

The Double Bell Euphonium, I Beg your Pardon?

By Joshua E. Long

***"The disappearance of the
double-bell euphonium
from manufacturer's
catalogs is mysterious."***¹

Double Bell Euphonium?

What kind of musical instrument is that?

Double Bell Euphonium?



♪ This hybrid duplex instrument existed mostly and was quite popular in the "**Golden Age of Bands**," an era of time marked from 1880 to 1930 where bands of America were evolving, admired, and accepted by many. ²

**What is a
Euphonium?**

Early Instruments

- ♪ Early instruments were made from horns of cow, oxen, or goat.
- ♪ By piercing holes into the horns you could play a melody.
- ♪ The Cornett and Bugle were the two instruments that evolved from this creation. ³



Early Instruments



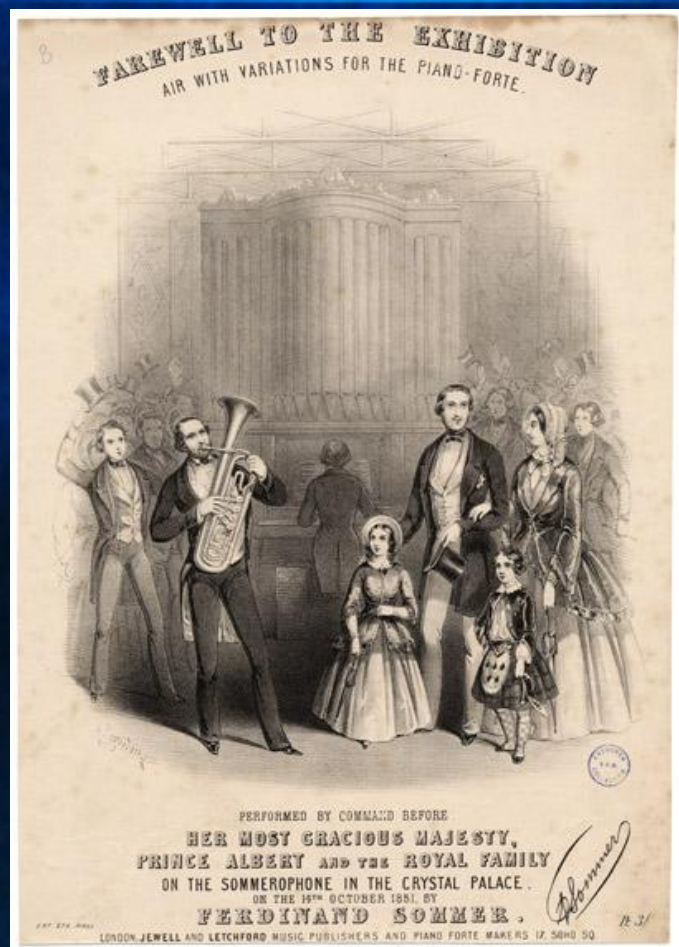
♪ Serpent (bass Cornett)



♪ Ophicleide (French for “young bull” – connection to cow horns) evolved.

“The ophicleide’s timbre, full and resonant, was characteristic of both the saxophone (which developed from it) and the euphonium (which replaced it)... considered the baritone/bass voice in the ensemble, was even at times called the euphonion or euphonium.” ⁴

Early Instruments



♪ In 1843
Concertmaster
Sommer of Weimar
designed a 3 valve
C, Bb, and A
baritone bugle called
Euphonion in
Germany, later
Barytonhorn.⁵

**Here Comes the
Double Bell Euphonium**

Double Bell Euphonium

- ♪ **Duplex Instrument – “two instruments of the same pitch but of different tone qualities, connected by a single leadpipe.”** ⁶
- ♪ Not to be confused with our modern French horn, which is a duplex instrument of two different pitched instruments (Key of F and Bb), connected by a one single leadpipe.

