Joseph Ori and The Early Circus Air Calliope

Fred Dahlinger, Jr.

A sound symbolic of the outdoor amusement world is that of the calliope, an instrument now foreign to the ears of many, but which elicits joy and happiness within those same listeners after producing only a few lilting notes. The word calliope usually brings to mind the steam-powered whistler, the signature noisemaker of the circus, the floating theatre and the excursion steamboat. Its softer cousin, the air calliope, is seldom mentioned, its once common presence pushed into the background by memories of the more impressive steamers.

Figure 1. The first successful air calliope was the one that Joe Ori fabricated in the early 1900s for diving show operator Capt. Louis Sorcho. It is shown here, behind the seat of the roadster, the wind supply perhaps the same as that used to furnish air to the divers in the show. Photo: Author's collection.

The air calliope was one of the most popular and plentiful mass produced entertainment musical instruments of the twentieth century. Considered as a group, the number of air calliopes constructed approaches that of the numerous band organs built and distributed by both domestic and foreign builders and agents. Several thousand were made, of which over a hundred survive today, primarily in the hands of private collectors and museums. Surprisingly little has been written about the instrument or its history, but thankfully that which is in print is generally accurate, though brief.[1]

The origins of the air calliope are ancient, its roots traceable to the pipe organs of Roman times. For practical purposes, it can be said the story of the air calliope starts much later, its beginnings associated with the first use of a steam calliope as an advertising tool by the American circus of the 1870s. The steam calliope became a fixture of the traveling shows in 1872, when the Great Eastern Menagerie, Museum, Aviary, Circus and Balloon Show featured a "steam piano" as part of its promotional campaign. Within the decade the majority of the larger railroad shows featured one of these devices at the end of their parade. It also served to provide a musical ballyhoo on the circus show grounds immediately before show time. The bulk and expense of this limited duty asset restricted the acquisition of a steam calliope to the upper tier shows, those that had an adequate bankroll to purchase and transport one of the heavy and expensive instruments. Capable of delivering the loudest possible notice that the show had arrived in town, the calliope was on the wish list of many showmen who desired a guaranteed method of advertising their presence.

The need to announce the show's arrival was not restricted to the circus, but shared by all outdoor showmen, including floating theatre owners, road show proprietors and street fair operators. The first step towards satisfying the needs of other impresarios was taken by George Kratz, the noted steam calliope builder from Evansville, Indiana. Developing an instrument quite different from those built previously, Kratz constructed a small instrument about 1903 utilizing a semi-circular manifold that could be operated by steam or compressed air. The volume of either medium required to operate the miniature calliope was but a fraction of that needed to operate one of the full-sized steamers. While the air pressure utilized to operate these Kratz hybrids is not known, it is believed to have been in the ten to fifty pounds per square inch range. The employment of compressed air to power a calliope had been foreseen years earlier by calliope inventor Joshua C. Stoddard, who covered its use in one of the claims of his 1855 patent. There is no known record of a calliope being operated by compressed air prior to Kratz's efforts, the application of compressed air apparently being prevented by the lack of a reasonably sized portable air compressor.

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Kratz's new calliope was well received, with something like 30 instruments being accounted for in a recent survey. Others tried to build compressed air calliopes, and one firm even offered to convert steam calliopes to compressed air service, but all of these activities were rather short-lived episodes. The advent of the compressed air calliope satisfied the needs of some showmen; however, a wagon to carry its weight, and a knowledgeable individual to operate it were still required.

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Road shows and street fair operators who loaded their shows into railroad baggage cars, and others that proposed to travel by that new invention, the automobile, required a very portable instrument, one capable of being lifted and moved by the efforts of a couple workmen. It also had to be sufficiently simple to permit operation by the many piano players that were commonly found in the industry. Although efforts dating to the 1890s can be cited, the first successful low pressure air calliope was constructed in 1905-1906 by Joseph Ori, a longtime showman who was then serving as talker, accordion player, and mechanic for Capt. Louis Sorcho's Deep Sea Divers show. Sorcho's business had been sagging during a tour of the western United States. After dismissing the steam calliope as too heavy and too costly, Ori told Sorcho that he believed that he could construct an air-powered calliope. The machinery used to feed air to the divers in Sorcho's glass fronted diving show tank may have inspired him in his solution.

