy brought \$17,600 (a mechanical toy which featured three Mickey Mouse characters, each playing either a banjo, castanets or xylophone). Both of these were estimated to be prewar (WW II).

The Mickey Mouse Organ Grinder metal toy is exactly what is depicted on the box. And, the box states that this is "Mickey Mouse" Organ Grinder. Of course the box and the toy are not replicas of an organ but of a street piano. I wonder if I corrected the buyer of his mistaken-identity toy that he/she would sell at a lower price?

On top is a miniature Minnie Mouse with red high-heeled shoes and

red dress. Apparently she moves when the "organ grinder" is set in motion (I assume this is a key-wound toy-there is nothing to indicate otherwise).

Ron Bopp



Ringling and Ringling: Showmen's Bells, Chimes and Related Novelty Musical Instruments

Part III

Fred Dahlinger, Jr.

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Other Deagan Novelty Instruments

The success of the Unafon caused Deagan to conceive of other novelty instruments. One that has survived, though it is not in any Deagan catalog that we have inspected, is a set of electric cowbells. It has the same arrangement as an Unafon, except that a set of 25 tuned cowbells is in place of the bars. It is now in a private collection (Figure 65).

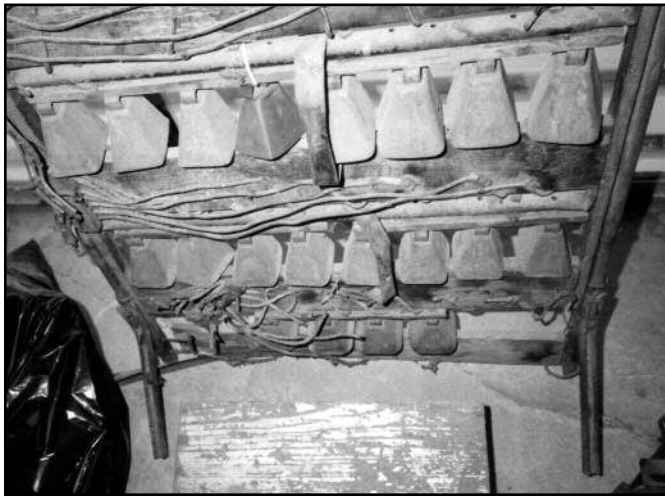


Figure 65 An interesting variation on the Unafon was this device that utilized cowbells as the sound producing device. One of them, formerly owned by Stan Peters, still exists and awaits restoration.

Photo: Dick Lokemoen.

Deagan catalog "F," issued in late 1913, covered a variety of electrically operated percussion instruments. In addition to the "Unaphone," Class A and B Musical Electric Bells, Musical Electric Swiss Bells and the Octaphone were described and illustrated. The last named device was similar to an Unafon except that two bars sounding an octave were struck simultaneously. Deagan Musical Electric Bells consisted of a set of tuned saucer bells mounted on oak bases, with a resonant chamber in-line with the base. Class B bells, the original style, had a reiterating magnet system, while the later Class A bells operated by single stroke. Each was played by a connected keyboard with a loud and soft selection button and was available in different sizes ranging from 12 to 32 bells. Several such sets survive.

When played they truly sound pleasing, but remind one of a set of musical doorbells.¹

Wisconsin showman Robert Engford (1883-1967) purchased a 25-tone Deagan Class B Musical Electric Bells instrument and then proceeded to wire his accordion so that the two instruments could be played in unison (Figure 66). He used the instrument to engage the audience at the Engford family's various circus and fair grandstand dates, and perhaps during their winter work in dance halls. His descendants donated the unique combination to Circus World Museum a few years ago. If showmen were anything, they were resourceful in enhancing novelties even further than envisioned by their manufacturers.