Evolution of the Double Bell Euphonium

Evolution

- ♫ **1788** Thomas Clagget (Irish), combined two trumpets (D and Eb) using the primitive valve mechanism. ⁷
- ♫ **1851** Gismore (London) combined a cornet and flügelhorn and McNeil (Dublin) combined a trumpet, cornet, and an flügelhorn all with a valve to redirect air stream through different shaped tubing and different types of bores. ⁸
- ♫ **1855** during a Paris Exposition, Pelitti, an Italian brass manufacturer, introduced a family of *Gemelli* (Italian for twins) cornet and flügelhorn; alto horn and Eb trumpet; baritone and valve trombone (ancestor of Double Bell Euphonium); and tenor tuba and bass trumpet. ⁹
- ♫ **1859** London Newspaper advertised an echo cornet made by Köhler cornet with second bulb-shaped bell (first to use multiple bells) which produced a distant echo effect (for soloists). ¹⁰
- ♫ **1859**, Adolphe Sax produced six valve, seven-bell instruments. ¹¹
- ♫ **1873** Vienna Exposition presented the first double-belled instrument – F. Hirschberg of Breslau introduced his B-C Clairon (flügelhorn in Bband cornet in C). ¹²

Evolution

- ♪ **1870's** Bohland and Fuchs (Graslitz) built the next direct ancestor to the double bell euphonium...combination of a baritone (or *baryton*), and a valve trombone (example did not survive). ¹³
- ♪ **1887** J.J. Chediwa (Odessa) invented *Lyrophone* with two tubes of the same length but with different bores...the narrow tube used for solo and piano passages, the wide bore tube for tutti and forte passages (Double Bell euphonium direct intended special effects use). ¹⁴
- ♪ **1888** C.G. Conn built a 5 valve double bell euphonium for Harry Whittier (John Philip Sousa Band [US Marine Band]). ¹⁵
- ♪ **By 1890** Higham (Manchester), produced the *Highamphone*, and Fontanie Besson (Paris), produced the *Doblophone*. In America, J.W. Pepper imported their instrument from C.A. Mouchel (Paris), and the Coleman Music Company imported from Missenharter (Stüttgart). ¹⁶
- ♪ **1890** Besson's stock report showed they made a *Basse et trombone* (probably a double bell euphonium). ¹⁷

Evolution

The "KING" Double Bell Bb Euphoniums

The Euphonium or Baritone is the "cello" of the Brass Family. Its rich harmonious tone is indispensable in any good band. Many players prefer the double-bell model, because of the varied effects made possible by its use. The Double-Bell Euphonium employs the small bell for echo effects, so charming in a baritone solo. The small bell operated by the extra valve produces this echo effect; in contrast to tone of the large bell. Due to its bore and size, its tone also closely resembles that of a trombone. Many band numbers are scored for a strong trombone section and the Double-Bell Euphonium enables the player to add the power of his instrument to the trombones by using the small bell. Both models shown may be had with the extra fourth register valve if desired.

"Artist Model" Double-Bell Bb Euphonium
No. 1160

This model is designed for the discriminating musician who desires the utmost in quality. It will hold its position for days because of its beautiful appearance but because of its distinctive tone. We have carefully proportioned the bore and valve system to co-ordinate with both bells. As a result every note is perfectly in tune and the tone is rich, resonant and powerful. The bend of both bells increases the mellowness of the tone and throws it forward. This feature is particularly desirable for solo playing or recording. If the extra fourth register valve is desired specify No. 1160 in ordering.

As the side action construction is much more to be desired than the top action we build the Double-Bell Euphonium only with the side action valves. Quick, responsive, and reliable valve action is assured for all valves are made of "Crystal Silver."

Regular Model Double-Bell Bb Euphonium
No. 1162

There are many players who prefer the straight bell instead of the curved and in the "King" Regular Model Double-Bell Euphonium they will find an instrument that will more than meet their requirements.

It is built just like the "Artist Model" in every way except the bend of the large bell. Both models, like all "King" Baritone, have the tongue slide in the mouth pipe with a water key at the lower part of the slide. This collects all water for easy removal and prevents it from entering the valves.