Figure 2. Several air calliopes were under construction when this view of Ori's shop was taken about 1915. John Philip Sousa's portrait is hanging aloft, as is a Looping the Loop thrill act poster for the Trenton, New Jersey fair.
Photo: Author's collection.

Hampered by having to work on the road but aided by the machine tools Sorcho commonly carried, Ori succeeded in creating an air calliope that proved an invaluable asset to Sorcho's show wherever it traveled (**Figure 1**). With the calliope mounted in the back seat position on an early roadster, Sorcho would drive the vehicle around the towns and cities being visited for hours on end, making sure no citizen could escape the fact that his show was in town. Traveling with the diving show for the next four years, Ori had to leave the calliope behind when he left Sorcho's employ in 1910. He settled in Bloomfield, New Jersey, with his brother, James, and determined to earn a living by building air calliopes.

Figure 3. This is the standard 43-whistle air calliope that evolved after a few years. The keyboard and siren whistle were located behind the whistles. Ori inked the names of some of his satisfied customers on the print.
Photo: Author's collection.

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Figure 4. The presentation of the Ringling Bros. air calliope wagon in the daily street parade was made even more exotic by the addition of a team of camels to pull it. This view dates to the late 1910s. Author's collection.

ated by a set of keys having the same arrangement as a piano keyboard. The whistles were fastened atop a compact sheet metal enclosure with the whistles arranged in an attractive manner in front of the keyboard. A rotary blower, such as those manufactured by the Roots firm of Connersville, Indiana, supplied lightly compressed air to sound the whistles. Altogether the air calliope and its blower weighed 200 to 300 pounds and could easily be moved about by two men.

The air calliopes operated at pressures that were a fraction of those used by compressed air calliopes. Early air machines operated at pressures as high as several pounds per inch, but later instruments were tuned to function at levels of one pound per square inch or less. In the past, and as late as 2002, one can find accounts wherein bona fide air calliopes are portrayed as having been originally sounded by steam. This was not possible, the interior construction being suited to only lower pressures and a dry fluid.

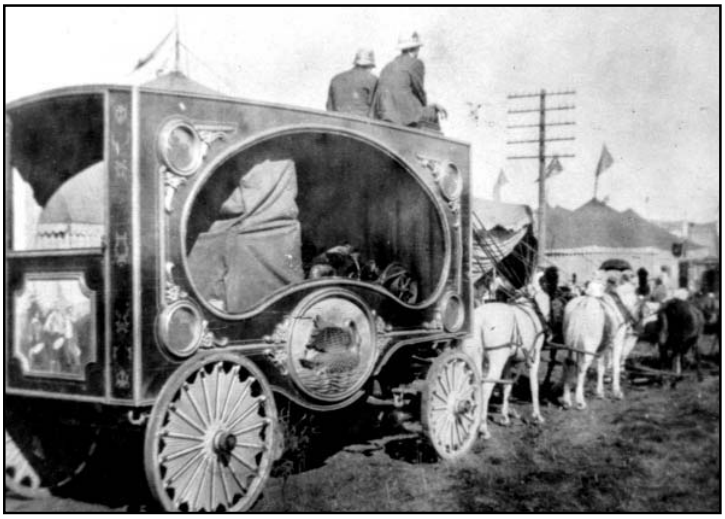

Figure 5. The Barnum & Bailey air calliope wagon was not as ornately decorated as the Ringling wagon, but still added flash and extra music to the daily march. Fred D. Pfening, Jr. collection.

By 1912 Ori established his firm, the Pneumatic Calliope Company, and moved it from a Newark storefront to a Bloomfield building. Known as Joseph E. Dupont among the show folk, Ori's ability to produce calliopes was outstripped by demand. Made with only hand powered tools and the assistance of his brother and nephews at night, the early Ori calliopes were essentially handmade. They were not made to order, but simply sold individually after Ori advised showmen that another calliope was ready. The firm was a modest effort, lacking in capital.

