

EVERETT, MICAH PAUL, D.M.A. *The Return to the Slide from the Valve Trombone by Late Nineteenth and Early Twentieth-Century Trombonists Including Arthur Pryor (1870-1942)*. (2005)
Directed by Dr. Randy B. Kohlenberg. 101 pp.

The invention of the valve radically changed the design, construction, and function of brass instruments. Following the introduction of the valve trombone during the 1820s, the slide was considered to be unwieldy and cumbersome, and therefore, inadequate for performing technically difficult music. Trombonists in America and Europe began to select the valve over the slide trombone as their instrument of preference. Even Arthur Pryor (1870-1942), who became famous throughout the world for his virtuosic slide trombone performances, began his career as a valve trombonist.

The tone quality and intonation of the slide trombone were judged to be superior to those of the valve trombone, prompting trombonists in Germany and Austria to return to the slide after only a brief period of valve trombone playing. Elsewhere, trombonists believed that the technical difficulties associated with the slide negated the advantages of the slide trombone. The ease of technical execution on the valve trombone was viewed by these players as the primary consideration.

Nevertheless, the slide trombone was reestablished as the instrument of preference in most of Europe and the United States between 1890 and 1925. While the deficient tone and intonation of the valve trombone were the primary

considerations prompting trombonists to adopt the slide, other factors influenced this change, as well. Pryor's slide trombone playing was among these factors.

Pryor cultivated a level of virtuosic technique previously thought impossible on the slide trombone, while exhibiting a gorgeous tone and sensitive interpretation. As soloist with the Sousa and Pryor bands, he demonstrated the technical and tonal capabilities of the slide trombone in performances throughout the United States and Europe. Pryor further promoted the slide trombone by recording and publishing his solo compositions. Given his unprecedented virtuosity and wide-ranging influence, the coincidence of Pryor's playing career and the return of many players to the slide trombone suggests that Pryor influenced this change. By eliminating trombonists' reservations regarding slide technique while demonstrating the superior sound of the slide trombone, Pryor contributed to the reestablishment of slide trombone hegemony in the United States and Europe.

THE RETURN TO THE SLIDE FROM THE VALVE TROMBONE
BY LATE NINETEENTH AND EARLY TWENTIETH-
CENTURY TROMBONISTS INCLUDING
ARTHUR PRYOR (1870-1942)

by

Micah Paul Everett

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Musical Arts

Greensboro
2005

Approved by

Committee Chair

© 2005 by Micah Paul Everett

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair _____

Committee Members _____

Date of Acceptance by Committee

Date of Final Oral Examination

ACKNOWLEDGEMENTS

Appreciation is extended to the faculty and students of the University of Northern Iowa School of Music, support and understanding of the stress caused by completing this study while teaching full-time has been crucial. The advice, encouragement, and criticism of advisory committee members Dr. Edward Bach, Dr. Jennifer Stewart, and Prof. Jack Masarie are greatly appreciated. Gratitude also is extended to Dr. Randy Kohlenberg, whose insightful and challenging instruction has been instrumental in the successful completion of this study, as well as numerous other intellectual and musical endeavors.

The emotional and financial support provided by Billy and Joyce Everett has been truly wonderful, and is greatly appreciated. To Jennifer Everett, whose patience and understanding has been continually tested throughout the course of this project, the utmost affection, respect, and appreciation is expressed.

PREFACE

Although the valve trombone was often portrayed negatively in the twentieth century, usage of the valve eclipsed that of the slide trombone in the United States and much of Europe during the nineteenth century. A return to the slide trombone by many players around the turn of the twentieth century coincided with the playing career of slide trombone virtuoso Arthur Pryor (1870-1942), who performed throughout the United States and Europe as soloist with the Sousa and Pryor bands.

The purpose of this study was to determine the extent to which the valve trombone was used during the nineteenth century, and the ways in which Arthur Pryor influenced the return of many trombonists to the slide instrument during the late nineteenth and early twentieth centuries. Both written and iconographical sources were consulted to determine the instrument choices of trombonists during that period. Concert programs and reviews of Pryor's performances also were examined to determine the responses of audiences and critics to his playing. The effects of Pryor's recordings and solo publications upon trombonists' instrument choices were investigated, as well. The intent of this study was to determine the extent to which the valve trombone was played in American and European performing ensembles at the end of the nineteenth century, possible reasons for trombonists' return to the slide trombone around

the turn of the twentieth century, and, more specifically, how Arthur Pryor influenced the change in perception among trombonists which led to this return.

TABLE OF CONTENTS

	Page
APPROVAL PAGE	ii
ACKNOWLEDGEMENTS.....	iii
PREFACE	iv
LIST OF FIGURES.....	viii
CHAPTER	
I. RETHINKING THE HISTORY OF THE VALVE TROMBONE AND ARTHUR PRYOR'S INFLUENCE.....	1
Valve Trombone Popularity during the Nineteenth Century.....	2
Explaining Trombonists' Switch to the Slide Trombone.....	7
Arthur Pryor (1870-1942): Slide Trombone Virtuoso.....	8
Pryor: Catalyst of the Reemergence of the Slide Trombone	12
II. THE DEVELOPMENT AND PROLIFERATION OF THE VALVE TROMBONE	15
Predecessors of the Valve	15
The Invention and Refinement of the Valve	22
The Development of the Valve Trombone	28
The Valve Trombone in Nineteenth-Century Performance	39
III. THE REEMERGENCE OF THE SLIDE TROMBONE:	46
Disadvantages of the Valve Trombone.....	46
The Reemergence of the Slide Trombone.....	47
Factors Influencing Trombonists' Return to the Slide Trombone.....	51
IV. ARTHUR PRYOR: EXPONENT OF THE SLIDE TROMBONE	59
Pryor's Technical Execution.....	59
Pryor's Tone Quality and Expression	65

International Slide Trombone Celebrity	68
Recording Industry Pioneer	70
Composer of New Music for Slide Trombone	73
Pryor's Role in the Return of the Slide Trombone.....	80
V. THE VALVE TROMBONE, THE SLIDE TROMBONE, AND ARTHUR PRYOR IN PERSPECTIVE	84
BIBLIOGRAPHY	91