The "Crystal Silver" valves, and the opportunity, proper workmanship and the "King" high system, combined with perfect workmanship insure you that nowhere can you find a better Euphonium at any price than the "King." If the extra fourth register valve is desired, specify No. 1162 in ordering.

	No. 1160 Artist Model Euphonium	No. 1162 Regular Model Euphonium
Diameter of Large Bell	11 in.	11 in.
Diameter of Small Bell	9 in.	9 in.
Width of Valves	11 in.	11 in.
Length	30 in.	29 1/2 in.
Weight	8 lbs. 14 oz.	8 lbs. 12 oz.




♫ **By 1900...**duplex echo instruments being produced was only double bell euphoniums (most popular) and echo cornets.¹⁸ Makers such as King (H.N. White and Company), Holton, Beuscher, Distin, York, C.G. Conn, Martin, and Sliver Piston – Chicago.

♫ **1902** D.C. Hall and Company exhibited a complete line of echo instruments.¹⁹ Double Bell Euphonium combines "a conical (Cornett Family) euphonium and a cylindrical (Bugle Family) valve trombone, both sharing the same valve cluster and lead pipe."²⁰



- ♪ This idea making a duplex instrument combining two instruments one can be traced back to the Fourth Century in Central and South America, where natives combined pipes and whistles together creating double, triple, and even quadruple instruments. ²¹
- ♪ It was also found in Ninth Century Morocco, Egypt, Greece, Slavic territories, and India where double flutes and clarinets were created. ²²

Historic Brass Instruments of the Turn-of-the-Century Town Band



Eb Cornet



Bb Cornet



Eb Solo Alto



Eb Alto Horn



Bb Tenor



Bb Baritone



Bb Bass
(Euphonium)



Bb Flugelhorn



Bb Slide
Cornet



Eb Alto
Valve Trombone



Bb Double Bell
Euphonium



Eb Helicon
Bass



Bb Tenor Valve
Trombone



Bb Tenor Slide
Trombone



Eb Bass

CONN INSTRUMENTS FROM THE PAUL MAYBERY COLLECTION

The Music Man production by Meredith Willson:

Seventy-six trombones caught the morning sun,
With a hundred and ten cornets right behind.
There were more than a thousand reeds
Springing up like weeds,
There were horns of every shape and kind.
There were copper-bottomed timpani in horse
platoons,
Thundering, thundering, all along the way.

Double bell euphoniums and big bassoons..." ²³

Construction of the Double Bell

Construction

- ♪ Same as a single bell euphonium except it has two bells and double the instrument.
- ♪ Based off a large bore (euphonium) or a small bore (baritone) it has two complete instruments of tubing similar to a double French horn but produces two different timbres at the same pitch. ²⁴
- ♪ Large Bell = euphonium sound
- ♪ Small Bell = trombone sound.