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It was the Ringling brothers who first attempted to purchase an Ori calliope in early 1912, dispatching John H. Snellen from their Barnum & Bailey Greatest Show on Earth winter quarters at Bridgeport, Connecticut to Ori's plant with the intent of having an instrument delivered to Baraboo prior to April 1, 1912. The Ringlings were acting in response to an inviting letter from Ori, but wanted the unit inspected before committing themselves. Cautious businessmen, the Ringlings desired assurance that the Pneumatic calliope was a practical and rugged unit. Others that the brothers had been exposed to were apparently not judged roadworthy by their standards. Snellen sent a favorable report to the Ringlings, but by the time the authorization for the purchase was received Ori had already sold the instrument to another party.

Not wanting to miss the opportunity to place one of his units on the Ringling Bros. World's Greatest Shows, Ori again wrote the Ringlings on January 9, 1913 offering another air calliope, characterizing it as "positively the best we ever built." Ori advised the Ringlings he would hold the unit long enough to permit both an inspection by one of their representatives and a positive response to be received from Baraboo. The calliope, complete with a blower, small tank, siren whistle, and a pedal to alter the volume, was offered for $625.00, a base or stand being $25.00 extra.[2] Acting quickly, the Ringlings wrote the Barnum & Bailey show manager, Sam McCrackin, two days later, informing him of the 1912 mix-up and advising him to take Snellen along to the Pneumatic plant. They suggested closing the deal on the spot if the instrument was satisfactory.[3]

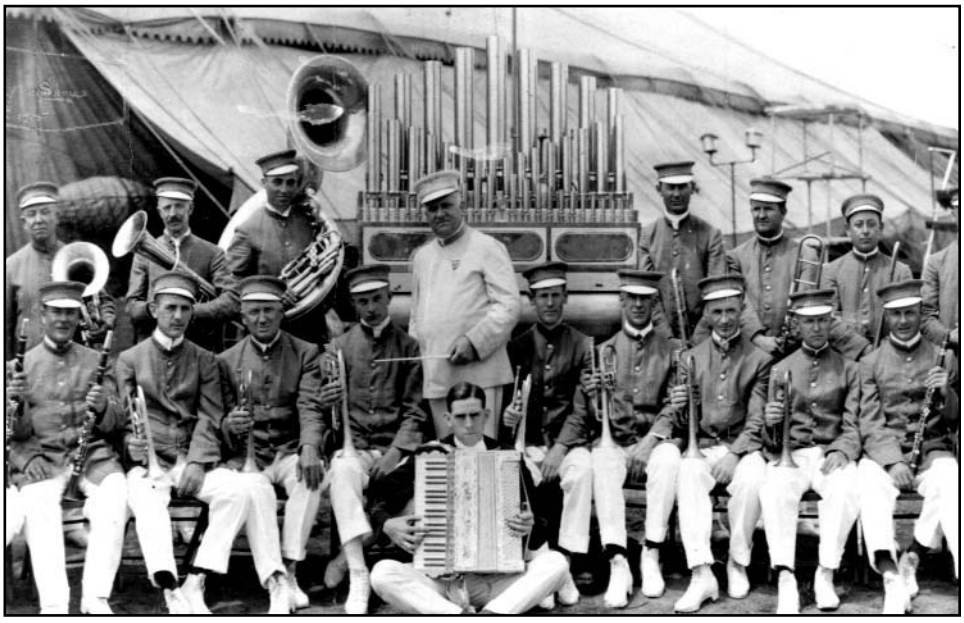

Figure 6. Ned Brill, bandleader on the Barnum & Bailey circus in 1914, was likely the man that caused the big 49-whistle Ori to be built. He's shown here with the calliope and part of his big show band that year. Photo: Circus World Museum.