E. R. Street's "Tango Bells"

Next to J. C. Deagan, Edwin R. Street of Hartford, Connecticut might have been the next largest producer of musical novelties in the United States. Born in Connecticut in 1868, he was the son of Joseph Street (1827?-), an English immigrant with a stair building trade and his wife, Lucy A. Street (1832?-), who kept house for him and their three children. The oldest son, Joseph, Jr. (1857?-) apprenticed in the father's trade, as did young Edwin, after some schooling. He remained a stair builder into the early 1890s, indicating that the musical instrument manufacturing business was originally a sideline operation. How he came to enter it is unknown, but surely his expert woodworking skills were invaluable in the undertaking. Edwin Street wed his wife, Rosa (1868?-), about 1909, and she joined him in the instrument work. They had one daughter, Helen A., born about 1901 or 1902.²

Next to J. C. Deagan, Edwin R. Street of Hartford, Connecticut might have been the next largest producer of musical novelties in the United States.

Street established his shop for the manufacture of novelty musical instruments in Hartford, Connecticut in 1885, a date proclaimed on the cover of one of his catalogs. When he celebrated 50 years in the business the event was marked in 1939.

Figure 66. The talented Engford Family of Wisconsin used music to accompany their stage athletic exhibitions at fairs and in the circus. A set of Deagan Class A Bells were connected in tandem with an accordion, delivering unique musical sounds.

Author's collection.



Whether he had two anniversaries, forgot his initial start date, or actually commenced in 1889 is unknown. By 1942 he had passed away and others were managing the business.³

Street first comes to our attention in late 1889, when he offered to sell sets of organ pipes. They were tooted by novelty act performers. In 1894 he was at 45 Brooks Street, selling all sorts of musical devices and by 1898 had settled into 28 Brook Street, his best known location. He termed himself an “Inventor and Maker of Musical Novelties.” The “Marimbaphone” and “Streetophone” were specifically mentioned. They were followed in 1900 by the “Pianophone,” portable at 45 pounds, which lacked strings to tune and was well suited to ragtime tunes. It was presumably a set of string tone organ pipes. Street stated that he had been in the same location for fifteen years, setting the start of his operation as early as 1885. He had new power tools in the shop and was making “Rosewood bells,” along with many other devices that were described in a catalog about to be released. In what may have been a knock against the several relocations of the Deagan operation, Street stated “15 years in the same place: is no ‘fly by night place.’” In 1901 his ad featured an illustration of a “Musical Lyre,” a device that has come to be known as “rub chimes” to some people because of the playing action.⁴

It took about two years after Deagan had introduced the Unafon before Street introduced his competing product, the “Tango Bells.”

A catalog issued by Street between 1910 and 1915 delineated the breadth of his specialties. Illustrated and described in it were rosewood xylophones, marimbas and marimbaphones, the musical hat rack, organ or calliope pipes, musical crickets, musical cow bells, piccolo cow bells, musical disks or coins, musical funnels, staff bells, musical glasses, metal musical glasses, the tubaphone, Street’s Musical Lyre, heavy cathedral and special small chimes, musical sleigh bells, Swiss hand bells, piccolo bell chimes, the piano bellaphone, musical flower pots, four-in-hand bells, musical electric bells (like Deagan’s), Perfectotone electric bells, Swiss electric bells, orchestra bells, harp bells, arch or cord chimes and Swiss staff bells, as well as eight pages of sound effects devices ranging from crow calls to a perfect surf and water effect.⁵



Figure 67. This 1915 advertisement is the only known illustration of Edwin Street’s Tango Bells. The concept appears to have been similar to the Deagan Unafon, but the style of construction was completely different and the play single stroke only. Author’s collection.