Construction

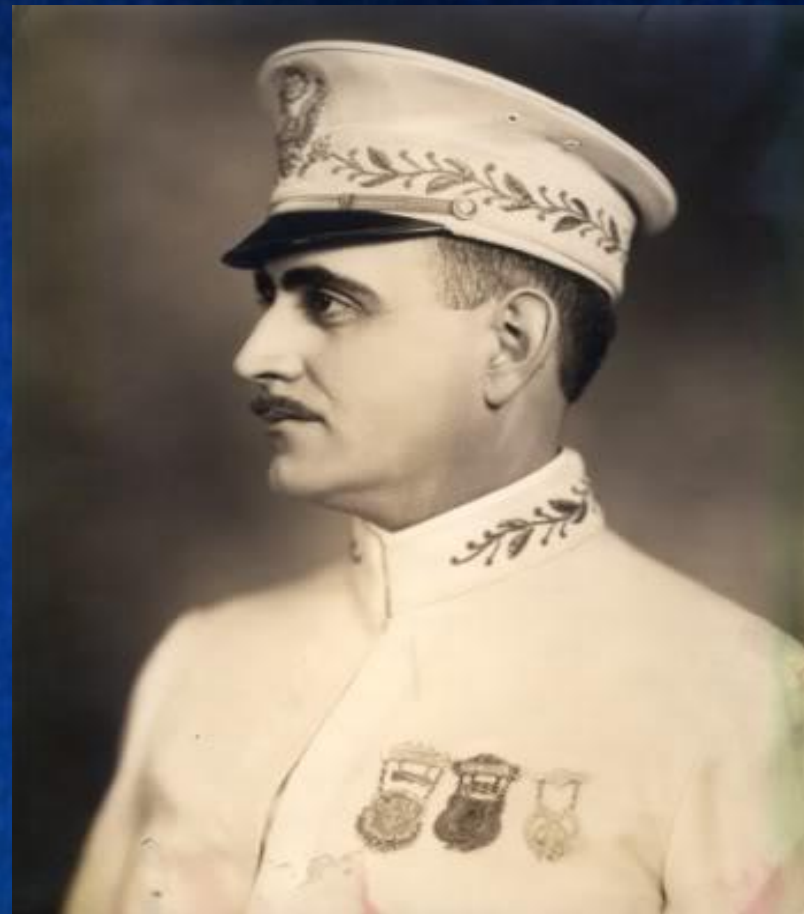


- 4 Valve Double Bell Euphonium: 1 – 3 are standard valves and valve 4 operates small bell and shuts off big bell.
- 5 Valve Double Bell Euphonium: 1 – 4 are standard valves and valve 5 operates small bell only.
- “Bell placement, valve placement, and tubing wraps differed greatly from company to company, and even within the same company from year to year.”²⁵

Function of the Double Bell Euphonium

Function

- ♪ **Karl King** famous march composer once referred to the euphonium as being a “cello of the band but the soul of the band, too.”²⁶
- ♪ During “The Golden Age of Bands” if there was a euphonium player; it was probably a Double Bell Euphonium player.



Function



- ♪ Paul LaValle a conductor of the Ringling Brothers and Barnum Bailey Circus Band once said “the euphonium section would often use the small bell for a thinner sound to blend with the trombone section (*Stars and Stripes Forever*), and the broader sound of the large bell to blend with the tubas.” ²⁷

1912 C.G. Conn Advertises – “The small or trombone bell enables the performer to strengthen the trombone section in certain passages where the trombone parts are intended to predominate and it also enables the performer to obtain an echo effect in solo work.”

1916 C.G. Conn Advertises – “The mellow voice of the euphonium and the penetrating trombone tone combined in one instrument.”

1934 C.G. Conn Advertises – “The smaller bell enables the performer to use echo or trombone effects to give variety and life to the tone coloring.” ²⁸

Performers of the Double Bell Euphonium

Performers

- ♪ The first musician to use a Double Bell Euphonium was Harry Whittier soloist for **Patrick Gilmore's** Band in which he played a double bell euphonium made for him by C.G. Conn in 1888. ²⁹
- ♪ Joseph Raffayolo followed his path and took the instrument with him to John Philip Sousa's band in 1892. ³⁰
- ♪ Joseph DeLuca, Aaron Harris, Salvatore Florio, Charles Caputo, and Charles Bezucha all performers and soloists with many famous circus bands.



