

Marching Through the Early History of the Sousaphone

Dave Detwiler, 27 March 2022

For about a century now, the most visible member of the tuba family-at least in America-has been the Sousaphone. Today, for example, if you catch a glimpse of any major college football halftime show, you'll see upwards of 20 huge metal bells gleaming in the fall sunshine. Or if you stay up late to watch *The Tonight Show Starring Jimmy Fallon*, you'll see one of those very same marching horns featured in the house band, The Roots.

But that's about where the familiarity ends. Very few people today know that the Sousaphone originally had a bell that pointed straight up; or that it was created not for marching, but for use in a concert band; or that it was named after the most popular entertainer of the day-John Philip Sousa ("Who?" I'm often asked). And even among those who *do* know these things, there remains more than a little confusion regarding the earliest history of the Sousaphone. My purpose in writing this article, therefore, is to clear up that confusion and restore the honor of this often-maligned member of the tuba family.

Atten-hut! -A Horn Is Born

The public history of the Sousaphone appears to begin with an unassuming little paragraph in *The Music Trade Review*, dated January 22, 1898, and titled, quite simply, "The Sousaphone." Here's what it says:

In honor of John Philip Sousa, the great bandmaster, C.G. Conn has made a new circular double B flat bass, which he has entitled the Sousaphone. It will be a feature of Sousa's band during the forthcoming European tour. We may say, by the way, that all the members of Sousa's band have recently been supplied with handsome silver-plated instruments from the Conn factory.[1]

Due to the impending war with Spain, Sousa chose to put his "forthcoming European tour" on hold. But the strange new bass-which, a few years later, the bandmaster described as "a BBb tuba of modified helicon shape adapted to concert purposes"[2]-did start appearing in 1898 at Sousa Band concerts throughout America (Fig. 1).[3]

Fig. 1. Sousa with his band in 1898, showing the "Sousaphone" for the first time (Sousa Archives and Center for American Music, University of Illinois)

The newly christened "Sousaphone" was played by Herman Conrad, the German-born "Primo Basso" of Sousa's band from 1892 through 1903, about whom we know very little.[4] Details on the horn are also scarce, other than what we can determine visually from photographs (that it has four valves, for example), and what we find in a few newspaper articles from around that time-that it cost "in the neighborhood of \$250,"[5] and that "it stands 5 feet high, measures four feet across, and its bell is twenty-six inches in diameter." [6]

But there is no question that Conrad loved the horn. In the April 1900 edition of *C. G. Conn's Truth*, he refers to it as the “new Wonder Monster Sousaphone” (presumably because Conn BBb tubas from that era were called “Wonder Monster Bases”) and declares it “the most perfect instrument I ever played on.” He goes on to boast that “the tone is rich, round and full, especially the low register, and best of all in good tune.” [7] Accompanying Conrad's testimonial is the earliest known image of this new instrument (Fig. 2).

Fig. 2. Conn's first Sousaphone
(Mark Overton at www.saxophone.org)

Forward, March! -A Horn on the Move

While the Sousa Band appeared on parade only about ten times in its 40-year history,[8] as many as four of those times may have featured Conrad with his spectacular new “Monster Sousaphone.” It can be seen in a photograph from September 30, 1899, showing the parade honoring Admiral Dewey for his part in America's victory in the war with Spain (Fig. 3, on the far left). And it most likely appeared on the march twice the year before—first as the Ohio National Guard departed for the war, and later when the Pittsburgh regiment returned from it. Of course, no one at that time could have imagined that the future use of this instrument would be almost exclusively in a marching context.

Fig. 3. The earliest known photograph of a Sousaphone on the march (Sousa Archives and Center for American Music)

And then there was that first European tour, for which the Sousa Band finally set sail on April 25, 1900. As the official American band for the Exposition Universelle in Paris they marched yet again, but spent the rest of their time giving concerts not only in France but also in Germany, Belgium, and Holland.