LIST OF FIGURES

Figure	Page
1. Sherman's Cornet Band, Winooski, Vermont, 1872	3
2. Samuel Pryor's Band, St. Joseph, Missouri, n.d.....	4
3. Boston Symphony Orchestra Trombone Section, c.1885.....	5
4. Väägvere Brass Band, Estonia, 1867	6
5. Norwich Citadel Band Trombone Section, Norfolk, U.K., 1882.....	6
6. Arthur Pryor, early 1890s.....	9
7. Arthur Pryor's Band, c. 1903	11
8. Arthur Pryor, 1942	13
9. Cornetto, Italy, seventeenth century	16
10. Serpent by C. Baudoin, Paris, c. 1820	17
11. Upright serpent by Cuvillier, France, c. 1815.....	19
12. Keyed bugle by George Smith, England, 1820s.....	20
13. Ophicleide by A.G. Guichard, Paris, c. 1840	21
14. Diagram of a Stölzel tubular piston valve system	23
15. Diagrams of the double piston (Vienna) valve.....	24
16. Diagrams of the rotary valve.....	25
17. Diagram of the <i>Berliner-Pumpe</i> (open).....	27
18. Diagrams of the Périnet piston valve	28
19. Piston valve trombone by F. Besson, London, 1885.....	31

20. Rotary valve trombone by Cazzani, Milan, before 1912	31
21. Double-piston (Vienna) valve trombone by Van Cauwelveert, Belgium, c. 1880.....	31
22. <i>Armeeposaune</i> by K. Schmal, Prague, c.1880.....	33
23. Contrabass trombone / <i>cimbasso</i> by Maino & Orsi, Milan, late nineteenth century	35
24. Short Model Valve Trombone by John F. Stratton, New York, c. 1890.....	35
25. Six-valve trombone by Adolphe Sax, Paris, 1867	36
26. Six-valve, seven-bell trombone by Adolphe Sax, c. 1860.....	37
27. Seven-valve, thirteen-bell trombone by Adolphe Sax, n.d.	38
28. César Franck: Symphony in D minor, Mvt. I, Measures 355-360, Trombone III part.....	42
29. César Franck: Symphony in D minor, Mvt. III, Measures 267-277, Trombone III part.....	42
30. B-flat/F Slide Trombone by Robert Piering, Germany, late nineteenth century.....	54
31. Holton Double-bell Euphonium, 1928.....	55
32. Arthur Pryor: <i>The Patriot</i> , Measure 24 (cadenza), Solo Trombone part	62
33. Arthur Pryor: <i>Blue Bells of Scotland</i> , Measures 72-74, Solo Trombone part.....	62
34. Arthur Pryor: <i>Blue Bells of Scotland</i> , Measures 94-98, Solo Trombone part.....	64
35. Arthur Pryor: <i>Blue Bells of Scotland</i> , Measures 24-43, Solo Trombone part.....	76
36. Arthur Pryor: <i>Annie Laurie</i> , Measures 29-46, Solo Trombone part	76
37. Arthur Pryor: <i>Thoughts of Love</i> , Measures 134-150, Solo Trombone part.....	77

38. Arthur Pryor: *Fantastic Polka*, Measures 118-129, Solo Trombone part..... 77
39. Arthur Pryor: *Air Varie*, Measures 154-175, Solo Trombone part 79

CHAPTER I
RETHINKING THE HISTORY OF THE VALVE TROMBONE
AND ARTHUR PRYOR'S INFLUENCE

The slide trombone predates the valve trumpet, horn, euphonium, and tuba by nearly 400 years. Invented during the fifteenth century, the slide trombone has remained functionally unchanged into the twenty-first, and has been performed in a variety of sacred, secular, and popular idioms.¹ Authorities on trombone history and orchestration have often contended that the slide trombone has been used continually without interruption or challenge.

Chronicles of trombone history are almost exclusively focused upon the slide instrument. Conversely, the valve trombone, introduced during the 1820s,² has been relegated to a minute role in trombone history. Twentieth-century authors described the valve trombone as a short-lived novelty that never was regularly played. According to Bate and Gregory, valve trombone playing was limited to nineteenth-century military bands and Italian opera productions,³ and Carse asserted that the instrument never was played in orchestral music of any

¹ David M. Guion, "A Short History of the Trombone," Available Online: <<http://www.trombone.org/articles/library/viewarticles.asp?ArtID=254>> [14 February 2005].

² Anthony Baines, *Brass Instruments: Their History and Development* (London: Faber and Faber Limited, 1976; Reprint: New York: Dover Publications, 1993), 248.

³ Philip Bate, *The Trumpet and Trombone: An Outline of Their History, Development, and Construction*, 2nd ed. (New York: W.W. Norton and Company, Inc., 1978), 233; Robin Gregory, *The Trombone: The Instrument and Its Music* (New York: Praeger Publishers, 1973), 121.

kind.⁴ Twentieth-century authorities concluded that the valve trombone never was popular and that the superiority of the slide instrument never has been questioned. Additional studies have disputed these conclusions.

Valve Trombone Popularity during the Nineteenth-Century

Although the valve trombone was viewed as an aberration after the early twentieth century,⁵ a number of nineteenth-century trombonists selected the valve trombone as their instrument of preference. Trombonists cited by Blaikley⁶ and Shifrin⁷ thought the valve rendered the slide trombone obsolete. To those players, replacing the slide with valves was a logical development because the execution of technical and legato passages was easier on valve instruments.⁸ The valve trombone became so popular that it almost replaced the slide trombone.⁹ Valve trombones were played in the premiere performances of works composed by Hector Berlioz (1803-1869), Fromental Halévy (1799-1862), Anton Bruckner

⁴ Adam Carse, *The History of Orchestration*, (London: Kegan Paul, 1925), 218.

⁵ Carse, *History of Orchestration*, 218; Gregory, 121; Denis Wick, *Trombone Technique* (Oxford, U.K.: Oxford University Press, 1971), 95.

⁶ D.J. Blaikley, "The Development of Modern Wind Instruments," *Proceedings of the Musical Association*, 12th session (1885-1886), 132-136. In this transcript, Blaikley and others hailed the slide trombone as superior in intonation and tone quality to the valve instrument, yet Blaikley claimed that trombonists with whom he was acquainted preferred the ease of execution offered by the valve in rapid technical passages.

⁷ Ken Shifrin, "The Valve Trombone in the Nineteenth Century Orchestras of France, Germany, Austria, and Bohemia, with Special focus on the Trombone Works of Dvořák," *Brass Bulletin* 111 (2000), 28.

⁸ Anthony Baines, *Brass Instruments: Their History and Development* (London: Faber and Faber Limited, 1976; Reprint: New York: Dover Publications, 1993), 248.

⁹ Steve Dillon, "Arthur Pryor: Poet of the Trombone," *The Instrumentalist* 40:4 (1985), 34; Larry Kitzel, "The Trombones of the Shrine to Music Museum" (DMA diss., University of Oklahoma, 1985), 7-8.

(1824-1896), Johannes Brahms (1833-1897), Antonín Dvořák (1841-1904), and others.¹⁰

Period photographs verify the popularity of valve trombones among nineteenth-century trombonists. Figure 1 is taken from an 1872 photograph of Sherman's Cornet Band of Winooski, Vermont. The trombonists in this photo are holding rotary valve trombones.