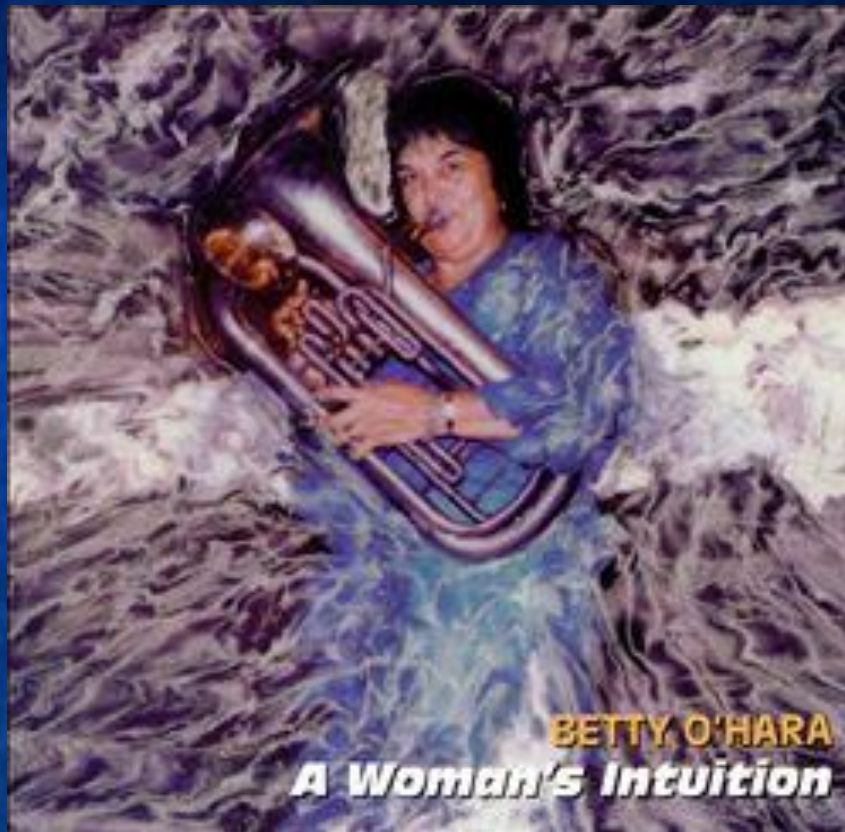
Performers



- ♪ Other John Philip Sousa's Band personnel included Noble Howard, John J. Perfetto, and the well-known **Simone Mantia** who performed exclusively on Conn Double Bell Euphoniums and was also a soloist of Arthur Pryor's Band. ³¹
- ♪ Even at age five Tommy Dorsey switched from playing alto horn over to a Double Bell Euphonium. ³²
- ♪ More recent soloists: Leonard Falcone, Brian Bowman, David Werden, and Neal Corwell.

Performers

- ♪ The late Ashley Alexander a jazz artist can be heard playing a Double Bell Euphonium on the Matteson-Phillips Tubajazz Consort's *Noreen's Nocturne*, from the "*Superhorn*" album. ³³
- ♪ "**Betty O'Hara** played her valve trombone and double-bell euphonium during that memorable evening. On "*S Wonderful*," blowing thorough euphonium's alternate bells, she traded profound statements with herself." ³⁴



What Musical Pieces Were Played

Musical Pieces

- ♪ Theme and Variations – *Carnival of Venice*.
- ♪ *Original Fantasie* by the well-known Simone Mantia has certain editions to offer the use of two bells for the played double stops in honor of the way Mantia would perform it. ³⁵
- ♪ *Father and Son Fantasy* by W.W. York was the only Double Bell Euphonium piece written for the instrument back in the day. ³⁶
- ♪ Jan Bach's *Concert Variation for Euphonium and Piano* contains stopped trills that can be generally performed by a Double Bell Euphonium - in the description it refers to making the timbre of the trills sound like a Double Bell Euphonium. ³⁷
- ♪ "SB" or "LB" (Small Bell or Large Bell) found embedded in early ensemble euphonium/baritone music.
- ♪ In 1965 Philip Palmer wrote *8 Artistic Brass Sextets*, which are brass sextets that have small bell markings. ³⁸

Double Bell Euphoniums Then Vanished

Vanished

- ♪ There is no exact date, although King removed them from their catalogs in the 1960s, Conn in 1956 after their contact stopped with the Marine Band. ³⁹
- ♪ Holton stopped manufacturing sometime between 1931 and 1935 as it was missing in the catalogue after 1935. ⁴⁰
- ♪ Edward Mallet's DMA Dissertation for Michigan State University found by comparing 49 Double Bell Euphoniums, that the two bells had tuning issues in which some good range notes were off by more than a half step between the two bells. ⁴¹

Vanished

♪ A British Navy vessel was docking for repairs, which included the on-board brass band, also needing repairs. Americans decided to give the band brand new instruments. Harold Brasch, soloist of the United State Navy Band took one of the left behind Boosey & Hawkes compensating euphoniums. Brasch found a dark mellow tone due to the larger bore much different than the American euphoniums. So he put down his King Double Bell Euphonium. ⁴²

