

Gems from the Milhous Collection

Fred Dahlinger, Jr.
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The Milhous Collection in Boca Raton, Florida encompasses one of the most famous aggregations of mechanical music instruments in North America. **Figure 1** Augmenting it is a full-sized carousel and two theater-style organs, not to mention an eye-popping array of classic automobiles, some of which are housed in an interpretation of the original Auburn-Cord-Duesenberg showroom in Auburn, Indiana. The mechanical musical instrument holdings include many extravagant orchestrions and organs, representing the best of German, French and Belgian production. All of the organs are equipped to operate from both book and MIDI systems. This article focuses on a small selection of their very finest holdings in organs and instruments suited to popular amusements.

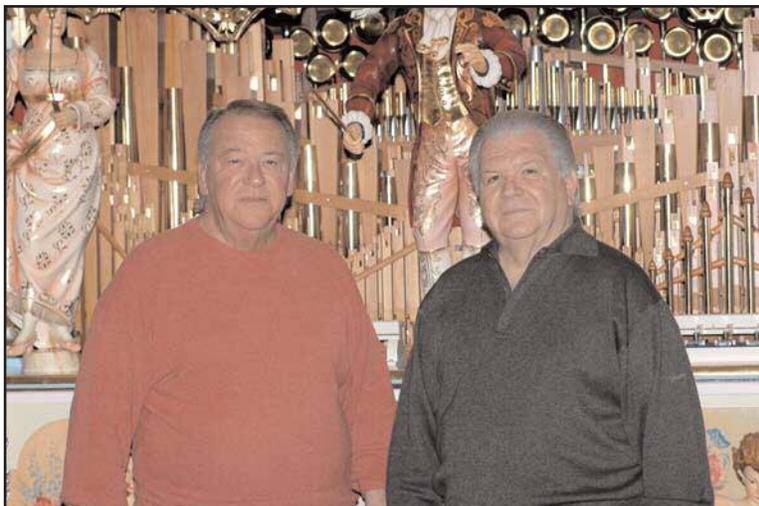


Figure 1. Bob and Paul Milhous, American businessmen and entrepreneurs, have established a major collection of mechanical music instruments in Boca Raton, Florida. All photographs by Ron Bopp, unless noted otherwise.

Gebrüder Bruder Model 104 Band Organ

Gavioli & Cie. of Paris, France introduced the keyed style of paper or book playing system in the early to mid-1890s, but it took some time before the new system was totally perfected and accepted by showmen. A. Ruth & Son of Waldkirch, Germany, countered with a keyless, pneumatic control system in 1900. The first instrument they built as a book organ was a 76-keyless Model 36. The largest Waldkirch firm, Gebrüder Bruder, is thought to have made their first book organ around 1902. By then they were selling their Model 104, 76-keyless instrument, essentially an equivalent to the earlier Ruth. The initial 104 Bruder

scale was later expanded to 80 keys, providing control for the actions of a band leader, bell ringers and a glockenspiel. It listed at DM3400, the equivalent of US\$809 at the time. About the same amount of money bought a musically less capable 59-key deKleist No. 22 military style band organ, if one excludes the

applicable American import tariff.

The total number of 104 Bruders fabricated is unknown. Likely it was in the range of thirty to fifty, with the last probably constructed about 1914. At least ten different examples of the style are preserved today. The 104 Bruder became a quite popular organ, with perhaps a dozen of them exported to American dealers William F. Mangels and C. W. Parker for important carousel applications.

Approximately 1908, Gebrüder Bruder designed

a line of new organs and applied names to these instruments with additional registers. To economize on the making of patterns and parts, they utilized the same key sizes that had already been established for their numbered organs. One of the more

popular ones was the 80-keyless "Elite Orchestra 'Apollo,'" which should not be confused with the Model 104. It was an ill-fated attempt to compete with the multiple-register organs that were then taking over dance hall applications. Only a few were ever sold.

To date, no shop number has been found on the Milhous Bruder. **Figure 2** When it becomes available, an estimate can be made of the vintage. The case lacks the identifying



Figure 2. The Model 104 Gebr. Bruder in the Milhous collection is a very original instrument, from the internal pipework to the decorative scheme on the façade.

stepped back construction, as found in earlier book and the previously manufactured cylinder organs. One report dates the instrument to 1911. The Model 104 scale includes two different melody voices, violins and flutes. On this organ, there is a rank of display violins as well as a visible rank of pan flutes from the flute register. The trumpets, which are the dominant voice and play on their own notes, are particularly nice in the Milhous Bruder.

An image survived in the papers of Gustav Bruder showing the instrument upon completion at the factory. This organ or an exact twin was sold to German carousel operator Wilhelm Vespermann. Mounted in its own Heinrich Mack wagon, it was positioned adjacent to the ride. In later years this organ belonged to Hans Schosnosky of Hamburg. Throughout its existence the music maker remained in a very good original condition, both the instrument and the façade. The death of the last showman in the family, at the age of 83 in 1995, provoked the sale of the well-preserved organ and about 600 meters of music.

Following the acquisition, the Milhouses commissioned Johnny Verbeeck to restore the instrument and Tony D'Angelo to re-decorate the façade. The latter was in a condition very close to the factory decorative scheme. In lieu of repainting the front in a newly conceived decorative scheme, it was taken back to the original designs, providing a clear insight into techniques of the early 20th century. The façade is unlike that found on most German organs. It almost has the appearance of being a French instrument, were it not for the fact that the majority of the asymmetrically pipework is intentionally concealed by fabric panels in the upper area. The inward tilting of the lower "belly" area of the façade also adds to the visual interest.