On January 15, 1913, McCrackin and Snellen visited the Pneumatic plant and after hearing several selections bought one of the instruments for the Ringling show. Before leaving the premises they purchased a second one for the Barnum show. Ori confirmed the orders in a telegram to the Ringlings the same day. McCrackin wrote Al Ringling on January 16, advising him that the purchase price had been discounted from $650 to $600 and noting "The tone of the Calliope is more musical and carries farther than the steam [calliope] and is a very small affair."[4]

As instructed by McCrackin, Ori also wrote the Ringlings on January 16, describing the calliopes that were sold as having 43 whistles, ranging from F to B, not including the adjustable siren whistle. The show had to provide the gas engine to power the blower, a two or three horsepower machine being required. A good muffler was recommended to avoid having the exhaust interfere with the music. Ori also confirmed the price discount of $50 on the Ringling calliope, but advised $100 had been cut from the Barnum show unit.[5] Not to be shorted $25 on a two calliope deal, one of the Ringlings wrote McCrackin on January 18 and indicated the price for either calliope should be $575, an arrangement McCrackin assented to in his January 21 response.

The Ringling calliope was expressed to Baraboo on February 3, 1913, with the Barnum unit shipped to Madison Square Garden in time for the show's March 22 opening date. Prior to their dispatch, a grand concert was held at the Pneumatic plant "to demonstrate the superiority of the Mammoth Air Calliopes," as the account of the event was worded in the trade journal, *The Billboard*. Professor Holden, a piano player from Bloomfield, entertained the audience with selections of classical music, while Miss Freda Kunze of Newark provided ragtime melodies. Present in the audience were E. S. "Ned" Brill, the bandleader of the Barnum and Bailey show, and Matt Meeker, a cornet player with keyboard skills who had been selected to play the calliope in the big show band.

The first circus use of an air calliope occurred during the March 22, 1913 matinee performance of the Barnum & Bailey Greatest Show on Earth at Madison Square Garden. The *Billboard* review of the event recorded the addition of the instrument to Brill's band noting "If there is one instrument in the world that is indigenous to the show business it is the calliope. There is circus in its every note."[6] Ori cited Brill about the same time, his ad in the March 22 The *Billboard* noting that Brill felt a brass band was incomplete without a calliope. The Ringling instrument debuted in Chicago on April 5, 1913, and thus did a long association between the circus and the air calliope have its origin.

Figure 7. The underside of the largest Pneumatic whistles were usually stamped with the year of manufacture and buyer. This view under the #1 whistle of the big Ori calliope confirms its heritage. Author's collection.

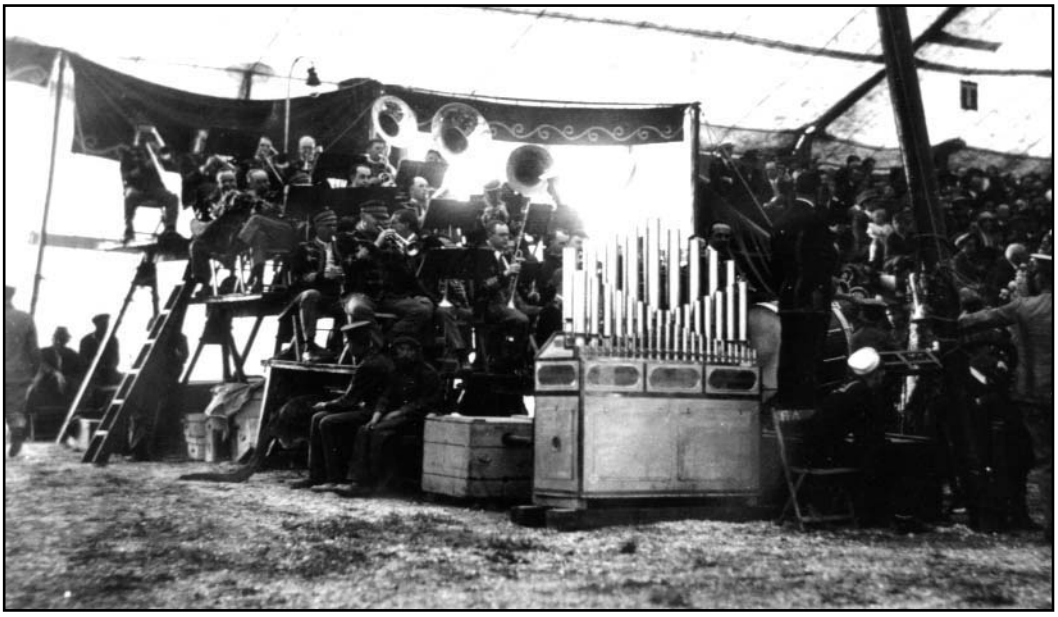

Figure 8. The 1914 Pneumatic calliope was placed in front of the big show band, on the ground, as shown in this circa 1924 view. Pete Mardo photograph, Circus World Museum.