Street first offered a set of electric bells to the amusement trade in 1912. They were keyboard operated, single-stroke 25-note instruments with resonators and retailed for \$57.00. Several years before, he had made a set of special double-toned electric bells for C. D. Willard’s “Temple of Music” novelty act, tuning them in octaves. They lacked the disagreeable “buzzer” effect because they were single stroke. By 1913, Street advised that he had bestowed the name “Multiphone” on the instrument, a term in direct opposition to the “single sound” Unafon name used by Deagan for his competing instrument. One of the highlights of the Willard presentation was musical saws, which when played with an electrified bow sent forth a veritable deluge of sparks.⁶

It took about two years after Deagan had introduced the Unafon before Street introduced his competing product, the “Tango Bells.” (Figure 67) It was a similar portable bell instrument, keyboard operated with a “calliope effect.” The 39-note model, with a chromatic compass from F to G cost \$175.00. It was powered by a Willard storage battery. The accompanying illustration detailed an instrument about the size of a Deagan Unafon, measuring 22" high by 20" wide by nine inches deep, excluding the keyboard. The bell bars of the Tango Bells appear to have been considerably larger than those in the Deagan apparatus, with exceptionally long mallet shafts to reach the appropriate point of the bar. The device was offered as late as the spring of 1916 but sales appear to have been limited. The author knows of no existing Street Tango Bells.⁷

Daniel W. Barton's “Autola”

Daniel W. Barton (1884-1974) is well known as a builder of quality theater pipe organs, but before he became famous for those instruments he manufactured a number of novelty devices. These were produced by his Bartola Musical Instrument Company of Oshkosh, Wisconsin. The Autola was introduced a few years after the Unafon and seems to have not been widely sold. When asked about the Autola in 1983, Barton's son Richard indicated that he had never heard of the instrument. No example is known to exist by the author. Playing off the last syllable of “Victrola” apparently did not broaden appreciation for the product.

Barton lived adequately late to be contacted by theater organ preservationists and also freely went on the record at several different times to document his contributions. These memoirs provide a bit of background on his Autola. Barton was a drummer and played with a number of traveling shows including lyceums, chautauquas, carnivals and Uncle Tom's Cabin troupes. He joined the Ringling Bros. World’s

Barton's immediate thought was to market the bell device to theater orchestra drummers but he learned quickly that they had no money to spend. He then expanded the instrument and added additional sound effects, developing the Bartola Orchestra, which could be sold to theater owners that desired to

THE AUTOLA
MUSIC ON YOUR
AUTO
A HIGH-CLASS STREET ATTRACTION FOR REPERTOIRE SHOWS, CARNIVALS, DRAMATIC SHOWS, VAUDEVILLE ACTS



Loud, pleasing tone; rugged construction; low in price. Write for particulars.

BARTOLA MUSICAL INSTRUMENT CO.
 P. O. Box 644,
OSHKOSH, - WISCONSIN.

Figure 68. The Autola mounted conveniently on the running board of a 1915 roadster and was then played from a detached keyboard mounted in the back seat. Any showmen could convert his private automobile into a rolling advertising rig with it.

The novelty was apparently much appreciated, bringing to mind other amusement places where disparate sounds, coming from different locations has happily caused much craning of necks to determine their point of origin.

broaden the variety of sounds that their piano players could provide for silent film accompaniment. It was a significant step forward in his eventual production of the Barton theater organ. The Bartola was already being offered for sale in mid-1913, so the formal marketing of the outdoor device came afterwards.⁹

Greatest Shows band in 1909 but returned home following his mother's unexpected death to care for his father. Barton took a job with the three-piece orchestra at Oshkosh's Bijou Theater. The theater's Shoninger piano had a set of bells that were played with the piano whenever the operator pulled a lever. Barton observed that the pianist never did that, so he removed the bells and arranged them to be rung by doorbell-type mechanisms all around the theater. He personally played the bells from a keyboard that he rigged up in the orchestra pit. The novelty was apparently much appreciated, bringing to mind other amusement places where disparate sounds, coming from different locations has happily caused much craning of necks to determine their point of origin.