Vanished

- **Arthur W. Lehman** a famous euphonium soloist said about the second bell during a Marine Band concert, “We use it to hold our white gloves when we are not wearing them.” ⁴³
- Some performers would have repairman disengage the small bell making it a Single Bell Euphonium for weight reasons. Many players would just keep their small bell off during rehearsals and it was only during performances they would add the small bell for show. ⁴⁴



Where to Find Double Bell Euphoniums

- ♪ **Found on the walls in bars, classrooms, showcases, in the hands of collectors, and museums.**
- ♪ There are 15 European and American made Double Bell Euphoniums in the Arne B. Larson Collection of Musical Instruments of the Shrine to Music Museum on the campus of University of South Dakota in Vermillion, South Dakota. ⁴⁵
- ♪ A much decorated engraved C.G. Conn Double Bell Euphonium is stored at one of the Ellis Island buildings in New York.
- ♪ A 1936 C.G. Conn Double Bell Euphonium is on display at the Metropolitan Museum of Art in New York given by Werner Kramarsky. ⁴⁶
- ♪ Found on eBay in which you can pay around \$2,000 for a 4 valve or \$3,000 for a five valve.
- ♪ Edward Mallet created a new Double Bell Euphonium made from a Canadian Brass-style euphonium and Getzen trombone bell. This instrument was created to minimize the two bell pitch issues but was never mass produced due to high costs. ⁴⁷

**Are You Interested in the Double
Bell Euphonium Craze?**

“Probably the remaining double bell euphoniums still in existence are in the hands of collectors or rest silently, unknown, in some people’s attics.”⁴⁸

Works Cited

1. Mary Petersen, "Double-Bell Euphoniums in the Arne B. Larson Collection," *T.U.B.A Journal*, Vol. 8/4 (Spring 1981): 7.
2. Schwartz Harry Wayne Schwartz, *Bands of America* (New York: Doubleday & Co. Inc., 1957), 16.
3. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 14.
4. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 18.
5. Sibyl Marcuse, *A Survey of Musical Instruments* (New York: Harper & Row, Publishers, 1975), 769.
6. Edward K. Mallet, "The Double-Bell Euphonium; The History of a Forgotten Instrument," *T.U.B.A. Journal*, Vol. 21/3 (1994): 24.
7. Edward Mallett, "The Double Bell Euphonium: Design and Literature Past and Present" (DMA Dissertation, Michigan State University, 1996), 4.
8. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 29.
9. Curt Sachs, *Real-Lexicon der Musikinstrumente* (New York: Dover Publications, 1964), 123.
10. Curt Sachs, *Real-Lexicon der Musikinstrumente* (New York: Dover Publications, 1964), 126.
11. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 31.
12. Curt Sachs, *Real-Lexicon der Musikinstrumente* (New York: Dover Publications, 1964), 42.
13. Curt Sachs, *Real-Lexicon der Musikinstrumente* (New York: Dover Publications, 1964), 123.
14. Sibyl Marcuse, *A Survey of Musical Instruments* (New York: Harper & Row, Publishers, 1975), 323.
15. Robert Reifsnyder, "A Short History of the Euphonium in America," *The Brass Bulletin XXXV* (1981): 16.
16. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 32.
17. Arnold Meyers and Niles Eldredge, "The Brasswind Production of Marthe Besson's London Factory," *The Galphin Society Journal*, Vol. 59 (May, 2006): 47.
18. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 32.
19. Robert Reifsnyder, "A Short History of the Euphonium in America," *The Brass Bulletin XXXV* (1981): 17.
20. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 29.
21. Ruth Midgley, ed., *Musical Instruments of the World* (New York: Bantam, 1976), 24.
22. Ruth Midgley, ed., *Musical Instruments of the World* (New York: Bantam, 1976), 37-45.
23. Meredith Willson, *The Music Man* (New York: Frank Music, 1957).