A. Ruth & Son Model 37 Band Organ

A comprehensive history of this Model 37 Ruth band organ, as well as a Model 38 instrument with a twin façade in the Krughoff collection, was published in a 2005 issue of the COAA Carousel Organ. Therefore, we will only present a summary here. **Figure 3**

The Milhous organ was the first Model 37 Ruth constructed, in 1901. It was the book-operated version of the 90-key Style 24 cylinder organ. Fourteen were reportedly built between 1901 and 1927, of which about half survive today. It

was assigned Ruth shop number 4007, which is stamped on the back cover board of the valve chest. The Model 37 was a prelude to the Model 38 of 1903, including one additional trombone, as well as an alternate flute voice and a glockenspiel, both on an additional chain-type register.

The Milhous instrument was originally furnished without a decorative façade. Sometime later, one akin to that placed on a Model 38 in early 1907 was fabricated and installed, perhaps at the same time that the instrument was expanded to the Model 38 Ruth scale. It was again rebuilt years later by Wilhelm Voigt, who added contrabass pipes, a third melody voice, a second snare drum, and a second glockenspiel.

The organ initially served a wanderkino owner named Heinrich Ohr. Later it was on the front of Fritz Krebs "Orient Electro-Schau." Rebuilt in the Waldkirch shop of Alfred Bruder, later it was owned by German showmen named Stahlman and Hammerdinger. It was rebuilt by Voigt for Horst Schmitt, who exported it to the U. S. The instrument was acquired from Schmitt by Jasper Sanfilippo, who later sold it to the Milhous brothers. Johnny Verbeeck rebuilt the instrument, removing some of the Voigt additions. It now plays a slightly altered Model 38 Ruth scale. The façade was re-decorated by Will Morton with an abundance of gold leaf.

M. Welte & Sons "Wotan" Brass Band Orchestrion

M. Welte & Sons of Freiburg, Germany was the leading builder of brass horn style cottage and concert orchestrions. They were shipped for placement in palatial homes, fine restaurants, on ships, in better restaurants, dance halls and beer gardens. Examples were exported to the United States as early as 1865 and until the commencement of World War I.



Figure 3. Large Ruth organs are noted for their flamboyant baroque facades and the one on the Milhous instrument exemplifies the style in grand form.

In America, the second skating boom lasted from approximately 1906 to 1910. Welte's American branch had been able to sell some of their cottage and concert orchestrions for the application, but apparently customers desired something even louder. The market was dominated by deKleist and later Wurlitzer's military style organs. Though they had bested the Wurlitzer "Monster" in a toe to toe contest, Welte proceeded to design and market three more powerful machines for skating rinks and similar placements.

About 1910, the firm designed a series of "Eisbahn," or skating rink, orchestrions, marketed in the U. S. as "Brass Band Orchestrions." The available models included the "Donar," "Walhall" and "Wotan." The last was the largest and most powerful of the style. These instruments were built and voiced for use in skating rinks, but could also be used in dance halls, carousels and in outdoor concert service in amusement parks. They supported the recreational activities that were proliferating in the first decade of the 20th century.



Figure 4. The Welte Wotan in the Milhous collection was housed in a huge, simply decorated case on the balcony when it furnished music for the immense dance pavilion at Bois Blanc park. Photo: author's collection.

The Wotan instrument has a free standing chassis with a wrap-around case. The interior space is divided into three sections: a double-acting, six-feeder pump fills the bottom of the case; the roll frame and valve action fill a shallow mid-section; and the pipework and principal percussion fills the entire upper volume. There are swell shutters in the top and sides of the case to modulate volume. Welte manufactured Wotans with somewhat different specifications, dependent upon the application site and customer budget and desires.

The casework was done in fine-grained oak, with carved ornamentation, similar to those housing the larger concert orchestrions. The case woodwork was finished in a dark gray-green color. Outside dimensions were given in the catalog as: height, 12 ft. 9 in.; width, 9 ft. 3 in.; depth, 4 ft. 10 in. The Wotan name was exemplified in some models by panels inspired by Wagner's opera, *Die Walküre*, or "The Valkyrie." These illuminated oil paintings on glass included a central panel featuring principal figures Siegfried and Brunnhilde, flanked on both sides by waterfall scenes from Switzerland. A mechanism behind the panels caused the water to have the appearance of flowing.

The Wotan was rated as equal to a 30 to 35 piece band. The instrumentation described in the circa 1911 catalog included: flutes, violins, clarinets, trumpets, pistons, octav, piccolos, horns, principals, wooden piccolos, bass flutes, bourdons, trombones, bass octav, and violin basses. Percussion provided included: snare drum, bass drum, cymbals and triangle, with one example fitted with a 27-note glockenspiel. The 1919 catalog description was comprised of the following: 1st and 2nd cornet, 1st and 2nd clarinet, trumpet, alto, trombone, French horn, baritone, bass, contra bass, saxophone, bourdon, piccolo, oboe, flute with xylophone, snare drum, bass drum (imitation kettle drum), cymbals and triangle. The instrument plays Welte's 100-note roll, which was utilized in a number of different piano orchestrions and the brass band orchestrions. The scale included 52 operating notes, numerous registers and percussion controls. When arranged for the Wotan, about 90 of the holes in the roll were utilized.