Barton proceeded to make up a similar device and mounted it on the running board of his automobile. The "electric xylophone," as it was termed in one 1969 article, was operated by a player sitting in the back seat. Barton's contrivance was shown before the Winnebago County fair grandstands in 1910. It is believed that this was the origin of the Autola and also the "Tangola" that he advertised for sale to the trade in 1915 and 1916. Barton first marketed the Tangola in late 1915, describing it as an electric xylophone played by a pianist and suitable for skating rinks, dance halls, orchestras and theaters. It was the apparent indoor equivalent of the Autola.⁸

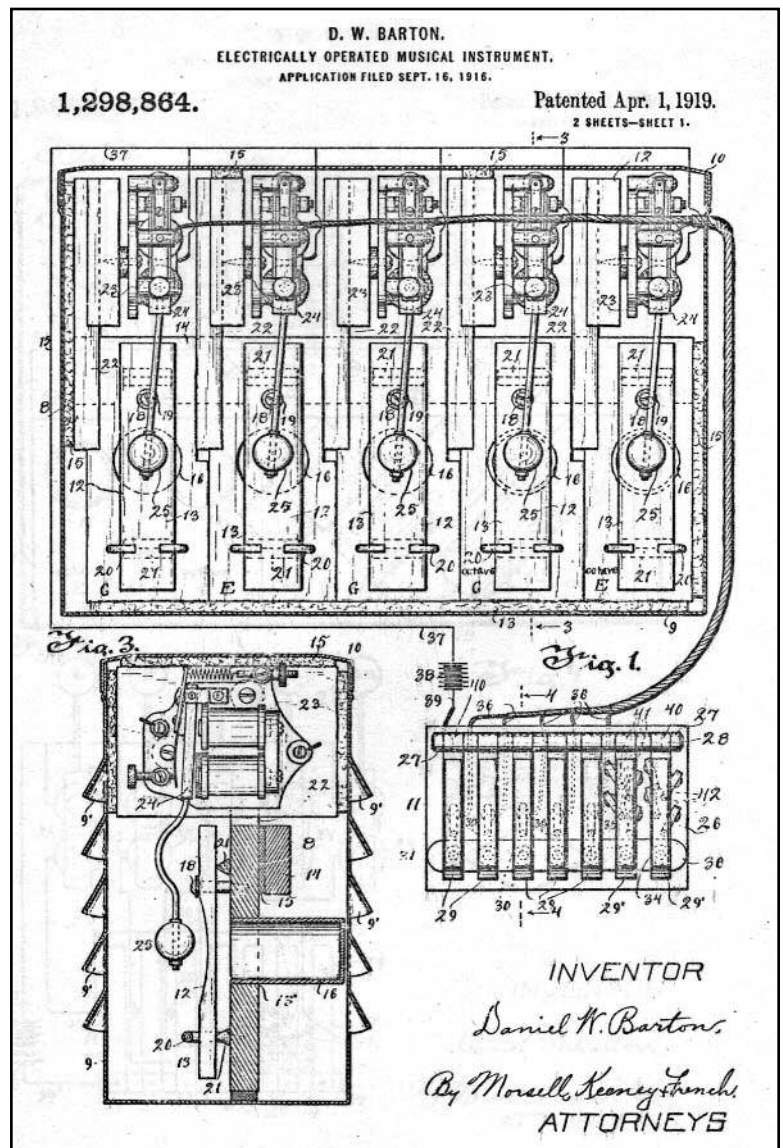


Figure 69. It is thought that this 1919 patent covered the device that Daniel Barton marketed as the Autola. Close inspection will reveal some similarities to the Deagan Unafon, such as the contoured bells and resonator tubes.

U. S. patent 1,050,513 issued to Barton on January 14, 1913, further augmented by 1,174,956 and 1,174,957 of March 14, 1916, appear to provide coverage for the Bartola Orchestra. Little is known about the nature of the Autola, which was offered for the first time in October 1915. A single known illustration depicts a Ford Model T roadster with two people in the rear seat and a large box mounted on the driver's side running board (**Figure 68**). A minimal engraving of the device shows nothing more than a box in the same position, with either a grill or louvers to protect the internal mechanism. It was described as having a calliope tone and as loud as a band. The price was just \$48.00. A catalog was mentioned but the author has never seen an example of it.¹⁰ One machine that was offered for sale second hand in 1917 was described as "DEAGAN'S AUTOLA," 20 keys, plays any piece; perfect condition; ready for use; batteries included. Hardwood case holds all, 26 x 10 x 13 inches. Cost \$225.00 Must sell for cash at once. \$72.00 takes it all. Dr. George W. Paradis, Pueblo, Colorado." Though the offered description sounds to some degree like a Deagan Una-Fon, the size is more in fitting with the Barton Autola.¹¹