Both the Sousa Band and the Sousaphone made quite an impression on that tour—especially in Germany, as noted in a Dresden newspaper on June 16, 1900:

The tone color of the Sousa Band differs materially from that produced by German brass bands, due to its visible difference in constitution. This is most marked in the case of the brass instruments which give out a softer and less blaring tone than is heard from our German musicians. Mr. Sousa is himself a skillful designer of instruments, and is—for instance—the inventor of the monster helicon, which is named after him, the “Sousaphone.” To this better equipment and to the masterly art with which the musicians control and subdue the volume of sound at their leader's behest, is due satisfying tone moderation of the orchestra. The result is that it is possible to listen with delight to the band's performance of compositions usually played only by string orchestra.[9]

A year later, from October 4 through December 13, 1901, Sousa and his band toured England and Scotland for the first time, and that trip caught the attention of London's *Illustrated Mail*. In an article dated October 12 and titled “Sousa's Wonderful Band,” we read the following:

The instruments used in the band include several never seen in an English musical combination. For instance, there is the “Sousaphone,” an immense wind instrument weighing 33lb. It is a modification of the helicon bass, and was invented by Mr. Sousa. It requires a strong man to play it, and Mr. Sousa found him in Mr. Herman Conrad, an ex-German soldier, who stands 6ft. 4in.[10]

Conrad is then featured in a photograph emphasizing his considerable height (Fig. 4). But a closer look at this image reveals a very different valve cluster than the one seen in the earliest photograph of Conrad with the horn (Fig. 2). In fact, these changes were made prior to the first European tour, over a year earlier.

Fig. 4. The Conn Sousaphone in London, 1901 (the Bodleian Library at Oxford University)

Mark Time! -Getting It Just Right

As much as Conrad and others raved about this new instrument, Conn apparently continued to tinker with the valve cluster, between the years 1898 and 1903, in order to get things just right. Twenty years later, while discussing Sousaphone history in the *Conn General Catalog*, the company explained that “several experiments were necessary to adjust the proportions to secure the desired quality of tone and accuracy of scale.” [11] Conn, it seems, did not share Conrad’s view that the initial version of the Sousaphone was “perfect.”

We get a much clearer view of the modified version of Conn’s first Sousaphone in a photograph of Conrad with the horn from around 1902 (Fig. 5).

Fig. 5. Herman Conrad with a modified version of Conn’s first Sousaphone (Steve Dillon)

The valve cluster is a perfect match to the photo from England with the exception of the straps that we now see (their function is not clear). But what is most notable about this image is the engraving of the word “Sousa,” or perhaps “Sousaphone,” as it wrapped around the bell (also faintly seen in Figs. 1 and 2). The message was loud and clear-this horn had everything to do with the great bandmaster.

And Conn still wasn’t done tinkering. By 1903 we see yet another modification of the valve cluster, although this time it appears to have been part of an entirely new four-valve Sousaphone (Fig. 6). But finally, it seems, Conn was satisfied, as that version remained in Sousa’s band to the very end of its run in 1931.

-Fig. 6. The Sousa Band in London, 1903, showing the latest and final version of Conn’s four-valve “Monster Sousaphone” (U.S. Marine Band Library)

Parade Rest! -Conn Was the First

While it took a few years to come up with the final version, it seems clear enough that C. G. Conn created the first Sousaphone in 1898 for use in Sousa’s band-and this is exactly what the Conn company of Elkhart, Indiana, claimed all throughout its history (and even today, the Conn-Selmer company makes this claim[12]). More specifically,

we are told that the first Sousaphone was designed and built by Ted Pounder, who went on to become a 60-year veteran of the company.[13]

And this was just the first of several apparent firsts for Conn and the Sousaphone in those early years. Others include:

- 1902-the first production-model three-valve version, dubbed “The Great Conn Sousaphone Double Bb Bass,” and listed from \$175 to \$250, depending on the desired finish.[14]
- 1907-the first Eb Sousaphone, featuring four valves, and hailed as the “Giant.”[15]
- 1908-the first bell-front horn (Fig. 7, the only kind we have today), which was called “The Helicon BBb Bass Wonderphone” until 1918, at which time it was renamed “The Sousaphone Grand.”[16]

Fig. 7. Conn’s first Wonderphone Helicon Bass, 1908 (mtr.arcade-museum.com)

The only problem is that the first “first” above-the claim that Conn created the first Sousaphone in 1898-is simply not true. While we can affirm that Conn built the first *commercially available* Sousaphone,[17] it was actually one of his rivals, J. W. Pepper of Philadelphia, who created the first Sousaphone (Fig. 8).