The Detroit & Windsor Ferry Company purchased and installed this Wotan at their Bois Blanc, later Bob Lo Island amusement park, in the Detroit River, near Amherstberg, Ontario, Canada. **Figure 4** It bears the serial number 3756 and was approved for purchase on November 20, 1912. Manipulation of published Welte shop number data would indicate that the instrument was built entirely new for the application. The booked cost of the instrument was given as \$4,716.09, slightly more than the \$4500 list price. In 1919 the Wotan style retailed at \$5,000. Erection was to take place by April 15, 1913. A card attached at the factory to the pump read "Ausnahme Wotan," which has been translated as meaning "outstanding Wotan." The notation also suggests that the Wotan was built in Germany and not the firm's Poughkeepsie, New York, facility, which opened in 1911. The instrument plays the standard 100-hole Welte orchestration roll and has 419 pipes, bells, three drums, a cymbal and a triangle. The original complement of rolls supplied with the machine apparently remained with it throughout the entire existence at Bob Lo.

The orchestration was placed on the balcony of the huge, 168 foot wide by 278 foot dance pavilion (46,704 square feet), which was approved for erection in August 1911 and completed in 1913. Constructed of concrete and masonry, with a fabricated steel superstructure, the modern building somewhat resembled a dirigible hanger of the time. Built with a hip roof, the end walls incorporated two gothic-styled arches providing something of a "cathedral" appearance. Glazed ends, open sides and a clerestory provided both illumination and ventilation of the expansive interior space. Reportedly it could hold 5,000 dancers at a single event. Dancing was a very popular recreational activity in Detroit and elsewhere across the country at the time.

The Bois Blanc installation is illustrated in Welte's 1919 catalog, depicting a modified and extended Welte Philharmonic style case around the instrument. The enclosure was considerably larger than the actual chassis of the instrument, providing ready access. Five sets of non-speaking metal pipes were installed in the façade. The date of manufacture was after the larger, Renaissance concert orchestrion cases were generally fabricated. The simpler and more modern style would also have been more economical to manufacture.

The Bois Blanc instrument was routinely serviced and remained in operation as dancing surged in popularity in the 1920s. The activity remained a favored Detroit area pastime into the mid 1950s. The Bob Lo dance hall, reached by a relaxing and romantic steam-powered boat ride, continued in operation until it was killed off by television and changing dance forms, with big bands and swing replaced by rock and roll.

For some time the Wotan was maintained by Grinnell, a venerable Detroit-based piano manufacturer from 1882 to 1981. Their Windsor, Ontario, Canada representative cared for the Wotan until shortly before 1938, when their technician “short-circuited” the controls and rendered about half of it inoperable. Park management planned to recruit Wurlitzer to place the Wotan back into proper operation, but at about that time the North Tonawanda firm was discontinuing its own mechanical music operations. The remote mounting, up on the balcony, secured an existence into the future, but in derelict condition.

The Wotan was essentially abandoned in place until acquired by Howard Hynne of South Milwaukee, Wisconsin in 1963. He learned about the orchestrion through an old piano man. The case may have been beyond salvage as Hynne did not take or get it with the exception of a few components. Hynne immediately impressed park personnel on his first visit, when he started to pick up rolls that had been scattered across the floor, showing an interest in the preservation of the big instrument even before he owned it.



Figure 5. The replacement case for the Welte Wotan was done in the classic style, as featured on cottage and concert orchestrions, as well as other Wotans. Photo courtesy Dave Wickerham.

The disassembled machine was stored by Hynne in a large, unheated, earthen-floor barn on his property, in the company of several theater organs and other salvaged materials. After his 1987 death, the dismantled Wotan was acquired by Jasper Sanfilippo. The instrument was restored by John Hovancek and Dan Meuer. The replacement brass trumpets came from another long-gone Welte in the Midwest, the remnants of which were obtained from Durward Center.

The present Wotan case was based upon the smaller Wotan in the Nethercutt collection, which was originally installed in August 1910 in the Gasthaus Sonne in Batzenhäusle, between Waldkirch and Freiburg, Germany. The center panel features an image of the mythological northern god, Wotan. It may be the instrument illustrated in Welte catalogs. No other Wotans are known to exist today, though at one time perhaps four to six were in service in the U. S. alone. The new case measures approximately 16'-10" tall, 12'-2" wide and 5'-8-1/4" deep. Calculation of the volume reveals that it fills a box space twice as large as instrument defined by the catalog dimensions. There's little wonder why it would have been judged “outstanding” by the factory, size adding another dimension to the inherent tonal quality. **Figure 5**

The Wotan was purchased from Sanfilippo for the Milhous collection in March 1999, along with the Hupfeld Super Pan. The rolls received from Hynne were retained by Sanfilippo and the Wotan is operated solely by a MIDI system. The disks currently in operation were generated on the machine, which has the capability to create MIDI files.

In the recent past a Welte cabinet style piano in the Jugendstil style was connected to the Wotan. It substantially altered the brass band presentation, imbuing it a Brisgovia playing quality. The piano was rebuilt by Dick Hack.

Gavioli & Cie./J. Verbeeck 114-key Fair Organ

Gavioli & Cie. of Paris, France established a branch factory in Waldkirch, Germany in 1896, under the direction of Richard Bruder. There they manufactured fairground organs of a unique design, consolidating German practice with French influence and components. Machines up to 89-keyless in size were fabricated before the firm ceased the operation and sold it to Limonaire Frères for 1908. Exemplifying the products of the firm are several well-known and distinctive instruments. These include: the original 87-key “De Schelm,” at the Open Air Museum in Arnhem, Holland; an expanded 87-key Gavioli, “de Lange Gavioli,” which now serves as the greeting organ for the city of Utrecht, Holland; the famous “Great Gavioli,” an expanded 89-key No. 4 machine now in England; and the 89-key, ex-D. D. Price instrument now awaiting restoration at the museum in Waldkirch.