Following the placement of his calliopes on the Barnum & Bailey and Ringling shows, Ori encountered little difficulty in selling additional instruments to the other big shows. Sells Floto, Hagenbeck-Wallace, John Robinson, Sparks, Barnes, and others all procured Pneumatic calliopes during the mid 1910s, making Joe Ori a welcome visitor to many circus lots. The Pneumatics proved to be reliable calliopes, serving thirty to forty years in hard circus use before expiring from abuse or being retired to a winter quarters barn or preservation. At least three of these instruments survive in public or private ownership today.

The Ringlings intended to use the new calliopes both to augment the big show band and to provide more music in the daily street parade. To facilitate this, they arranged for the construction of a new wagon by their cousins, the Moeller brothers, who operated a wagon building concern in the Ringling winter quarters city of Baraboo, Wisconsin. The wagon's design resembled the full roof steam calliope wagons built by Henry Ohlsen in the early 1890s. It featured a large kidney shaped opening on the sides, with a carved oval below the center of the hole. The sides and back door were covered with carvings typical of those the Moellers utilized to decorate the cages and dens built for the Ringlings. The air calliope was placed crosswise, in the center of the wagon, with the player facing the rear. The blower and gas engine were located behind the player, in the front half of the wagon. Later, the instrument was turned around, so that the player faced towards the front of the wagon, and wasn't seated beside the gas engine.

Figure 9. Though many calliope players faked their playing, anyone playing in Merle Evans played from the music, as arranged by the legendary bandmaster. Little music was specifically written for calliope, the player usually followed the solo cornet part. Photo: Author's collection.

A new wagon was also constructed to house and carry the Barnum & Bailey calliope, but the identity of its builder has not been confirmed. Its overall execution, however, suggests a strong influence of the Moeller firm. Simpler in style than the Ringling vehicle, the ornamentation on the Barnum & Bailey wagon consisted primarily of scroll carvings. Photographs of the Barnum &

Bailey air calliope wagon are relatively rare, in contrast to the rather common views of the Ringling wagon.

The adoption of the air calliope as a parade feature didn't always meet with enthusiasm. When the Ringling Bros. circus played Atlanta on October 9, 1916, the air calliope's presence in the early part of the parade caused many Georgians to think the big march had come to a premature end. According to the reporter present, "everybody who heard it coming said 'that's all I reckon,' and started to go home, for everybody knows that the steam piano is the very last thing in a circus parade." The scribe noted it was the Pneumatic Calliope Co. instrument that had caused the confusion. Everyone was elated when the parade didn't end but continued, and were happy when "The regular calliope came along at long last, where it belonged. It was a real steam piano, with black smoke rolling out of the stovepipe and the whistles moaning and screeching and everybody was pleased. There was considerable criticism of the way the circus people tried to fool everybody by running in two calliopes on them."[7]

The desire to avoid shifting the air calliope from the parade wagon to the bandstand, combined with an apparent desire for an instrument more suitable for use in the band led to the construction of a 49-whistle Pneumatic calliope for the 1914 Barnum & Bailey show (**Figure 6**). The first documented appearance of it is in a pan view of the show's band published in the September 11, 1915 issue of *Billboard*. Looking like an enlarged 43-whistle unit, it is identifiable by a greater width and the presence of three oval access ports below the whistles. The standard 43-whistle Pneumatics had only two ports in this location.