Works Cited

24. John R. Floyd, "The Double-Bell Euphonium, Vanishing But Not Forgotten," *Woodwind World, Brass, and Percussion* XXI/4 (1982): 7.
25. Edward Mallett, "The Double Bell Euphonium: Design and Literature Past and Present" (DMA Dissertation, Michigan State University, 1996), 9.
26. Karl M. Holvik, "The Karl King Story: An Informal Interview," *Journal of Band Research* Vol. 3/2 (Spring 1967): 9.
27. Edward Mallett, "The Double Bell Euphonium: Design and Literature Past and Present" (DMA Dissertation, Michigan State University, 1996), 15.
28. John R. Floyd, "The Double-Bell Euphonium, Vanishing But Not Forgotten," *Woodwind World, Brass, and Percussion* XXI/4 (1982): 7.
29. Harry Wayne Schwartz, *Bands of America* (New York: Doubleday & Co. Inc., 1957), 200.
30. Robert Reifsnnyder, "A Short History of the Euphonium in America," *The Brass Bulletin* XXXV (1981): 17.
31. John R. Floyd, "The Double-Bell Euphonium, Vanishing But Not Forgotten," *Woodwind World, Brass, and Percussion* XXI/4 (1982): 8.
32. Peter J. Levinson, *Tommy Dorsey: Livin' in a Great Big Way, A Biography* (Cambridge: First Da Capo Press Edition, 2005), 4.
33. The Matteson-Phillips Tubajazz Consort, "Superhorn," (New York: Mark Records, 1982).
34. Floyd Levin, *Classic Jazz: A Personal View of the Music and the Musicians* (Los Angeles: University of California Press, 2000), 263.
35. Edward Mallett, "The Double Bell Euphonium: Design and Literature Past and Present" (DMA Dissertation, Michigan State University, 1996), 302.
36. Charles Guy, "Exploring the New Double-Bell Euphonium: A Review/Commentary of Edward Mallett's Lecture/Recital," *T.U.B.A. Journal*, Vol. 23/4 (1996): 64.
37. Jan Bach, *Concert Variations for Euphonium and Piano*, Annandale, VA: T.U.B.A., 1991.
38. Philip Palmer, *8 Artistic Brass Sextets* (Bloomington: Brass publications, 1965.)
39. Gretchen Renae Bowles, "The "Golden Age" of Euphonium Playing" (DMA Dissertation, The University of Southern Mississippi, 2004), 33.
40. Edward Mallett, "The Double Bell Euphonium: Design and Literature Past and Present" (DMA Dissertation, Michigan State University, 1996), 11.
41. Edward Mallett, "The Double Bell Euphonium: Design and Literature Past and Present" (DMA Dissertation, Michigan State University, 1996), 269.
42. Edward Mallett, "The Double Bell Euphonium: Design and Literature Past and Present" (DMA Dissertation, Michigan State University, 1996), 17.
43. David Werden, "What is a Double-Bell Euphonium," Last modified September 10, 2012, <http://www.dwerden.com/forum/entry.php/117-What-is-a-DoubleBell-Euphonium>.
44. Lloyd E. Bone, Eric Paull, & R. Winston Morris, *Guide to the Euphonium Repertoire: The Euphonium Source Book* (Indiana: Indiana University Press, 2007), 13.
45. Pary Petersen, "Double-Bell Euphoniums in the Arne B. Larson Collection," *T.U.B.A. Journal*, Vol. 8/4 (Spring 1981): 4-5.
46. John K. Howat, et al, "Curatorial Reports and Departmental Accessions," *Annual Report of the Trustees of the Metropolitan Museum of Art*, No. 120 (July 1, 1989 – June 30, 1990): 29.
47. Charles Guy, "Exploring the New Double-Bell Euphonium: A Review/Commentary of Edward Mallett's Lecture/Recital," *T.U.B.A. Journal*, Vol. 23/4 (1996): 64.
48. John R. Floyd, "The Double-Bell Euphonium, Vanishing But Not Forgotten," *Woodwind World, Brass, and Percussion* XXI/4 (1982): 8.