The “Black Forest” Gavioli that served as the basis for the current machine was built in the Waldkirch shop about 1900 for the fairground family of Aug. Leeser. They probably installed it in the center of their “Berg und Tahlbahn,” a steam-powered switchback ride with cars that rode an undulating, circular track. **Figure 6** In 1891, Leeser bought Frederick Savage steam engine #536, described as a 5 HP double cylinder, 5.125" bore x 9.5" stroke machine, which probably powered his ride.

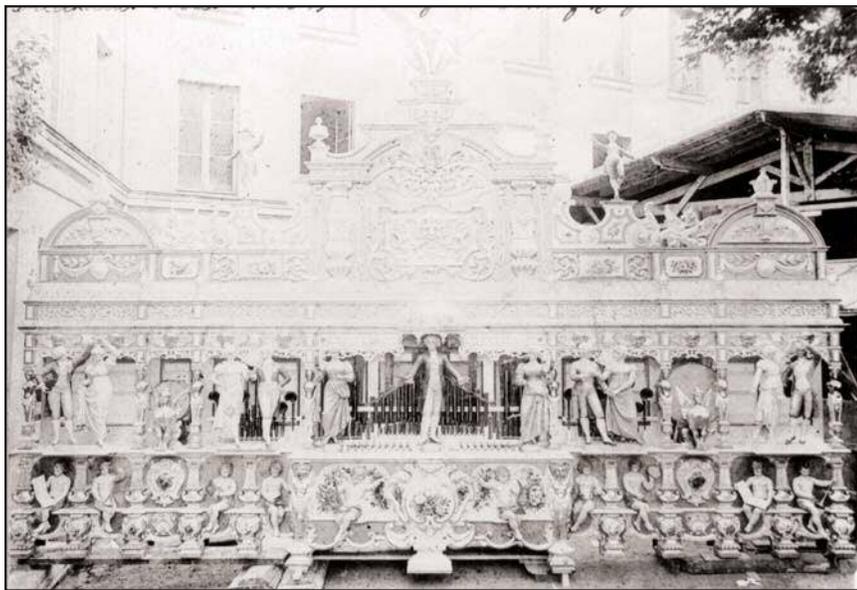


Figure 6. The gigantic façade of this Waldkirch-built Gavioli filled the center area of the Leeser switchback ride with both music and a feast for the eyes.

Photograph courtesy Marcel van Boxel.

The big organ likely replaced a smaller cylinder-operated instrument, probably of German origin, which previously provided a musical atmosphere for riders. A similar installation of another immense Gavioli can be seen in a German-built switchback that once toured in Italy. The ride organs were housed in four-wheel wagons, often fabricated by the firm of Heinrich Mack in Waldkirch. One side and the top opened for the propagation of the music from within. Typically the organ wagon was elevated on a platform, termed a “gantry” by the British, specially constructed for the purpose, in the center of the ride.

A preserved Gavioli shop photograph documents the original appearance of the organ, which Carl Öhler personally identified as having an 87-key specification. It featured brass resonator clarinets and saxophones, as well as wooden trombones, with a glockenspiel on the counter. Brass trumpets, an unusual feature on German instruments, were fitted into the side wings, where the piccolos and additional clarinets were also positioned. The brass trumpets may have been specified to overcome the high volume of noise generated by the switchback mechanism.

The enormous façade was fabricated by Waldkirch artisan Karl Böhler, with figures by Demetz in the Tyrol. There were five niches, by the factory’s count, to either side of the center facade. The visually impressive front incorporated four pairs of dancers, two bell ringers, a male band leader, eight caryatids, two rotating figures in elevated positions, ten musical cherubs below the counter, ten amorini on the entablature and two seated, female sphinxes in front of the drums and a third at the very top. Perhaps the style could be termed “Florentine Renaissance revival.” Gavioli design number 588 was assigned to the completed organ. It was surely one of the most imposing facades ever assembled by the craftsmen in Waldkirch.

The duration of Leeser family ownership is unknown, but almost all of the big fairground rides with wooden ornamenta-

tion, including the switchbacks, were retired in the 1920s as they were replaced by more thrilling rides. A precious few continued in operation until the onset of World War II. Some big organs were parked beside new devices, like Dodgem cars and the Caterpillar, or placed into general concert service. According to a later report, the big Gavioli passed into the possession of Swiss owners by about 1930. A showman named E. Möckel-Hunger, of Zurich, Switzerland, contracted for a rebuild by Heinrich Voigt of Höchst, near Frankfurt, Germany, sometime in the late 1940s, with completion achieved about 1951. At some time during these actions the façade was substantially reduced in height and in width to provide for easier transport and display. There were also some changes to the figures. The original male bandleader was replaced by a female figure and different dancing couples were installed. It has not been possible to determine when these alterations were accomplished.

The Voigt family has an extended heritage in mechanical organ building that dates back to the 1830s and the manufacture of hand organs. In the late 1930s they acquired the equipment, designs and patterns that had been originated by A. Ruth & Son in Waldkirch, providing them with an entirely new array of products and services. Their perpetuation of the old traditions continues today under the guidance of Heinz Voigt.

Between the late 1930s and 1962, sustained in the latter years by a surge of interest in fairground organ instruments, the Voigt firm built several new organs to the Model 38 Ruth scale. The firm also undertook instrument expansions and altered several large devices to the 96-keyless scale, including two Gaviolis. One of them is the huge, two-stage expansion commissioned by Georg Pötzsch of Munich, Germany, the result of which is the “Oktoberfest” organ now owned by Graham Atkinson in England. The other was a conversion of the Leeser instrument.