Figure 1. Sherman's Cornet Band, Winooski, Vermont, 1872.¹¹

¹⁰ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 126-144; *Brass Bulletin* 112, 118-126.

¹¹ Sherman's Cornet Band of Winooski, Vermont, 1872, in Robert Joseph Garofalo and Mark Elrod, *Pictorial History of Civil War Era Musical Instruments and Military Bands* (Missoula, Montana: Pictorial Histories Publishing Co., Inc., 1985), 96.

Figure 2 is part of an undated photograph of Samuel Pryor's (1844-1902) band in St. Joseph, Missouri. The trombonist standing directly behind the bass drum is holding a valve trombone.



Figure 2. Samuel Pryor's Band, St. Joseph, Missouri, n.d.¹²

Although the photo is somewhat unclear, this instrument is shorter than a slide trombone. Additionally, a portion of the valve tubing, presumably the first and third valve tuning slides, is visible upon close examination.

¹² Samuel Pryor's Band, n.d., in Glenn Bridges, *Pioneers in Brass* (Detroit: Sherwood Publications, 1965), 104.

The trombone section of the Boston Symphony Orchestra is depicted in Figure 3. In this 1880s photograph, the trombonist on the right is unmistakably holding a valve trombone. Because the view of the other trombonist is obscured by the music stand, the type of trombone in his hands is unclear.



Figure 3. Boston Symphony Orchestra Trombone Section, c. 1885.¹³

Figure 4 depicts the low brass section of the Väägvere Brass Band in Estonia. The four trombonists all are holding rotary valve trombones. Two trombonists in the Norwich Citadel Band, an early British brass band, are depicted in Figure 5. Both are holding piston valve trombones.

¹³ Boston Symphony Orchestra, ca. 1885, in M.A. DeWolfe Howe, *The Boston Symphony Orchestra: 1881-1931* (Boston: Houghton Mifflin Company, 1931), 66.



Figure 4. Väägvere Brass Band Low Brass Section, Estonia, 1867.¹⁴



Figure 5. Norwich Citadel Band Trombone Section, Norfolk, U.K., 1882.¹⁵

The use of the valve trombone by nineteenth-century American and European trombonists is thus documented both in written sources and in

¹⁴ Väägvere Brass Band, Estonia, 1867, Available Online:
 <<http://www.harrogate.co.uk/harrogate-band/photo72.jpg>> [26 November 2004].

¹⁵ Norwich Citadel Band, Norfolk, U.K., 1882, Available Online:
 <<http://www.satiche.org.uk/vinbbp/photo703.jpg>> [26 November 2004].

photographs. The slide trombone again resumed popularity around the turn of the twentieth century, and the valve trombone became relatively obscure.¹⁶

Explaining Trombonists' Switch to the Slide Trombone

Despite the popularity of the valve trombone, most trombonists judged the tone quality and intonation of the slide trombone to be superior to those of the valve instrument.¹⁷ German and Austrian trombonists adopted the slide instrument between 1850 and 1883 because of the deficiencies of the valve trombone in these areas.¹⁸ Elsewhere in Europe and in the United States, however, a majority of trombonists played the valve trombone for a greater length of time.¹⁹ These players acknowledged the superior tone quality and tuning of the slide trombone²⁰ yet were reluctant to give up the valve instrument because of the easier legato and technical execution offered by the valve.²¹ Nevertheless, most trombonists in these countries switched to the slide trombone

¹⁶ Bohuslav Čížek, "Josef Kail (1795-1871): Forgotten Brass Instrument Innovator," *Brass Bulletin* 74 (1991), 28.

¹⁷ Blaikley, 132-136; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 138-139.

¹⁸ Gregory, 121; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 138-141.

¹⁹ Blaikley, 132-136; Dillon, 34; Gregory, 121; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 133-134; Tom S. Wotton, "The Misuse of the Trombone," *The Musical Times* 66:989 (1925), 634. Wotton's writing is a letter written to the magazine in response to an article by J.A. Westrup, "The Misuse of the Trombone," which appeared in the previous issue.

²⁰ Blaikley, 132-136; Robert E. Eliason, "The Trombone in Nineteenth-Century America," *International Trombone Association Journal* 10:1 (1982), 9.

²¹ Blaikley, 132-136; Daniel Evans Frizane, "Arthur Pryor (1870-1942): American Trombonist, Bandmaster, and Composer" (DMA diss.: University of Kansas, 1984), 16-17; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 128.

around the turn of the twentieth century.²² A number of factors in addition to the superior sound of the slide trombone are thought to have contributed to trombonists' change in preference from the valve to the slide. One of these factors was the work of virtuoso slide trombonist Arthur Pryor (1870-1942).

Arthur Pryor (1870-1942): Slide Trombone Virtuoso

Arthur Willard Pryor was born on September 20, 1870, in St. Joseph, Missouri. The son of the local bandmaster, Pryor began studying music at the age of six. He received piano instruction from a local teacher, and was taught to play various wind, string, and percussion instruments by his father. By age eleven, Pryor was a valve trombonist in his father's band, and soon after was given a slide trombone, "the first one in St. Joseph,"²³ which he taught himself to play. At age thirteen he was a featured slide trombone soloist with his father's band, and at age fifteen, Pryor performed regularly at county fairs and similar local events.

In 1889 Pryor joined the newly-organized band of Alessandro Liberati (1847-1927) and performed with the band during a tour of the western United States. While a member of Liberati's band, Pryor began to compose and perform his own virtuosic trombone solos. In 1890 he declined an offer from Patrick Gilmore (1829-1892) to join the Gilmore Band as trombone soloist, choosing instead to become director of the Stanley Opera Company in Denver. Pryor

²² Čížek, *Brass Bulletin* 74, 28; Kitzel, 7.

²³ Frizane, 5.

served in this capacity for several months and was reportedly competent both as director and as piano accompanist.²⁴ When invited in 1892 to join the trombone section of John Philip Sousa's (1854-1932) band, Pryor decided to focus upon trombone playing and accepted the invitation. The photograph in Figure 6 was taken around the time Pryor joined the Sousa Band.



Figure 6. Arthur Pryor, early 1890s.²⁵

Pryor arrived in New York City to play his first rehearsal with Sousa in 1892, carrying only "his trombone and 35 cents."²⁶ He immediately impressed

²⁴ Bridges, 101.

²⁵ Arthur Pryor, early 1890s, Available Online:
<<http://www.dws.org/sousa/images/013.jpg>> [20 July 2004].

²⁶ Frizane, 9.

Sousa and the other band members with his virtuosic technique and tone quality. In 1893 Pryor became a regularly featured trombone soloist with the band, and during the next ten years, played virtuosic solos in Sousa Band performances throughout the United States and in sixteen European countries. Pryor also recorded several of his solo works while a member of the Sousa Band.