The lack of details about the Autola causes us some reservation in identifying U. S. patent 1,298,864 granted on April 1, 1919 to Barton as covering the device (**Figure 69**). However, the electrically operated solenoids, contoured bell bars, resonance chambers and louvered enclosure for outdoor placement and protection all strongly suggest that this was the design for the Autola. It had been applied for on September 16, 1916.

Notes

1. A set of these bells is heard on the compact disk "Circus Day Music" issued by Circus World Museum in 1999.
2. Data from U. S. Census schedules.
3. The 1880 census lists him as Edwin R. M. Street. *Billboard*, August 26, 1939, page 35; February 7, 1942, page 50.
4. *Clipper*, December 28, 1889, page 704; October 6, 1894, page 501; February 12, 1898, page 833; March 31, 1900, page 116; June 1, 1901, page 308; *New York Clipper Annual* for 1900, page 187.
5. E. R. Street Musical Novelties, Musical Bells and Specialties catalog, Warshaw Collection, Smithsonian Institution Archives.
6. *Billboard*, December 14, 1912, page 93; *Clipper*, January 25, 1913, page 22.
7. *Billboard*, December 18, 1915, page 125; March 18, 1916, page 168.
8. Dan Barton, "The Birth of a Theatre Organ," *Bombard*, December 1964, page 8; Ruth Westover, "Chicago Still Hears That 'Oshkosh Sound,'" *Oshkosh (WI) Daily News*, August 20, 1969.
9. *New York Clipper*, June 14, 1913, page 2, has a description of the Bartola. Barton also offered a device called a Tangola, an electric xylophone playable by the theater pianist, in late 1915.
10. *Billboard*, October 30, 1915, page 24; November 20, 1915, page 14; July 22, 1916, page 27; October 14, 1916, page 28.
11. *Billboard*, August 25, 1917, page 65.

Fred Dahlinger continues to research and document hand organ, band organ, hackbrett and street piano history in America, and welcomes contact and communication on these topics.

Recording Review . . .



To help celebrate their 50th anniversary, the KDV (Dutch organ association) issued a CD *Historisch Concoure* for their members—it was included with the recent issue of *Het Pierement*.

Explaining the purpose of the CD is best accomplished by repeating the accompanying message from the CD insert:

The Circle of Mechanical Organ Friends (KDV) was established in The Netherlands in 1954 by a group of idealists. They feared that the mechanical organ would disappear from the Dutch streets, cafes, dance halls and fairgrounds, unless they took concert action to prevent this. Now, 50 years later, it is clear that the battle to retain the place of the mechanical organ in daily life, has been essential and still is.

The insert continues on to describe the content of the CD by saying:

The music on the two CDs offers you a colorful overview of mechanical organ music sounds from the first half of the 20th century. Regrettably, a lot of the music that these mechanical organs played, has been lost. The recordings have been derived from 78 rpm discs. These had to be well and truly straightened, polished up and resurrect by the skilful technician Harry Coster, before we could put this music onto a modern disc, and enable you to enjoy this "Historical Concourse" for many years to come.

I found the two CDs to be quite delightful. The first CD covers a period of 1911 to 1926 while the second plays organs from 1927 to 1941. A total of 58 songs are included played by familiar as well as unknown organs to me. Earlier Dutch organs seem to incorporate the use of xylophones whereas that instrument seemed to phase out over time.

This is a "must" for those interested in Dutch street organ music but only a few extra copies were made and inquiries regarding availability should be addressed to:

H. Meddeler, Secretary
Mastwijkerdijk 78
NL 3417 BT Netherland
leden@draaiorgel.org

Ron Bopp