Voigt altered the original 87-key Gavioli specification to play the 96-keyless Model 38 scale. A postcard inscription and a later 1998 report placed it at 103-keys in size, but that may be in error. In the front center of the case Voigt installed his characteristic ocarina, a stop comprised of one rank of doppelflutes and one of open flutes. He favored it over the Ruth factory’s flute and ocarina, his design having a more distinctive character that in some ways may have been a response to a Carl Frei tonal innovation. The typical three-rank violin register was placed behind the center dividing panel. A three-rank mixture was reportedly placed inside the front belly area, which muffled its effects to brighten the tone. Contrabass pipes were added and positioned behind the left side wings. A Voigt keyframe and valve action replaced the Gavioli system. The work yielded a truly unique sounding organ, an unusual combination of Gavioli-Waldkirch, adapted Ruth technology and Voigt innovation. As part of his work, Voigt also fabricated and installed a

large panel on top of the instrument to provide a more finished appearance. **Figure 7**

About 700 meters of Ruth music were eventually furnished for use with the instrument. At an unknown time, perhaps in the late 1960s, the Gavioli/Voigt became the possession of Willy Bonardo-Lilly Binda, Villeneuve-Lausanne, and subsequently only Willy Bonardo, of Muraz-Collombey, Switzerland. Several widely circulated LP record albums documenting the unique sound of the instrument were issued during Bonardo's ownership. They include Everest/Tradition 2081, Joys 154 (1964) and another known only by the number identification ML+RCBZ 40115.

Bonardo sold the organ into the Milhous collection in early 2001. A complete rebuilding was commissioned from Verbeeck, with the original façade to be reconstructed by Tony D'Angelo. During the course of paint removal, 1896 German patent numbers, 95120 and 90501, were found painted on the façade, the same two appearing in a factory photo of De Lange Gavioli. Later, the façade was also shipped to Verbeeck for completion.

The Gavioli/Voigt mechanism was replaced in its entirety by an entirely new Verbeeck instrument of 114-key specification. There is one additional space for another key to be added. The works are housed in a main case measuring 82" tall by 91-1/4" across and about 41-1/2" deep, augmented by side cases standing the same height by 100-1/2" wide. The twelve trombones are uncased, standing upright at the far outer ends of the two side cases.

Based on a scan of the original shop photo of the organ, the entire façade was re-constructed. Considerable expense and attention were given to faithfully re-constructing the original appearance of this monumental creation. The figures received with the instrument were sold to another collector. The statues documented in the factory photo were re-created and other necessary figures and ornamentation were carved, painted and leafed. The result was an elegant and imposing façade measuring approximately 17'-10" tall by 24'-10" wide. The work was completed in mid-2004. **Figure 8**

The Milhous instrument is one of the few existing band organs in the U. S. with at least a partial Gavioli-Waldkirch pedigree. About a dozen and a half exist throughout the world. At least three were once in service in the United States, but none of them are thought to have survived to today, or have not been identified as such. A recently-imported 57-key machine, perhaps of German heritage, awaits restoration. Two "Black Forest" Limonaires, built in the former Gavioli factory, have been imported, but their current locations are unknown. One of them was also altered by Wilhelm Voigt.

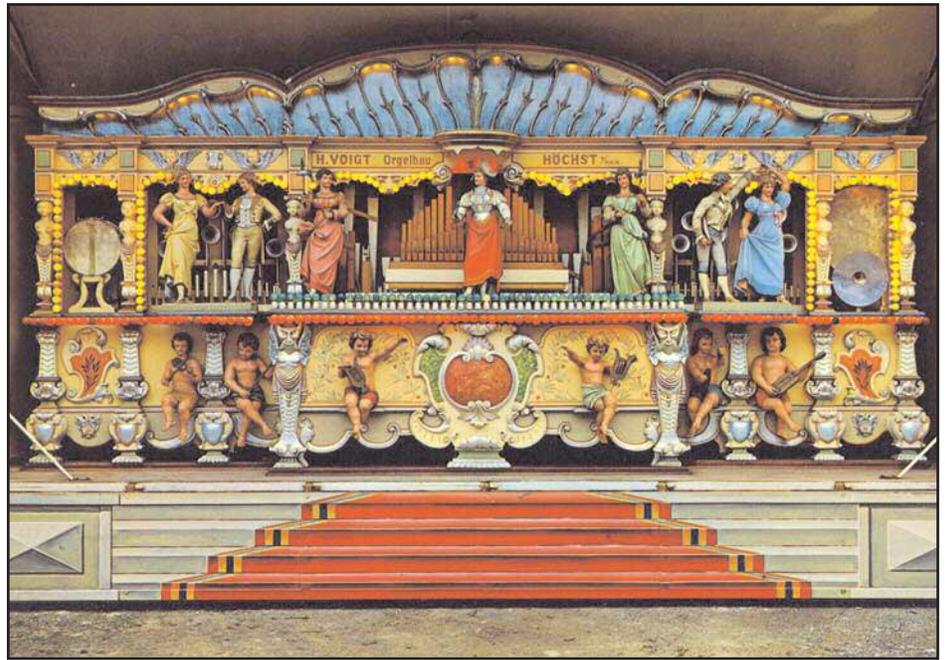


Figure 7. It was in this physical configuration, devised by Wilhelm Voigt, and via LP records made thereafter that most people came to know the unique Bonardo organ.

Image courtesy Willy Bonardo.