In 1895 Pryor was appointed assistant conductor of Sousa's band, assuming conducting responsibilities when Sousa was ill and during most of the band's recording sessions. These experiences allowed Pryor to develop the conducting and organizational skills needed to successfully lead his own band.

In 1903 Pryor left Sousa's band and formed his own. Pryor's band performed its first concert in New York City's Majestic Theatre on November 3, 1903,²⁷ and received positive reviews. Following this early success, the Pryor Band performed throughout the United States in the same manner as the Sousa Band, and achieved notoriety second only to Sousa's band. The Pryor Band toured actively until 1909, after which Pryor decided to focus on recording projects and summer concert series. Figure 7 depicts Pryor with his band.

Pryor became an influential musical figure worldwide through his pioneering work in the recording and broadcasting industries. As stated, he conducted the majority of Sousa's recording sessions during his association

²⁷ Bridges, 104.



Figure 7. Arthur Pryor's Band, c. 1903.²⁸

with that band, and continued to conduct Sousa Band recording sessions into the 1920s.²⁹ Pryor served as arranger and conductor for works recorded by the Pryor Band and Pryor Orchestra, which probably included Pryor Band members and an added string section.³⁰ During his recording career, Pryor produced at least 2,000 recordings for the Victor Company. He became involved in radio broadcasting in the 1920s, and worked for NBC during the early 1930s.³¹

Pryor, who continued to play the trombone throughout his career as a bandmaster, believed that the responsibilities of conducting left him without sufficient time for trombone practice. He did not perform trombone solos in public if he could not meet the playing standard established during his career with the Sousa Band. After assuming the role of conductor, Pryor gradually performed and recorded fewer trombone solo works.

²⁸ Arthur Pryor's Band, c. 1903, in Bridges, 104.

²⁹ Frizane, 31.

³⁰ Frizane, 31.

³¹ Frizane, 32-33.

Pryor retired in 1933, moved with his wife to a 27-acre farm near Long Branch, New Jersey, and established a teaching studio in New York City.³² He continued to compose and write, and was a charter member of the American Society of Composers, Arrangers, and Publishers (ASCAP)³³ as well as the American Bandmasters Association (ABA).³⁴ The Pryor Band occasionally reconvened for concerts at Asbury Park in New Jersey during Pryor's retirement years. Pryor died following a rehearsal for one of these concerts on June 18, 1942.³⁵ The photograph in Figure 8 was taken shortly before Pryor's death.

Pryor: Catalyst of the Reemergence of the Slide Trombone

Pryor's slide trombone playing was certainly prodigious, and audiences praised him for both his technique and his tone quality.³⁶ His international notoriety³⁷ enabled him to influence the instrument choices of trombonists in at least seventeen countries.³⁸ Through solo performances,³⁹ recordings,⁴⁰ and publication of slide trombone solos,⁴¹ Pryor demonstrated the technical capabilities and superior tone quality of the slide trombone throughout the

³² Frizane, 41.

³³ Pryor, Arthur. *Arthur Pryor: Solos for Trombone*. (New York: Carl Fischer, 2002), Piano Part, 2.

³⁴ Frizane, 43-44.

³⁵ Bridges, 105.

³⁶ Bridges, 102-103.

³⁷ "Arthur Pryor," *The Metronome* (June 1905), 10.

³⁸ Frizane, 15.

³⁹ Bridges, 102.

⁴⁰ Frizane, 19.

⁴¹ Frizane, 82-92.



Figure 8. Arthur Pryor, 1942.⁴²

United States and Europe. Trombonists began to switch from the valve to the slide trombone during and immediately following Pryor's performing career,⁴³ partly as a result of Pryor's work.

Although twentieth-century authorities indicated that slide trombones were continuously played since the fifteenth century, a number of trombonists abandoned the slide in favor of the valve trombone during the nineteenth century. While popular, the valve trombone was considered to be deficient in

⁴² Arthur Pryor, 1942, in Bridges, 104.

⁴³ Blaikley, 132-136; Gregory, 121; Dillon, 34; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 133-134; Wotton, 634.

tone quality and intonation when compared to the slide instrument. German and Austrian trombonists returned to the slide after a brief period of valve trombone playing because of these deficiencies.

Trombonists in other countries retained the valve trombone for a greater length of time because of the easier technical and legato execution on that instrument, yet switched to the slide trombone around the turn of the twentieth century. The change to the slide instrument coincided with the exceptional playing career of slide trombone virtuoso Arthur Pryor.

Pryor toured the United States and Europe as soloist with the Sousa and Pryor bands, performing virtuosic slide trombone solos and greatly impressing both musicians and audiences. Through his performances, recordings, and solo publications, Pryor dispelled the notion that rapid playing was not possible on the slide trombone while demonstrating the superior tone quality and intonation achievable on that instrument. His unique combination of virtuosic playing and international notoriety positioned him to influence the instrument choices of trombonists throughout America and Europe. The development and use of the valve trombone in the nineteenth century and Pryor's effect upon trombonists' change to the slide will be explored in the following chapters.

CHAPTER II

THE DEVELOPMENT AND PROLIFERATION OF THE VALVE TROMBONE

The valve trombone was just one of many new brass instruments made possible by the invention of the valve. First developed in the 1820s,¹ valve trombones were being manufactured and played throughout Europe and the United States by the 1830s.² Trombonists came to prefer the valve over the slide trombone during a large portion of the nineteenth century.³ The development and use of the valve trombone will be examined in the following paragraphs, beginning with a short history of the valve itself.

Predecessors of the Valve

The valve, invented during the 1810s,⁴ was the last in a series of innovations created to expand the chromatic ranges of brass instruments. "Brass" instruments such as the cornetto (Figure 9) and serpent (Figure 10) produced chromatic pitches through the use of finger holes not unlike those on woodwind instruments, and were in existence well before the nineteenth century. The

¹ David Wilken, "A Brief History of Brass Instruments," Available Online: <<http://www.unca.edu/~dwilken/brasshistory.html>> [6 January 2005].

² Eliason, "The Trombone in Nineteenth-Century America," 9.

³ Kitzel, 7.