About Face! -Conn Was Not the First

In the August 30, 1922 edition of the *Christian Science Monitor*, there is an article intriguingly titled “Sousaphone Seen as Possible Substitute for Upright Tuba,” in which Sousa himself recounted this:

The Sousaphone received its name through a suggestion made by me to J. W. Pepper, the instrument manufacturer of Philadelphia, fully 30 odd years ago. At that time, the United States Marine Band, of Washington, D. C., of which I was conductor, used a double B-flat bass tuba of circular form known as a “Helicon.” It was all right enough for street-parade work, but its tone was apt to shoot ahead too prominently and explosively to suit me for concert performances, so I spoke to Mr. Pepper relative to constructing a bass instrument in which the bell would turn upwards and be adjustable for concert purposes. He built one, and grateful to me for the suggestion, called it a Sousaphone. It was immediately taken up by other instrument makers, and is today manufactured in its greatest degree of perfection by the C. G. Conn Company, of Elkhart, Ind.[18]

Here we learn that:

- Sousa himself came up with the idea for the horn.
- This was apparently while he was still leading the Marine Band (1892, his last year with that unit).
- It was built by Pepper, not Conn, although Sousa came to prefer Conn Sousaphones.
- It was created for concert purposes, not marching.

· Mr. Pepper honored Sousa by calling it a “Sousaphone.”

Fig. 8. J. W. Pepper invoice showing the factory where the first Sousaphone was built (J. W. Pepper company)

Six years later, Sousa published his autobiography, *Marching Along*, in which he said something similar, although this time choosing not to name J. W. Pepper for some reason:

I strove in every way to improve the quality and variety of the instruments. Way back when I was with the Marines they used a Helicon tuba wound around the body. I disliked it for concert work because the tone would shoot ahead and be too violent. I suggested to a manufacturer that we have an upright bell of large size so that the sound would diffuse over the entire band like the frosting on a cake! He designed a horn after that description and it has been in use ever since, by many bands, under the name of the Sousaphone.[19]

These are the only two times we find Sousa weighing in on the history of the horn that bears his name. But is there any additional evidence to confirm that it was J. W. Pepper who built the first Sousaphone? Indeed, there is.

Sound Off! -Giving Pepper His Due

Don Johnson, the foremost collector of J.W. Pepper instruments and publications, has discovered what may be the very first reference to the Sousaphone. [20] It is quietly tucked away, with no fanfare whatsoever, in a late 1895 or early 1896 edition of Pepper’s *Musical Times and Band Journal*. Here’s what it says:

In a letter, dated October 14, 1895, Mr. Herman Conrad, the famous bass player of Sousa’s Peerless Concert Band, writes as follows concerning the new instrument, the Sousaphone, which was made by J.W. Pepper, under Mr. Sousa’s special instructions: “The Sousaphone has become the talk of the town and gains in reputation daily. The Sousaphone is a splendid instrument. It is well in tune and has a wonderful carrying power. The photographs of the Sousaphone are in the windows of one of the principal music stores in Olive Street (St. Louis), which is *the* street of this city, and are a great attraction.”[21]

The letter was written during the last week of the Sousa Band’s 46-day residency at the St. Louis Exposition in 1895. But was Conrad actually playing the Sousaphone in those concerts? It is perhaps significant that he mentions the photographs, and not the horn itself, as the “great attraction” at that time. But either way, we are told that a Sousaphone existed more than two years before Conn built his “Monster.”

A few months later, in April 1896, the cover of Pepper’s *Journal* featured “Prominent Members of Sousa’s Peerless Concert Band Who Use and Endorse the J. W. Pepper Premier Band Instruments.” In the top left corner is a headshot with the caption, “Herman Conrad, Sousaphone, Sousa’s Band.” [22]

Finally, somewhere in this time period (late 1895-early 1896), Pepper tried to properly introduce his remarkable new instrument to the world. His beautifully

produced volume titled *Portraits of Great Artists* features 52 pages of photographs and brief testimonials of great musicians who favored Pepper instruments. But one entire page is an announcement for “The Sousaphone, Original Invention of the Famous Bandmaster, John Philip Sousa, Played by Herman Conrad, Used Daily in Sousa’s Peerless Concert Band.”^[23] Whether this historic notice appeared anywhere else is unknown. But at the center of the page we are treated to the very first look at Conrad with the new horn (Fig. 9).