Limonaire Frères 50-key "Jazzbandophone"

Paris was the heart of the show organ industry in France. It was the home to Foucher-Gasparini, Gavioli & Cie., Limonaire Frères and Ch. Marengi & Cie., as well as other firms. Already in the 1880s, their innovative technology and artistry often paced the business. Perhaps for that reason the leader, Gavioli, was the first to collapse shortly before 1910. They manufactured fair organs for traveling showmen and had a long



Figure 8. The incredible detail of the original Gavioli façade was re-created when the front was restored for the Milhous brothers. Photograph courtesy Dave Wickerham.

tradition of supplying a variety of instruments for indoor applications. The strongest firm financially, Limonaire, eventually triumphed over the others. Following Charles Marengi's death in 1919, his firm was succeeded by Gaudin & Cie., which furnished and rebuilt larger fair-ground instruments and also continued to manufacture huge dance organs of a character different than their predecessor.

The Limonaire shop number applied to this machine, 4761, connects it with mid-1925. **Figure 9** Another machine, a 50-key Jazzbandophone number 4764, is dated as August 1925. The highest known number on a surviving Limonaire is just one number higher, 4765, affiliated with the very last year of production of the Parisian firm.

From a different perspective, other aspects of the machine may suggest a prior existence. The instrument is housed within a stepped-back case, of the type that was popular shortly after the changeover from cylinder to book operation. In this organ, the created "shelf" space is the location of the key frame and the book slides into and away from it.

The façade is done in the Art Nouveau style, typical of that found on Limonaire facades during the first decade of the 20th century. The exact style has not been discovered in the manufacturer's catalogs. The name painted upon it, "Limonaire Frères," was the shortened version of the corporate name, "Société Limonaire Frères et Cie.," from January 29, 1886 until 1913, when it was re-formed as the "French Public Corporation of Pneumatic Pianos." The succeeding firm was dissolved effective on January 1, 1921, and superseded by another title. Despite the corporate changes, the name "Limonaire Frères," or variations thereon continued to be applied at the factory to completed instruments.

Available documentation suggests at least four different sized models of Jazzbandophone were manufactured: 45-keys, perhaps the No. 1; No. 2 at 50-keys; another at 56-keys, possibly the No. 3; and No. 4 at 84-keys. Unlike outdoor-voiced



Figure 9. The Jazzbandophone in the Milhous collection is one of the last instruments to leave the Limonaire factory, yet it has a heritage that reaches back much earlier.

Limonaire band organs, marketed under the "Orchestrophone" name, the Jazzbandophones were intended for indoor service, likely smaller cafes and dance halls, being much smaller than the monstrous Belgian dance organs. The largest one, the No. 4, might have been equivalent to a Mortier café organ but none are known to exist today. A few, perhaps a half-dozen Jazzbandophones, survive. There are 45 and 56-key examples in the U. S. and others of 45 and 50-keys are in Europe. The current example was imported within the past few decades from Europe, as part

of the collector's movement. It became part of the Alan Bies collection, from which it was sold to the Milhouses in 2006.

Swell shutters were fitted into the front of the case, for tonal modulation. In addition to many ranks of pipes on individual registers, a complete array of percussion instruments was included. A pair of wood blocks appears to be activated by a duplex action that plays upon the snare drum.

Gaudin & Cie./J. Verbeeck 125-key Concert Organ

Gavioli & Cie., the famous organ builder of Paris, France, moved from the construction of military-styled cylinder organs to the manufacture of paper book-operated, symphonic-voiced organs in the 1890s. They sold them for both fairground and indoor dance hall applications. Some were retailed through a Belgian dealer, Theofiel Mortier, who later established his own firm to construct dance organs. By the early 1910s he commenced to make instruments with additional voices that were more suited to indoor work, incorporating special and solo stops that were not found in fair organs. The fabrication of such instruments continued into the 1950s, with the Decap firm still manufacturing them today (2007).

Charles Marengi, Gavioli's skilled shop foreman, broke away from the Gavioli firm and in 1902 established his own Parisian operation, where he made fair organs equal to or better

than those of Gavioli and Limonaire. As the market for instruments waned late in the first two decades of the 20th century, Marengi also commenced to build some very large dance hall organs, up to 106-keys, for Belgian buyers. Upon his 1919 death, the business was continued in the same location by the Gaudin brothers. They rebuilt a number of Marengi instruments and also fabricated a number of very large dance organs for Belgian halls, perhaps up to 116-keys. An organ of the latter scale is reportedly in the possession of a showman's family in France. There was lively competition amongst the hall proprietors for the biggest and best music machine, the competition for dancers leading to multiple replacements in a relatively short period of time.

Early in the collector's movement of the 1960s and 1970s, Mortiers of 80, 92, 97 and 101-keys were imported to America. They were augmented by 92-key and a few 121-key Decaps. In the past two decades, a number of very large, fully chromatic, Belgian-built dance organs have been acquired for several American collections. Nearly all of them have been expanded beyond their original dance hall capability to what can be qualified as "concert" status. Bob Gilson was the first to act, bringing a huge, 1920-ish 114-key (112 working) Gaudin & Cie. dance organ to the US in 1988. Admittedly, this was a Paris-made organ, but it was built for a Belgian customer after the European fairground organ market had slumped following World War I. The original home of the organ was a large hall owned by the Breydels family in Wetteren, Belgium, where it filled a commanding position on a balcony overlooking the dance floor through 1940. With over 1200 pipes, drums and seldom seen tubular bells, it is capable of playing any musical composition.

Johnny Verbeeck has been responsible for all of the other recently enlarged 100-keys plus dance organs. He changed the specification of Theofiel Mortier shop number 1001, originally built with a 101-key scale in the 1920s, and created a centerpiece for Jasper and Marian Sanfilippo's ever expanding collection showplace in September 1992. This concert organ plays its 825 pipes with 23 registers from a 115-key scale. A pair of gilded lions, at the top of the façade, glare as guests peer over the hand railing to the lower level of the Victorian Palace where the organ is located.