⁴ Clifford Bevan, *The Tuba Family* (New York: Charles Scribner's Sons, 1978), 72.

cornetto, however, fell into disuse during the eighteenth century,⁵ and the serpent was only played occasionally in church music.⁶ Musicians and inventors during the late eighteenth and early nineteenth centuries sought to increase the chromatic ranges of the brass instruments then in use,⁷ and to create a new contrabass brass instrument with greater carrying power than the serpent.⁸

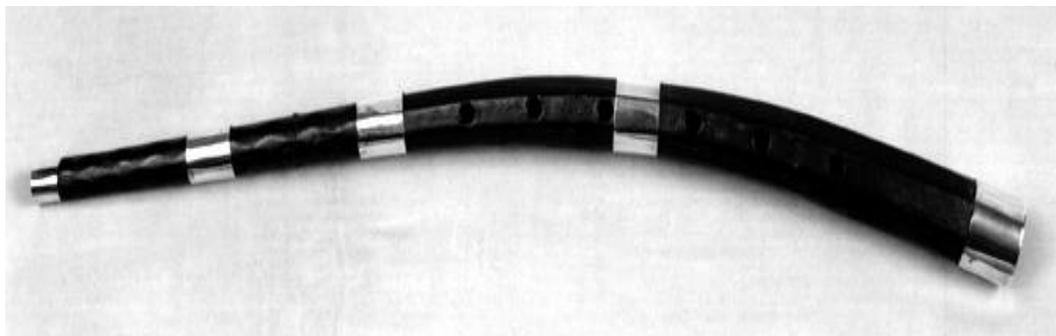


Figure 9. Cornetto, Italy, seventeenth century.⁹

The use of hand technique for expanding the chromatic ranges of the trumpet and horn was developed around 1750. This technique was employed widely by hornists, but adopted by very few trumpeters.¹⁰ Morley-Pegge provided a succinct description:

⁵ Adam Carse, *The Orchestra from Beethoven to Berlioz* (Cambridge, U.K.: W. Heffer & Sons, Ltd., 1948), 410.

⁶ Bevan, *The Tuba Family*, 48-54.

⁷ Baines, *Brass Instruments*, 184; Carse, *History of Orchestration*, 180.

⁸ Carse, *Orchestra from Beethoven to Berlioz*, 41-42.

⁹ Cornetto, "Edinburgh Collection of Historical Musical Instruments," Available Online: < <http://www.music.ed.ac.uk/euchmi/ucj/ucjth07.html> > [7 May 2005].

¹⁰ Carse, *History of Orchestration*, 180-181.



Figure 10. Serpent by C. Baudoin, Paris, c. 1820¹¹

About the middle of the 18th century it was discovered that by closing the bell with the hand to a greater or lesser extent it was possible to obtain a number of notes outside the harmonic series to which the instrument had up to then been strictly confined. Great inequality of tonal value between the natural and some of the closed notes was absolutely unavoidable . . . but within the restricted range of about an octave and a half . . . a chromatic scale could be played with almost even tone quality.¹²

A number of hornists remained loyal to the use of hand technique well after the invention of the valve, whereas others found it to be an imperfect solution. Again

¹¹ Serpent, "MFA Collections Database," Available Online: <http://www.mfa.org/artemis/fullrecord.asp?oid=50494&did=31> [7 May 2005].

¹² Reginald Morley-Pegge, *The French Horn*, Second Edition (New York: W.W. Norton and Company, 1973), 2-3.

quoting Morley-Pegge, “the horn was still hog-tied to the single harmonic series of its tube length.”¹³ Musicians and inventors alike continued to seek additional means of adding chromatic notes to brass instruments.

The application of keys to woodwind instruments during the late eighteenth and early nineteenth centuries greatly enlarged the range of notes available on these instruments.¹⁴ Inventors applied keys to brass instruments for the same purpose. In 1780 a French musician named Régibo developed an upright, keyed serpent. One version of this instrument, called the “Russian bassoon,” is depicted in Figure 11. The instrument pictured utilized both keys and finger holes. The upright serpent produced a stronger tone than the traditional serpent and was adopted throughout Europe.¹⁵ In the 1790s a copper serpent combining the use of keys and finger holes was produced in London. Inventors in Germany and Scotland also produced metal, keyed serpents during the early nineteenth century.¹⁶

Keys were applied to other brass instruments, as well. Keyed trumpets were produced in Weimar,¹⁷ Hamburg,¹⁸ and Dresden beginning in the 1760s,

¹³ Morley-Pegge, 3.

¹⁴ *Wind Instruments of European Art Music* (London: Inner London Educational Authority, 1974), 36-37, 40-41, 43, 46-47.

¹⁵ Bevan, *The Tuba Family*, 51.

¹⁶ Bevan, *The Tuba Family*, 50-52.

¹⁷ Johann Ernst Altenburg, cited in Baines, *Brass Instruments*, 190.

¹⁸ Baines, *Brass Instruments*, 191.



Figure 11. Upright serpent by Cuvillier, France, c. 1815.¹⁹

though the tone quality of these instruments was considered dubious.²⁰ A keyed horn, called the *Amor-schall*, was produced in 1766 by a Bohemian hornist named Kölbel.²¹ The keyed bugle, a more conical relative of the keyed trumpet, was patented in 1810 (Figure 12).²²

The most significant keyed brasses were the keyed trumpet developed by Anton Weidinger (1766-1852), and the ophicleide. Weidinger experimented with

¹⁹ Russian Bassoon (Upright Serpent), "Edinburgh Collection of Historical Musical Instruments," Available Online: <<http://www.music.ed.ac.uk/euchmi/ucj/ucjth07.html>> [7 May 2005].

²⁰ Daniel Schubart, cited in Baines, *Brass Instruments*, 191.

²¹ Baines, *Brass Instruments*, 191; Bevan, *The Tuba Family*, 58; Carse, *History of Orchestration*, 181.

²² Baines, *Brass Instruments*, 194; Bevan, *The Tuba Family*, 57.



Figure 12. Keyed bugle by George Smith, England, 1820s.²³

keyed trumpets beginning in 1793,²⁴ and by 1800 he performed on an instrument with four keys.²⁵ In 1796 Franz Joseph Haydn (1732-1809) composed his *Concerto in E-flat* for Weidinger, who premiered the work in 1800.²⁶ Weidinger also premiered the *Concerto in E* by Johann Nepomuk Hummel (1778-1837) in 1803.²⁷

The ophicleide (Figure 13), a lower-pitched relative of the keyed bugle, was invented by Jean Hilaire Asté (c. 1775-c. 1840) in 1817. The instrument was patented in 1821.²⁸ The most successful of the keyed brasses in terms of widespread use, the ophicleide was popular in France and Britain, and to a lesser extent in Italy, Germany, and the United States. The usual design resembled a

²³ Keyed Bugle, "Edinburgh Collection of Historical Musical Instruments," Available Online: <<http://www.music.ed.ac.uk/euchmi/ucj/ucjth07.html>> [7 May 2005].

²⁴ Reine Dahlqvist, "Weidinger, Anton," *Grove Music Online*, ed. L Macy, Available Online: <<http://www.grovemusic.com>> [16 October 2004].

²⁵ Baines, *Brass Instruments*, 192.

²⁶ Baines, *Brass Instruments*, 192; Dahlqvist, Online.