Fig. 9. Herman Conrad with the very first Sousaphone in 1895 (J. W. Pepper company)

Below the image is the following explanation:

This instrument was made from the plans and under the direction of the famous bandmaster, John Philip Sousa. It is an original idea of his, and he considers it the best method and only correct way of obtaining the full tonal quality of the Helicon BBb Bass in band. We feel proud of the honor that Mr. Sousa has conferred in selecting us, from among the large American band instrument manufacturers, to receive the order for making this special instrument: thus showing his confidence in our ability to successfully make a perfect Sousaphone. The instrument is played by Herman Conrad, the first BBb Bass of Mr. Sousa’s band. The other large instruments used in this band were also made by Mr. Pepper. The Sousaphone is a Helicon BBb Bass of the largest size made.

This squares with most of what Sousa would say 27 years later in the *Christian Science Monitor*, quoted earlier, where he names Pepper as the one who built the first Sousaphone. So that should settle it, right?

Band, Halt! -Where Did It Go?

Much to my surprise, I was unable to find a single mention of Pepper’s new horn in any newspaper from that time period. ^[24] Further, there are no photographs of a Sousaphone “in action” in the Sousa Band prior to 1898, at which time the new Conn Sousaphone appears and is treated as if it was the first. Pepper claimed that his Sousaphone was “used daily in Sousa’s Peerless Concert Band,” but there is apparently no evidence to support this claim. In fact, the horn seems to disappear shortly after being built. Why?

We can’t say for sure, but there are a few clues to consider. First of all, Sousa may not have been a fan of the Pepper horn. We know that he was seeking to create a particular sound with the new instrument—one that would be less “violent” than what a helicon produced, and more able to “diffuse over the entire band like the frosting on a cake” by having a larger upright bell than a standard tuba. It may be that the Pepper horn simply did not accomplish this well. It is notable that the only quote that Pepper was apparently able to get from Sousa regarding Pepper instruments around that time reads as follows: “All of the Pepper Instruments in use in my Band are thoroughly satisfactory” (Fig. 10).^[25] Not exactly a ringing endorsement!

Fig. 10. Sousa on Pepper instruments (J. W. Pepper company)

Second, it may also be that Conrad was not a fan of Pepper's horn. While, in his letter of October 14, 1895, he refers to the Pepper Sousaphone as a "splendid instrument," it is hard not to read between the lines when Conrad praises the first Conn Sousaphone, as well as the Conn company, in 1898 (portions of which I quoted earlier, but here is the full reference):

Dear Mr. Conn:-After testing your new Wonder "Monster Sousaphone," I can decidedly say it is the most perfect instrument I ever played on. The tone is rich, round and full, especially in the low register, and best of all in good tune. Allow me to congratulate you on being the only manufacturer in America who can ably supply the demands of a professional musician. It will save all tuba players money, and time, of importing their instruments from Europe. I am fully convinced that you lead the world in the manufacture of band instruments. Herman Conrad, Sousa's Band.

Finally, Paul Bierley, in his magisterial resource, *The Incredible Band of John Philip Sousa*, writes, "The first sousaphone was apparently used only for a short time for reasons not mentioned in any of Sousa's writings. The use of such an instrument would surely have been mentioned in reviews of concerts, and it is reasonable to assume that such accounts would have been added to the band's press books." But, as I said earlier, no such references have been found regarding the Pepper Sousaphone. And Bierley goes on to observe that "the Pepper company had financial difficulties during the 1890s, perhaps explaining why their sousaphone was not put into production."^[26]

Putting all of these clues together, maybe it was as simple as this: Pepper did not have sufficient funds or time to spend on his Sousaphone for it to meet the standards required for Sousa's band, so it quickly dropped out of sight.