Figure 10. Placed on an elevated platform, the 125-key Gaudin-Verbeeck dominates the main room of the Milhous collection.

Several new dance or concert organs have been fabricated entirely anew by Johnny Verbeeck. Willis Boyd of Escondido, California commissioned Verbeeck to build a huge 125-key dance organ that was delivered in February 1990. It contains 1,191 pipes and also incorporates two large automatic figures that play upon drums at the arranged times. There are 35 registers in the organ. This instrument has reportedly been donated to a university in Michigan. More recently, Verbeeck constructed a new 99-key organ with 684 pipes on 21 registers for Bob Pellegrini of Long Island, New York, including brass trumpets. All of these Verbeeck productions are capable of being played traditionally by book and also by newer MIDI systems.

Bob and Paul Milhous commissioned Verbeeck to enlarge the tonal resources of a 98-key Gaudin dance organ, yielding a 125-key instrument with 22 registers and 1,406 pipes that was delivered in December 1999. **Figure 10** In terms of key-size, it is the largest in the United States and equaled in Europe only by an extended 125-key Carl Frei fair organ. Some 19th century cylinder organs were made with as many as 160-keys and more, but these were also smaller machines of substantially less musical capability. Both the Sanfilippo and Milhous organs were retrofitted with second countermelodies and other modifications that augmented the tonal characteristics of the original instruments.

The Gaudin was constructed circa 1925, probably for a person or location named De Ketelaere. It ended up in the hands of a British collector, Charles Hart, followed by Dennis Chappell and Reg Saunders, whose family sold it to Bob and Paul Milhous. It was purchased with the understanding that it could be expanded in size and capability to equal or exceed the

other expanded dance organs that had been experienced by the Milhouses. Substantial additions were also made to the instrument, including a trumpet en chamade over the center section and another rank of conventional trumpets in front of the main case swell shutters.

The façade of the instrument was also substantially enhanced. It now measures 31'-6" across and stands nearly 19-feet tall. A circa 1924, 112-key Gaudin with 21 registers, originally installed in a Wetteren, Belgium dance hall, and now preserved by the Stichting Het Helmondse Draaiorgel foundation in Helmond, Holland, served as a general guide in the reconstruction of the Milhous façade. It has two, carved atlante figures supporting a front canopy extension, as

well as pairs of columns supporting smaller extensions at the far ends. At least two instruments were made in this style, as the panel incorporating two winged griffins was salvaged from another and was exported to the U. S. about a decade ago.

The Milhouses purchased several six-foot tall atlantes figures at the auction of Tussaud's fairground art collection from Wookey Hole, Somerset, England on October 6, 1997. These were incorporated into the side canopy posts, which were of a rectangular cross-section. Such figures were applied to Parisian-organ bioscope facades, particularly Marengi and Orton & Spooner collaborations, as well as to a variety of British fairground ride facades, such as Orton & Spooner-decorated scenic railways by Savage and Lakin-built arks. The exact origin of the four figures acquired by the Milhouses has not been determined.

Verbeeck fabricated a canopy like that on the Helmond Gaudin and used it to support a twelve bell carillon that was added to the instrument. It is featured in such pieces as the *1812 Overture* and *Three O'Clock in the Morning*. Tubular bells had previously been fitted for the application in French, Belgian and later in German organs. Sets of smaller bells, used more for melody accompaniment than solo playing, were installed on a few Gavioli and German machines in the 1890s, as well as on large Gebrüder Bruder machines around 1911-1913. Compact disk recordings of the Gaudin/Verbeeck were available at one time via the Verbeeck website.

Theofiel Mortier/J. Verbeeck 115-key Concert Organ

In 1921, Theofiel Mortier constructed the only organ to leave his shop with six side cases. As a result, the organ ended up with a façade over 39-feet wide and nearly 20 feet tall. **Figure 11** It must have proven more economical to furnish organs with just four. The organ originally went to an owner in Serskamp, near Wetteren, Belgium. In the 1930s it was acquired by Frans van Sant of St. Truiden. In 1936 he arranged



Figure 11. The widest organ ever constructed by Theofiel Mortier's firm was the six-side chest monster in the Milhous collection.

to have Mortier update the instrument with an accordion on the front. Decap Herentals added two more accordions and a saxophone in 1958.

In 1976 Arthur Prinsen purchased and rebuilt the Mortier, removing the accordions and saxophone. He sold it for installation in the Good Time Charley's entertainment area of the Sharpstown Center in Houston, Texas. When offered for sale in 1979, it was described as a 90-key instrument with 650 pipes, percussion and a xylophone. Five carved figures had been retrofitted to the façade by this time.

The organ was acquired by A. M. "Gib" and Emma Gibson of Houston, Texas, who had it rebuilt again by Alan Bies and Steve Boehck in 1985. When offered for sale that year, it was termed a 92-key machine with 540 pipes, bass and snare drums, wood block and xylophone. The instrument was still in the possession of the Gibsons during an AMICA visit in 1986.

The organ may have sold via Bies and Boehck in 1987 to someone named Nicholson. There was an unconfirmed rumor that the main chest had split. It was eventually acquired by the Milhous brothers, who arranged for Johnny Verbeeck to rebuild the organ to the same 115-key scale that had been used on Jasper and Marian Sanfilippo's large Mortier #1001.