²⁷ Elisa Koehler, "In Search of Hummel: Perspectives on the Trumpet Concerto of 1803," *International Trumpet Guild Journal* 27:2 (January 2003), 7.

²⁸ Baines, *Brass Instruments*, 198.



Figure 13. Ophicleide by A.G. Guichard, Paris, c. 1840.²⁹

brass bassoon, with nine to twelve keys and a mouthpiece similar to that of the trombone.³⁰ Berlioz and his contemporaries utilized the ophicleide in their works until the tuba, made possible by the invention of the valve, supplanted it.³¹

The development of keyed brasses was an important step in the evolution of brass instruments, yet players could not produce a consistent tone quality using them. This deficiency limited the prospects for long-term acceptance of

²⁹ Bass Ophicleide, "MFA Collections Database," Available Online: <<http://www.mfa.org/artemis/fullrecord.asp?oid=50499&did=600>> [7 May 2005].

³⁰ Bevan, *The Tuba Family*, 61-64.

³¹ Hector Berlioz and Richard Strauss, *Treatise on Instrumentation*, Translated by Theodore Front (New York: Edwin F. Kalmus, 1948; Reprint: New York: Dover Publications, 1991), 339.

keyed brasses.³² Even when the ophicleide was gaining acceptance, the construction and performance of brass instruments was changing rapidly because of a new invention, the valve.

The Invention and Refinement of the Valve

The valve was invented during the 1810s by Heinrich Stölzel (1777-1844) and Friedrich Blühmel (d. c. 1845). Stölzel, an orchestral hornist, and Blühmel, a member of a mining company band, were issued a joint Prussian patent in 1818 for a square-shaped piston valve.³³

The circumstances surrounding the invention of the valve are unclear because of quarrels between the two men.³⁴ Blühmel claimed that he invented the valve and later sold the design to Stölzel. Stölzel claimed that he was the original inventor.³⁵ Regardless of these arguments, one or both of these men had developed a working valve by 1815.³⁶ Although the original patent was for a square piston valve, the design usually credited to Stölzel was tubular. This design was considered deficient because the airway was constricted by ninety-degree bends in the tubing (Figure 14).³⁷

³² Bevan, *The Tuba Family*, 72.

³³ Bevan, *The Tuba Family*, 73.

³⁴ Baines, *Brass Instruments*, 207.

³⁵ Bevan, *The Tuba Family*, 73.

³⁶ Robert Erwin Eliason, "Brass Instrument Key and Valve Mechanisms Made in America Before 1875 with Special Reference to the D.S. Pillsbury Collection in Greenfield Village, Dearborn, Michigan" (DMA diss., University of Missouri at Kansas City, 1968), 25.

³⁷ Bevan, *The Tuba Family*, 73.

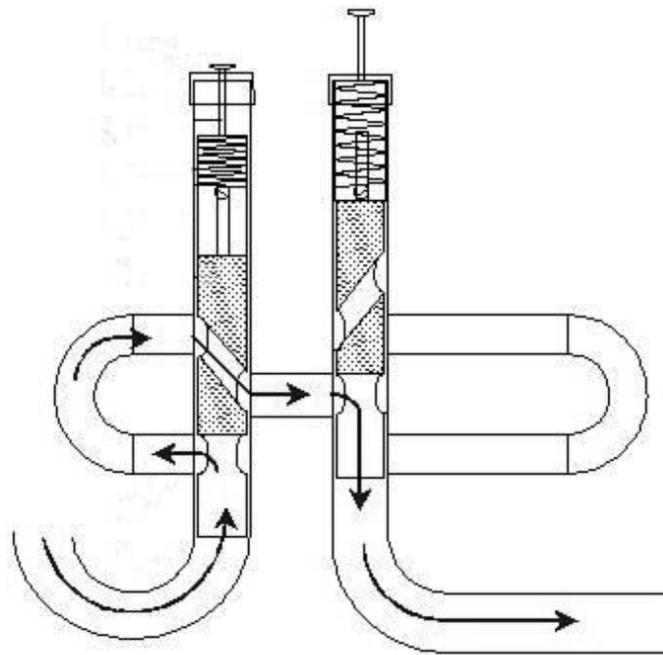


Figure 14. Diagram of a Stölzel tubular piston valve system.³⁸ The valve on the left is engaged, and the one on the right is open. The arrows indicate the direction of airflow.

A square-shaped valve, known as the Schuster Box Valve,³⁹ was later produced in Karlsruhe.⁴⁰ This valve “was clumsy but the windways were not restricted, allowing easier blowing.”⁴¹ Meanwhile, Stölzel continued to improve upon his tubular piston, and instruments using his designs were played until the 1840s.⁴²

³⁸ Early Model Stölzel Valve, “Elements of Brass Instrument Construction,” Available Online: <<http://www.usd.edu/smm/UtleyPages/Utleyfaq/brassfaq.html>> [7 May 2005]. © National Music Museum: America’s Shrine to Music <<http://www.usd.edu/smm>>.

³⁹ Bevan, *The Tuba Family*, 73.

⁴⁰ Baines, *Brass Instruments*, 208; Bevan, *The Tuba Family*, 73; Eliason, “Brass Instrument Key and Valve Mechanisms,” 25.

⁴¹ Bevan, *The Tuba Family*, 73.

⁴² Baines, *Brass Instruments*, 210.

Other makers sought to improve valve designs, as well. A double piston valve was produced by Sattler in 1821.⁴³ This design was improved upon by several manufacturers, most significantly Leopold Uhlmann (1806-1878).⁴⁴ Uhlmann's 1830 design (Figure 15) ultimately was employed on the Vienna horn, an instrument played exclusively by hornists in the Vienna Philharmonic/Vienna State Opera Orchestra.⁴⁵ Uhlmann's double piston, therefore, came to be known as the Vienna valve.⁴⁶

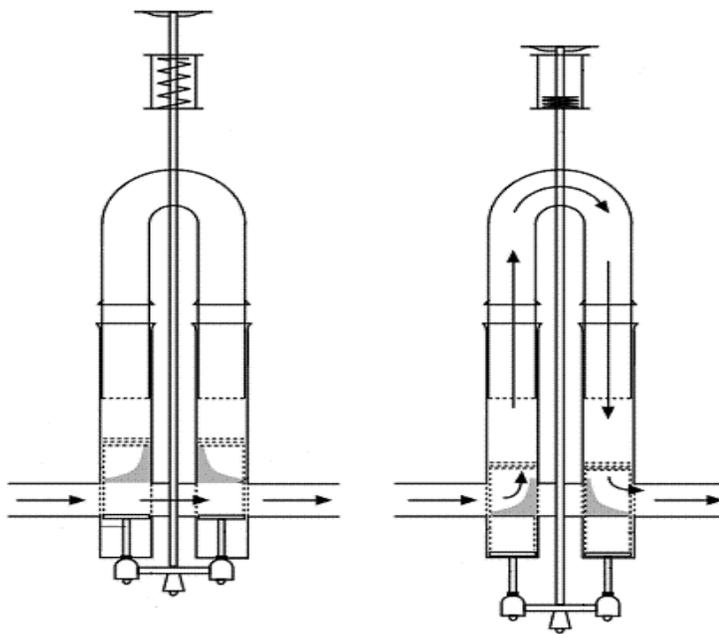


Figure 15. Diagrams of the double piston (Vienna) valve.⁴⁷ The diagram on the left depicts the valve when open, and the one on the right depicts the valve when engaged. The arrows indicate the direction of airflow.