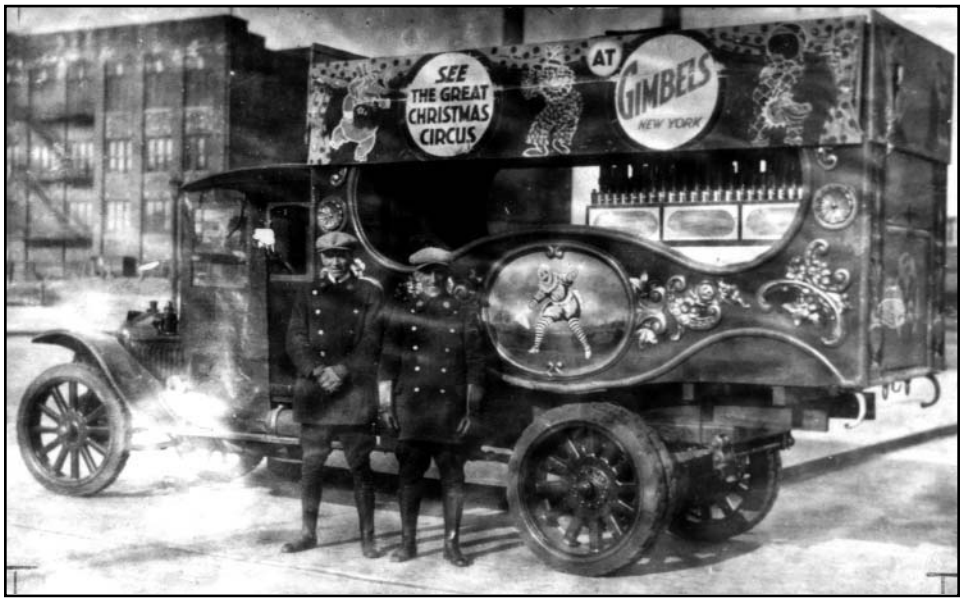

Figure 10. For one notable Gimbel's Christmas celebration the 49-whistle Pneumatic was remounted in the Ringling calliope wagon, which in turn had been specially placed on a truck chassis. A. Bruce Tracy collection.

Bandleader Brill was the apparent advocate for the new instrument, Ori's nephew recalling years later that Brill visited the Pneumatic plant many times during its construction. Except for one known instance, the 49-whistle Pneumatic was used exclusively in the big show band, being disassembled and placed in a trunk after the show, and transported in the baggage wagon that carried the other band props. The big calliope was used continuously through 1941, when it was replaced by a Hammond organ as part of the North brothers effort to modernize the show. It was then used on the side show front in the 1950s, after which it was relegated to storage at the Sarasota winter quarters where it was rescued from oblivion by the late Thomas A. White, who donated the historic instrument to the Circus World Museum in 1974. The sound of the calliope can be heard on a recent compact disk issued by the museum titled "Circus Day Music."

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Ned Brill left the Barnum & Bailey show following the 1918 tour and the Ringlings secured Merle Evans as bandleader of the new Ringling Bros. and Barnum & Bailey Combined Shows band for 1919. Holding the bandleader's job for an incredible period, through 1969, Evans was in daily contact with the big Ori instrument for 22 years and provided information concerning its use in the band. Evans indicated that in 1919 the calliope was played in the key of C, which was changed to B flat in 1920. This allowed the player to directly use the solo cornet part of the music without having to transpose it. The player did not "fake" any music, following the solo cornet parts and thus giving keyboard playing cornet players the inside track for the calliope position.[8]

The success and popularity of the Pneumatic calliope on the 1913 Ringling show inspired Charles Ringling to write his brother Al concerning the possibility of adding a second unit in 1914. Charles stated "I would also add another small air calliope on as a small a wagon as possible, which would be used in the side show, and in the street parade, and as they are played all the time they add life to the parade and it would be a sure money getter in the side show. If we wanted to add two more and cut out the steam calliope it might be a good thing. It would save buying coal, hauling water, getting up steam, and a six-horse trip for the baggage stock. They are always in tune and sound much better than the old style calliope."[9] The second air calliope would also permit the show to dispense with the ticket sellers band which, from Ringling's description, was a rather unmusical ensemble. Similar thoughts of eliminating the

steamers had occurred to other showmen following the advent of a successful air calliope. This opportunity to replace the steamer was offered by Norman Baker, a Muscatine, Iowa, a builder of air calliopes who had just entered the business.