But did Conn not know about the Pepper Sousaphone when he built his own version a few years later? Again, we can't say for sure. As noted earlier, the Conn company has proudly maintained throughout its history that it created the first Sousaphone. But did they not keep up on Pepper news in the 1890s? Or is it possible that Pepper's horn was never actually used in Sousa's band-or anywhere else for that matter-and so Conn's Sousaphone received all of the attention, being the first to actually be seen and used in public? And did this perhaps encourage Conn to claim that his horn, for all practical purposes, was the first?

Once more, we can only speculate. All I have come across is evidence that Conn treated Pepper as a hated rival around that time, and maybe that factors in somehow. In 1893, at the World's Columbian Exposition in Chicago, both Conn and Pepper won awards for their band instruments.^[27] But in the aftermath of that honor, Conn claimed that Pepper was "governed by no squeamish scruples, nor has he much regard for the truth," as he was "attempting to deceive and to induce people to believe that his horns are equal to other American instruments" (Conn's, I presume?!). More bluntly, Conn asserted that "it has been stated time and again by many competent judges that Mr. Pepper made cheap horns," and that he published "bogus testimonials" for his instruments.^[28] My goodness!

At Ease! -Pepper's Horn Resurfaces

But none of this changes the fact that J. W. Pepper did indeed build the first Sousaphone. And that historic horn (unlike Conn's first horn, as far as I know) can be seen today-currently at the J. W. Pepper building in Exton, Pennsylvania (Fig. 11).

The story of how it resurfaced in recent years is almost too good to be true. On a quiet Sunday afternoon in the spring of 1973, John Bailey, a 24-year-old tuba player and recent graduate of West Chester State College, joined his mother and sister for an outing to Renningers Flea Market in Adamstown, Pennsylvania. John had moved back home to Wernersville, near Reading, where he began teaching and occasionally subbing with the Ringgold Band-yes, the band that holds the distinction of being the very last one that Sousa conducted before he died in 1932.

John wasn't looking to buy anything that day, but he noticed a vintage three-valve "raincatcher" Sousaphone, heavily tarnished and covered with dust, hanging upside-down from the rafters by a single loop of binder twine! When he was told that it cost only \$50, he raced home to get the money. His plan was to get it into playable shape and have an interesting horn for use in parades.

Fig. 11. The original Sousaphone at J. W. Pepper today.

The Author with the original Sousaphone

In cleaning up the Sousaphone, John discovered that it was unfinished, that is, just raw brass, which further suggests that the horn was never actually used in public.[29] He also found that the front of the bell featured some beautiful and highly significant engravings (Fig. 12).

Fig. 12. A close-up of the bell engravings

At the top, barely visible, is a portrait of Sousa wearing the uniform that was first used in 1894 (the exact image we see in Fig. 10), and so the horn could not have been created before that year (unless, of course, the engraving was added later, but that seems unlikely). Below that is a twirling ribbon that contains, separately, the words "Sousa" and "Phone"-the name Pepper chose for this special instrument. Next are the words "Highest Medal & Diploma Chicago 1893," referring to the award won at the World's Columbian Exposition. This has led many to conclude that the horn was built in that year, but we just ruled that out. Plus, many Pepper instruments made later than this Sousaphone boast of this award on their bells, and that's all that is going on here-a little boasting of recent accolades.

Finally, it says "Premier J.W. Pepper Maker Philadelphia and Chicago," and then gives the serial number, 8800 (also found on the second valve casing), which supports what we already know-that the instrument was built in 1895.[30]

For almost 20 years, John Bailey kept that historic horn in storage, collecting dust once again. Along the way, he received confirmation from experts that he had something special, but he never got around to having it restored and displayed. But then, in August 1991, John gladly sold the horn back to its maker, the J. W. Pepper

company, who proceeded to have it restored, including adding a lacquer finish. Finally, after 96 years, the first Sousaphone was ready to go public!

Fig. 13. Pepper finally starts selling Sousaphones-a decade later (J. W. Pepper company)

As far as we can tell, Pepper never made another horn like this one. It truly is a one-of-a-kind treasure. In fact, it wasn't until late 1905 that Pepper finally tried his hand at selling Sousaphones.^[31] But at that point, he chose to import, rather than build, a very different BBb Sousaphone, along with something never before seen in America-an Eb Sousaphone (Fig. 13; sorry Conn, your Eb horn wasn't the first of its kind either!).^[32] And while you probably can't read the fine print above that massive 28-inch-diameter bell of the BBb horn, it reveals Pepper's frustration with the popular view of Sousaphone history at that time. Taking aim at Conn, no doubt, he urges his readers to "remember that we are the sole originators of this style of basses, and all others are imitations of these magnificent large proportioned monsters."^[33] He even includes an 1890's-era photo of Herman Conrad to help make his point, although the great bass player had nothing to do with the Sousaphones featured!