⁴³ Baines, *Brass Instruments*, 210.

⁴⁴ Baines, *Brass Instruments*, 211; Bevan, *The Tuba Family*, 75.

⁴⁵ Baines, *Brass Instruments*, 223.

⁴⁶ Bevan, *The Tuba Family*, 75.

⁴⁷ Vienna valve, Philip Bate and Edward H. Tarr, "Valve," *Grove Music Online*, ed. L. Macy, Available Online: <<http://www.grovemusic.com>> [11 May 2005]. Used with permission.

Blühmel produced the first rudimentary rotary valve in 1828. Flaws in Blühmel's design were corrected by Josef Kail (1795-1871) in 1829,⁴⁸ and Joseph Riedl (d. 1840) in 1832. Riedl secured a patent for his design, which became the "standard" rotary valve model (Figure 16).⁴⁹

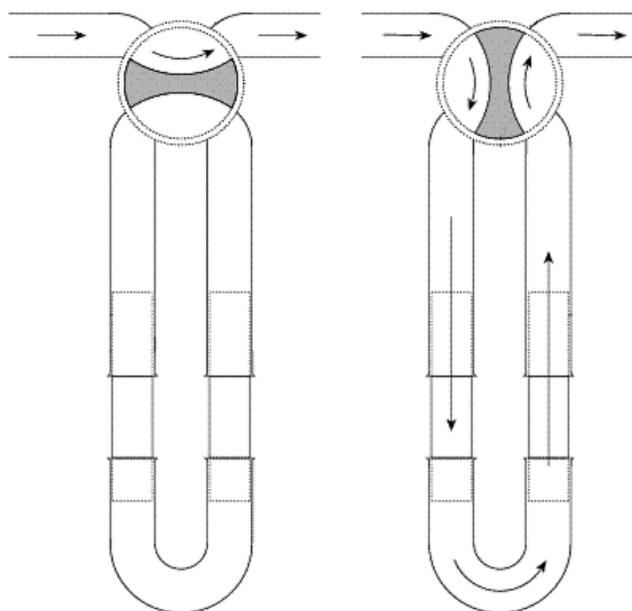


Figure 16. Diagrams of the rotary valve.⁵⁰ The diagram on the left depicts the valve when open, and the one on the right depicts the valve when engaged. The arrows indicate the direction of airflow.

Brass players throughout Europe adopted the rotary valve soon after its development. This new valve was especially well-received in Germany and Austria.⁵¹ The rotary valve enabled players to produce a superior tone quality to

⁴⁸ Baines, *Brass Instruments*, 211.

⁴⁹ Bevan, *The Tuba Family*, 75.

⁵⁰ Rotary valve, Bate and Tarr, "Valve," Online. Used with permission.

⁵¹ Bevan, *The Tuba Family*, 76.

that produced with Stölzel piston valve instruments because of the lack of sharp bends in the tubing.⁵² Berlioz thought the tone quality achieved with rotary valve instruments was far superior to that of instruments with pistons and that the rotary valve would therefore supplant the piston.⁵³ The piston valve remained in use because it was easier to operate than the rotary valve, and military bandsmen complained that rotary valves were too delicate for practical use by cavalrymen.⁵⁴

In 1835 Berlin bandmaster Wilhelm Wieprecht (1802-1872) and instrument maker J.G. Moritz (n.d.) introduced two important inventions. One was an improved piston valve, the *Berliner-Pumpe*, which was intended to combine “the light feel of Stölzel’s piston with the better tonal results of Blühmel’s rotaries” (Figure 17).⁵⁵ The other was the Bass-Tuba, “pitched in F with five *Berliner-Pumpen*.”⁵⁶ The tuba satisfied the need for a contrabass brass instrument that could sufficiently balance the high brasses. The *Berliner-Pumpe* enabled players to produce a better sound than with earlier piston valve designs, though the tone quality produced using rotary valve instruments was still considered superior.⁵⁷

⁵² Wilhelm Wieprecht, cited in Baines, *Brass Instruments*, 211.

⁵³ Hector Berlioz, *Memoirs of Hector Berlioz from 1803-1865, Comprising His Travels in Germany, Italy, Russia, and England*, Translated by Rachel Holmes and Eleanor Holmes, Revised by Ernest Newman (New York, Alfred A. Knopf, Inc., 1932; Reprint: New York: Dover Publications, 1966), 260; Bevan, *The Tuba Family*, 78.

⁵⁴ Wieprecht, cited in Baines, *Brass Instruments*, 211-212.

⁵⁵ Wieprecht, cited in Baines, *Brass Instruments*, 211.

⁵⁶ Bevan, *The Tuba Family*, 84.

⁵⁷ Baines, *Brass Instruments*, 212.

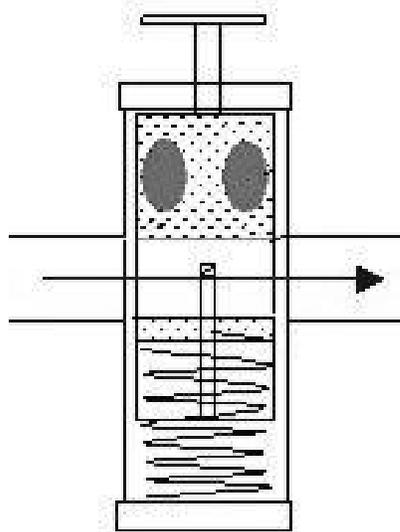


Figure 17. Diagram of the *Berliner-Pumpe* (open).⁵⁸
The arrow indicates the direction of airflow.