Baker was Ori's only serious competition in the air calliope business before 1920. His firm, the Tangley Manufacturing Company, produced a calliope that mimicked those of Ori, also having 43 whistles ranging from F to B and an adjustable siren whistle. It featured a simpler construction, having all the whistles mounted at one level, instead of in Ori's stepped, cascading arrangement. Tangley's first customers are unknown, but it does not appear that the legend specifying the first buyer as carnival proprietor James Patterson is accurate. The question of which calliope, Ori's or Bakers's, was better is a moot point, but the mass produced Tangley calliope would eventually far outsell the handmade Pneumatic calliope. Prior to 1920, the prolific Tangleys would outsell the Pneumatics everywhere except in the circus field, where Ori's machines were the rule rather than the exception.

Figure 11. The wear and tear of circus use required that show calliopes be periodically repaired. Joe Ori is shown here regulating his 49-whistle creation in the late 1930s. Newark Public Library.

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Waiting to investigate the steamer replacement for one year, on August 17, 1914 one of the Ringlings finally wrote the Tangley firm regarding the air calliopes they built, apparently inquiring about the largest and most powerful instrument they could produce.[10] Baker proposed building a super compressed air calliope with two keyboards and 50 whistles, ranging in size from several inches to four feet long, tuned for operation at 10 p.s.i.[11] The complete calliope with a blower and gas engine was priced at $2,175.00, almost four times the price the Ringlings had paid for steam and air calliopes in 1913. Tangley's sales pitch was that the air calliope would "enable you to do away with your large steam machine and its smoke and fuel troubles.[12] In a follow-up letter Baker advised that the Sells- Floto show was contemplating buying an even bigger air calliope from Tangley, a statement made to arouse concern in the Ringling camp that one of their biggest competitors might have a machine superior to that owned by the Ringlings.[13] It was Al Ringling, the recipient of Charles' original idea, who advised Tangley they would continue using their steam calliope and "defer the building of the big machine for another season."[14]

Sells-Floto also passed up the big Tangley machine and later that same year Charles Sparks threatened to replace his steamer with an air calliope, only to relent and purchase a bigger steam calliope than the one he owned previously.[15] To the best of our knowledge, only one air calliope replaced a steam calliope until well into the 1920s, the big steamers continuing to hold down the final position in the circus parade until the wagon style parade itself passed from the scene. There can be no doubt, however, that the invention of the air calliope limited the sales of new steam calliopes to all but their traditional roles in the railroad circus, on excursion steamboats and aboard floating theatres. The air calliope was the instrument preferred by the motorized circuses from the 1920s to the 1950s.

To complete the story of the first air calliope wagons, when the separate Ringling and Barnum & Bailey circuses were combined into one show following the 1918 season, three air calliopes became available for the 1919 tour. Aware of their entertainment value, the Ringlings used all three in both 1919 and 1920, the big 49-whistle Pneumatic in the band the two 43-whistle Pneumatics and their wagons in the parade. After the 1920 tour and the abandonment of the parade for 1921, the two 43 whistle machines and their wagons were relegated to storage at the show's Bridgeport winter quarters.

One of the late Bill Woodcock's many recollections concerning the transfer of circus assets involved the sale of an air calliope from the Bridgeport winter quarters to the Nat Reiss carnival in the 1920s. Woodcock's source placed it at 53 whistles, a size popularized in the mid-1920s by E. A. Harrington and the National Calliope Company. There is no confirmation that Ringling-Barnum ever bought an instrument from either of those builders. Therefore, it is possible the instrument was actually one of the 43-whistle Ori calliopes of 1913, probably the one that originally resided in the Ringling wagon. This hypothesis is based upon the presence of the 49-whistle Barnum & Bailey Pneumatic in the Ringling calliope wagon during a special promotion for a post 1918 Christmas sale at the Gimbel New York store (**Figure 10**). For the Gimbel appearance the Ringling wagon body was removed from its original wagon gears and placed on a straight bed truck. The width of the 49-whistle Ori precluded placing it in the normal crosswise manner, and thus it was situated in a rather awkward longitudinal position in the rear of the body.[16] If the original 43-whistle instrument was still available, it is logical that it would have been in the wagon, and not the oversized 49-whistle calliope. Unfortunately the dates of both the Reiss purchase and the Gimbel promotion are unknown at the present time.