I recently paid a visit to the original Sousaphone of 1895 in the lobby of the J. W. Pepper building and, with the kind assistance of Pepper historian George Class, measured the bore at 0.730 inches, the bell diameter at 24 inches, the height at 4 feet, 5 inches, and the weight at 24.9 pounds. I even had the chance to play it a bit, and it still seems to be "well in tune and have a wonderful carrying power," as Conrad put it when he first tried it.

Band, Dismissed! -Concluding Thoughts

For years, confusion and even controversy swirled around the early history of the Sousaphone. But no longer. We can now say with confidence that Pepper, who received the idea from Sousa in 1892, built the first Sousaphone in 1895. But for some reason it quickly faded away, attracting very little public attention. The idea was then picked up by or delivered to Conn, whereby he was able to produce, in early 1898, the first Sousaphone that appears in use by Sousa's band. This horn went through a few modifications in its early years, and remained the sole Sousaphone in Sousa's bass section until 1915, when we see a second Sousaphone added for the first time. Then, from 1921 onward, the entire section consisted exclusively of Sousaphones (Fig. 14).^[34]

Fig. 14. Sousa's bass section in 1927 (Sousa Archives and Center for American Music)

What is most important to remember, however, is what prompted the creation of this unique member of the tuba family that is almost never seen today in its original form. It certainly wasn't for marching purposes, nor was it to serve as a spectacle (although it must have been a sight to see!). Rather, it was to generate a bass sound that would help make the Sousa Band what it ended up becoming-the envy of the world! Sousa put it rather pointedly in 1922: "It is my belief, when properly played, that the Sousaphone tone mingles with better effect with the tones of other instruments, string and brass, than is the case with the ordinary bass instruments."^[35] Perhaps we should point the bells up again and let our Sousaphones return to the back rows of our concert bands and orchestras!

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[1] "The Sousaphone," *The Music Trade Review*, vol. 26, no. 4 (January 22, 1898), p. 11.

[2] John Philip Sousa, "Big Military Bands," *The Sunday Herald-Boston*, December 7, 1902, p. 39.

[3] The earliest known reference occurs in "Sousa and His Band in Concert at the Lafayette Square Opera House," *The Washington Post*, January 17, 1898, p. 7.

[4] Conrad was regularly listed among the dozen or so soloists, or "stars," of Sousa's band, and at some point in 1896 he "succeeded Tom Shannon as the executive officer of the band" ("Sousa's Plans for St. Louis," *The St. Louis Republic*, August 28, 1896, p. 7).

[5] "Sousaphone," *Portsmouth Daily Times*, January 4, 1899, p. 6. This article is referring to the *second* Sousaphone made by Conn and purchased by Joseph Dupere, who "always provides himself with the latest and most up-to-date instruments."

[6] Gustave Schlotterbeck, "March Master and His Method," *Pittsburgh Post*, September 17, 1899, no page number.

[7] "From Herman Conrad, Primo Basso, Sousa's Band," *C. G. Conn's Truth*, vol. 4, no. 8 (April 1900), p. 17.

[8] Eight are confirmed in Patrick Warfield, *Making the March King: John Philip Sousa's Washington Years 1854-1893* (Urbana: University of Illinois Press, 2013), p. 294, note 6, but a few more instances have been found in the Sousa Band Press Books by James L. Schardein, *The Legendary Sousa Band* (Denver: Outskirts Press, 2009), p. 25.

[9] "Sousa Concert," *Dresdner Nachrichten*, June 16, 1900, no page number (translated in C. G. Conn, *A Glimpse of Wonders and the Scenes of Their Creation* [Elkhart, IN, 1902], no page number).

[10] "Sousa's Wonderful Band – The Remarkable Careers of Mr. Sousa and Some of His Performers," *Illustrated Mail*, October 12, 1901, no page number.