Wurlitzer Style 153 Duplex Orchestral Organ

The Wurlitzer 153 was the quintessential American-built carousel band organ. **Figure 12** The first one was produced and sold in 1916, with the last furnished in 1936. A total of 179 machines were built with several dozen in existence today. It utilized the 150 roll scale, the origins of which dated back to the years when deKleist first started to manufacture the style 20A cylinder-operated military band organ. The roll scale, with 54-keys, did not initially include the swell shutters that were fitted in the 153, suggesting that the scale evolved over time. Two roll functions and three register keys were also accommodated within the re-formatted scale. The catalog specification for the

153 comprised 164 pipes, bass and snare drums, cymbal and a 16-bell glockenspiel. It was usually furnished in a duplex roll arrangement to provide continuous riding music. The list price was \$1900.

The 153 was one of the few organs actually designed by Wurlitzer. The downward pointing trumpets in the front of the main chest suggest German design influence. The façade arrangement was of the center case and shelf configuration, with added panels and ornamentation. It was furnished in at least three different façade designs, of which one predominated. Another may have been a single issue while a third, specially patterned after a Limonaire Frères Art Nouveau creation, was fitted to two instruments that exist today.

The heritage of the Milhous 153 dates back to a large railroad carnival, the S. W. Brundage Shows. The operation commenced around 1905, with a continuation through 1932.

Sometime in the 1920s the Brundage outfit acquired a Wurlitzer 153 band organ. It was likely the same orchestral instrument that was shipped back to Brundage in mid-1929, following a claimed three-year overhaul. "For tone and quality, 'tis said, it can't be beat," was stated upon the return. At some time the façade was painted with a tropical or desert motif, palm trees and such, suggesting placement in a Hawaiian, Egyptian or another similar-themed back end tent show attraction.

There is no record of the disposal of the Brundage property following its closure during the Great Depression. By an unknown route, the show's Wurlitzer 153 band organ came to reside in a warehouse of the Royal American Shows in Tampa, Florida. Terry Haughawout acquired the organ there and sold it to the Milhouses, with a rebuild as part of the deal. During the course of the restoration the original front was exchanged for a replica façade fabricated by Paul Dyer and decorated by Tony D'Angelo. The original front went to Bob Brown.

Wurlitzer Style 157 Duplex Orchestral Organ

Wurlitzer identified a possible market for a larger carousel organ, one that matched the capability of medium-sized German book organs. They planned an entire "family" of organs based on their new "165" roll scale, which was developed by 1914. The first instrument, identified as the Style 165, was derived from Gebrüder Bruder's multi-register 65-keyless "Elite Orchestra 'Apollo.'" The first 157 was not built until



Figure 12. Music for the Milhous collection carousel is furnished by a Wurlitzer 153 that served most of its working life with a railroad carnival

1922, the sixth and last organ designed by Wurlitzer staff to play the same roll. The last 157 was shipped in 1929, with about nineteen constructed in total, of which at least seven survive today. As a curiosity, the last 165 shipped in 1939 was also furnished with a 157-style façade. Wurlitzer 157s were most frequently sold for carousel applications and for that reason were fitted with a duplex roll frame so that there was never a moment without music to attract and entertain riders. **Figure 13 and back cover.**



Figure 13. The Wurlitzer 157 in the Milhous collection has been seen in the Midwest, the far West and now Florida, making it a well-known instrument.

The 157 was designed to use 61-keys of the 75 keys in the 165 roll scale. It was a somewhat economical version of the earlier 165, with higher-pitched trumpets. Wurlitzer designers may have updated the 165 design to yield a machine that would be more popular with contemporary buyers that desired to use the popular music of the time. Some present day enthusiasts continue to favor it for playing American popular music of the 1920s. The catalog specification included 208 pipes, bass and snare drums, a cymbal and a 16-bell glockenspiel. The list price of the 157 was \$2750 for as long as it was manufactured.

Despite the newer Wurlitzer-styled interior components, an older, foreign façade design was adapted for the visual aspect. Cylinder organs housed in rectangular cases in the 1890s were augmented with percussion devices mounted on side shelves or open wings. Eventually the extensions became full enclosures. Gavioli & Cie., the Parisian manufacturer, designed a columned façade with backed side platforms around 1900 for one of the 57-key organ styles that it sold. About a dozen have been documented, including several sold in the U. S. That Gavioli façade became the basis of the Wurlitzer 157. Several of the 57-key Gaviolis were rebuilt in the Wurlitzer shop, suggesting where and how the choice was made to adapt the design. The Wurlitzer front design evolved into a wider arrangement, aesthetically more pleasing to the eye, with somewhat different decorations. The 157 became one of the few American band organs with incandescent lights, 36 of them, as a standard feature. They were furnished in patriotic red, white and blue, with additional red lights mounted inside the drums.

The Milhous 157, shop number 3639, was shipped on March 24, 1924 to the Spillman Engineering Company of North Tonawanda, New York. They were a large fabricator of mechanical amusement rides and related apparatus. It's likely that the organ accompanied one of their larger park carousels. At a later date it came into the possession of the Motor State Shows, a Detroit-based motorized carnival owned by the Fredericks family. They sold the 157 to dealer Jim Wells, who later re-sold it to collector Paul Torin in 1975. The instrument was mounted in a trailer by Torin, who used it for promotional work. Mike Ames bought it in 1983 and later sold it to the Milhouses.

Credits:

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Fred Dahlinger is a frequent contributor to the *Carousel Organ*. There are many gaps in the documentation about organs of 100-keys and greater, both those made domestically and others fabricated in France. Fred would appreciate hearing from anyone having photographs, catalogs, scales, books or other data about any of these machines.