Joseph Ori continued to build calliopes through the 1920s but the onset of the depression wiped out much of the demand for new instruments.

The Ringling air calliope wagon appears intact in a photograph taken after the February 2, 1924 fire that destroyed one of the large barns at the Bridgeport winter quarters, negating the possibility that it was destroyed in that conflagration. Since the 49-whistle Ori calliope remained a Ringling-Barnum fixture until years later, the chance that the Ringling wagon went permanently to Gimbel is not rational. It was also not included in the large group of wagons sold to circus man George Christy in 1925, a sale that marked the beginning of the end of the Bridgeport quarters. Except for its possible inclusion in the sale to the Reiss carnival, nothing has been found to indicate the ultimate disposition of the 1913 Ringling air calliope wagon.

Another note provided by Bill Woodcock pins down the final days of the 1913 Barnum & Bailey air calliope wagon. It, too, survived the 1924 Bridgeport fire. Later, it was on the train that departed from Bridgeport for Sarasota, Florida on May 3, 1927 carrying away usable equipment still remaining at the Connecticut site. At an undetermined date, one of the Ringling-Barnum assistant boss animal men cut off the top of the wagon and converted it into a manure wagon for use at the Sarasota quarters, much to the chagrin of show manger Carl Hathaway who had intended to sell it. The disposition of the instrument it once carried remains uncertain.

Joseph Ori continued to build calliopes through the 1920s but the onset of the depression wiped out much of the demand for new instruments. He could no longer support himself on the repair business. Seeking other employment, Ori continued to repair calliopes as a sideline until his death (**Figure 11**). Today only a few Pneumatic calliopes survive, but their musical quality bears testimony to the skill and care of the man who made them.

Notes:

1). Q. David Bowers, *Encyclopedia of Automatic Musical Instruments* (Vestal, N.Y.: Vestal Press, 1972) pages 838-844, remains the best general discussion of air calliopes currently available, but the material given is necessarily limited by the scope of Bowers' volume.

2). Letter from Joseph E. Dupont to Ringling Bros. dated January 9, 1913. All of the Ori-Ringling correspondence is in the collection of Fred D. Pfening III.

3). Letter from Ringling Brothers to Samuel McCrackin dated January 11, 1913.

4). Letter from Samuel McCrackin to Al Ringling dated January 16, 1913.

5). Letter from Joseph E. Dupont to Ringling Brothers dated January 16, 1913.

6). *The Billboard*, March 29, 1913, page 6.

7). Dudley Glass, "Calliope Near Parade Front Just One of Circus Surprises: Another One In Usual Place," *The Atlanta Georgian*, October 9, 1916, courtesy Robert Brisendine.

8). Letters from Merle Evans to the author dated May 19 and June 9, 1983.

9). Letter from Charles Ringling to Al Ringling dated August 26, 1913, Fred D. Pfening III collection.

10). The Ringling letter of August 17, 1914 is lost. The inquiry is discernable from the Tangley response dated August 14, 1914. The Baker-Ringling correspondence is in the Fred D. Pfening III collection.

11). Letter from N. Baker, Tangley Manufacturing Company to Mr. Ringling dated October 4, 1914.

12). Ibid.

13). Letter from N. Baker to Mr. Ringling dated October 19, 1914.

14). Letter from Al Ringling to Tangley Manufacturing Company dated November 11, 1914.

15). *The Billboard*, December 12, 1914, p. 43.

16). A. Bruce Tracey Collection.

Fred Dahlinger is Director of Historic Resources and Facilities at Circus World Museum. The collections there include both the 49-whistle Ori illustrated here and an incomplete 1911 instrument, the oldest known to exist.