[11] C. G. Conn, *Conn General Catalog "C,"* 1924, p. 27.

[12] <http://www.conn-selmer.com/en-us/about/history/our-brands/cg-conn/> , accessed November 27, 2014.

[13] "Original Sousaphone 'Stars' in Movie," *The Instrumentalist*, vol. 7, no. 5 (March-April 1953), p. 21.

[14] Advertised in *C. G. Conn's Truth*, vol. 5, no. 4 (December 1902), p. 27.

[15] "Conn's Sousaphone," *The Music Trade Review*, vol. 45, no. 26 (December 28, 1907), p. 42.

[16] "Wonderphone Family of Band Instruments," *The Music Trade Review*, vol. 47, no. 2 (July 11, 1908), p. 37. Conn stopped making Sousaphones with upright bells in 1926, but the company brought them back 30 years later, from 1957-1962, as an option (model 21K).

[17] Clarified by Margaret Downie Banks, *Elkhart's Brass Roots* (The Shrine to Music Museum, University of South Dakota, 1994), p. 3.

[18] H. I. B., Special Correspondence, "Sousaphone Seen as Possible Substitute for Upright Tuba," *Christian Science Monitor*, August 30, 1922, p. 8.

[19] John Philip Sousa, *Marching Along: Recollections of Men, Women and Music*, Revised Edition, ed. Paul E. Bierley (Westerville, OH: Integrity Press, 1994), p. 334.

[20] Don's collection is on display at the Marion County Heritage Center in Lebanon, KY (<http://mcheritagecenter.org/our-venue/don-johnson-exhibit/>). He plans to write a book on Pepper history.

[21] J. W. Pepper, *Musical Times and Band Journal*, vol. 13, no. 155, p. 24, no date indicated (Pepper often failed to include the date on his publications).

[22] J. W. Pepper, *Musical Times and Band Journal*, vol. 14, no. 159, stamped as follows: "Library of Congress Copyright Apr 29, 1896."

[23] There is no date on this publication, and it is possible that it included pages that were featured earlier in other Pepper publications. But one of the first pages features 26 "prominent members and former members of Sousa's Peerless Concert Band." In cross-checking when these men were active in the Sousa Band, we arrive at 1895 as the likely year that this volume was published.

[24] It doesn't help that there is nothing in the Sousa Band Press Books from September 4, 1894, to June 13, 1896. But various online searches for newspaper references to "Sousaphone" during this period produced nothing.

[25] I found this "endorsement" in numerous Pepper publications, as early as 1894, and as late as 1912.

[26] Paul Edmund Bierley, *The Incredible Band of John Philip Sousa* (Urbana: University of Illinois Press, 2006), pp. 55-56.

[27] As noted on the cover page of *The Music Trade Review*, vol. 18, no. 10 (September 30, 1893). For the full text of the awards given, see Frank D. Abbott (ed.), *Musical Instruments at the World's Columbian Exposition* (Chicago: Presto Co., 1895), pp. 231-32, and 238.

[28] "Pepper Piqued: His Horns 'Damned By Faintest Praise' by the Judges at the World's Columbian Exposition," *C. G. Conn's Truth*, vol. 2, no. 10 (June 1894), p. 17.

[29] I am indebted to Matt Brown, a professional tuba player in the Reading area and an expert on Sousa history, for this insight.

[30] Bierley, *The Incredible Band of John Philip Sousa*, p. 55.

[31] Details and images of these Sousaphones first appeared on the back page of J. W. Pepper, *Musical Times and Band Journal*, vol. 19, no. 222, which came out in late 1905.

[32] Don Johnson was able to track down one of the Eb horns, and has it on display at the Marion County Heritage Center (see note 20).

[33] J. W. Pepper, *Everything Musical: J. W. Pepper's Complete Catalogue* (Philadelphia, 1907), p. 14. This was the only year these Sousaphones appeared in a Pepper catalogue.

[34] Based on what we can see in photographs of the band. A fair question would be, Why didn't Sousa make use of more Sousaphones earlier than he did?

[35] H. I. B., "Sousaphone Seen as Possible Substitute for Upright Tuba," p. 8.