An additional piston valve improvement was made by Paris instrument maker Étienne Périnet (n.d.) in 1838-1839. Périnet's piston valve (Figure 18) was more open than the Stölzel design, yet not as bulky as the *Berliner-Pumpe*.⁵⁹ The Périnet valve eventually supplanted all earlier piston valve designs.⁶⁰

Within thirty years, the first rudimentary valves were introduced and the refinement of three distinct valve types—piston, rotary, and Vienna—was completed. Manufacturers applied these inventions to the trumpet, horn, bugle (creating the flugelhorn), and post horn (creating the *cornet à pistons*),⁶¹ and

⁵⁸ Berlin Valve, "Elements of Brass Instrument Construction," Available Online: <<http://www.usd.edu/smm/UtleyPages/Utleyfaq/brassfaq.html>> [7 May 2005]. © National Music Museum: America's Shrine to Music <<http://www.usd.edu/smm>>.

⁵⁹ Baines, *Brass Instruments*, 213, Bevan, *The Tuba Family*, 76.

⁶⁰ Bevan, *The Tuba Family*, 76.

⁶¹ Baines, *Brass Instruments*, 219-235.

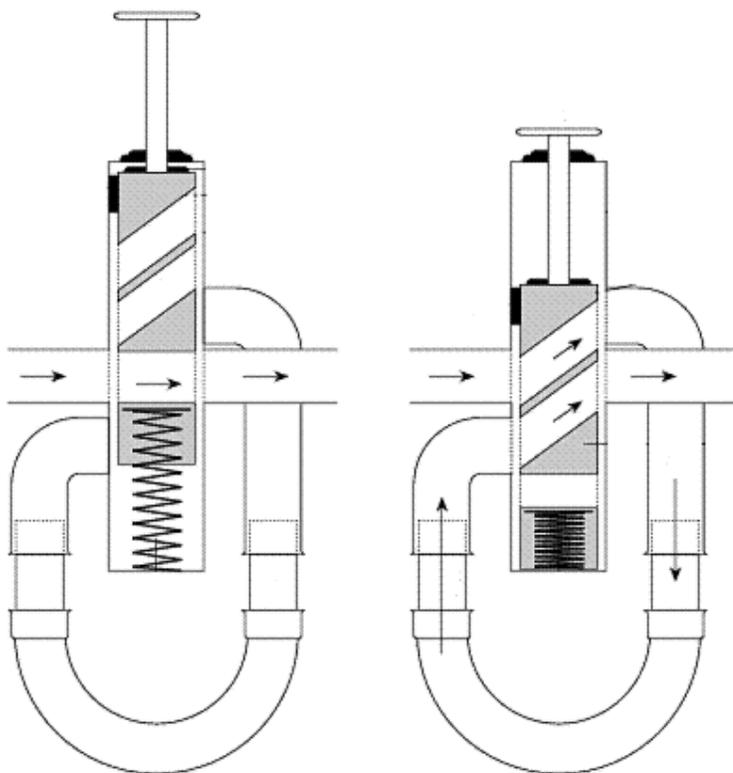


Figure 18. Diagrams of the Périnet piston valve.⁶² The diagram on the left depicts the valve when open, and the one on the right depicts the valve when engaged. The arrows indicate the direction of airflow.

introduced new tenor, bass, and contrabass brass instruments.⁶³ The trombone was not ignored in the application of valves to brass instruments.

The Development of the Valve Trombone

The precise date and location of the invention of the valve trombone are unknown. Baines believed the instrument to have been invented in Vienna or

⁶² Piston valve, Bate and Tarr, "Valve," Online. Used with permission.

⁶³ Baines, *Brass Instruments*, 249-266.

Prague during the 1820s.⁶⁴ Musicians in Prague concurred with the latter idea, asserting that Kail introduced the first valve trombone.⁶⁵ Heyde traced the conceptual development of the valve trombone back even further, to Blühmel and Stölzel themselves:

Stoelzel wrote in his application for a patent in February 1818 that valves could be applied not only to the horn but to all brass instruments. Blühmel actually ordered—between February and April 1818 a trombone with 3 box valves to be made by J.C. Gabler and had the valve trombone included in his application for a patent. In the joint patent given to Stoelzel and Blühmel together (1818), the valve trombone is included but as a result of the breach between Gabler and Blühmel . . . the trombone was never built.⁶⁶

Blühmel and Stölzel were responsible for the concept of the valve trombone, yet disagreements and legal entanglements between the two delayed the realization of that concept. A working valve trombone was in existence by 1827, when Stölzel mentioned an improved valve trombone in an application for a patent extension.⁶⁷ Valve trombones had presumably been produced prior to this improved model, though the specific date of the invention of the valve trombone is unknown.

⁶⁴ Baines, *Brass Instruments*, 248.

⁶⁵ Shifrin, "The Valve Trombone," *Brass Bulletin* 112, 119.

⁶⁶ Herbert Heyde, "On the Early History of Valves and Valve Instruments in Germany (1814-1833)," *Brass Bulletin* 26 (1979), 75.

⁶⁷ Heyde, *Brass Bulletin* 25, 45.

American manufacturers began producing valve trombones by 1831,⁶⁸ and a French patent for the instrument was issued in 1836.⁶⁹ The valve trombone was most likely introduced in Italy soon after its development, and Italian players accepted the instrument more fully than perhaps any other group of trombonists.⁷⁰ Valve trombones were widely played in Belgium after the introduction of Adolphe Sax's (1814-1894) "six-valver" in 1852.⁷¹ British trombone design mirrored French trends during this period,⁷² suggesting that the valve trombone was introduced there during the 1830s.

Although the proliferation of the valve trombone was rapid, homogenization of valve trombone designs did not occur during the nineteenth century.⁷³ Manufacturers developed valve trombones in a variety of shapes and configurations. Both piston (Figure 19) and rotary (Figure 20) models were common,⁷⁴ and Vienna valve trombones were produced, as well⁷⁵ (Figure 21).

⁶⁸ Eliason, "The Trombone in Nineteenth-Century America," 9.

⁶⁹ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 128.

⁷⁰ Clifford Bevan, "Cimbasso Research and Performance Practice," In *Perspectives in Brass Scholarship* (Stuyvesant, New York: Pendragon Press, 1997), 296; Guion, "A Short History of the Trombone," Online; Curtis H. Larkin, "Memories of Arthur Pryor and His Band," *The School Musician* (February 1943), 9.

⁷¹ Albert Mertens, "The Trombone in Belgium," *Brass Bulletin* 5/6 (1973), 96.

⁷² Anthony Baines, Trevor Herbert, Arnold Myers, "Trombone," *Grove Music Online*, ed. L. Macy, Available Online: <<http://www.grovemusic.com>> [22 January 2005]. *The section containing this material was authored by Baines and Myers only.

⁷³ Bevan, "Cimbasso Research and Performance Practice," 297.

⁷⁴ Kitzel. Kitzel's photographs include a number of nineteenth-century instruments from American and European makers using both piston and rotary valves.

⁷⁵ Bob Beecher, "Variations on the Trombone," Available Online: <<http://home.att.net/~bobbeecheer/trombone/trombone.html>> [6 January 2005].

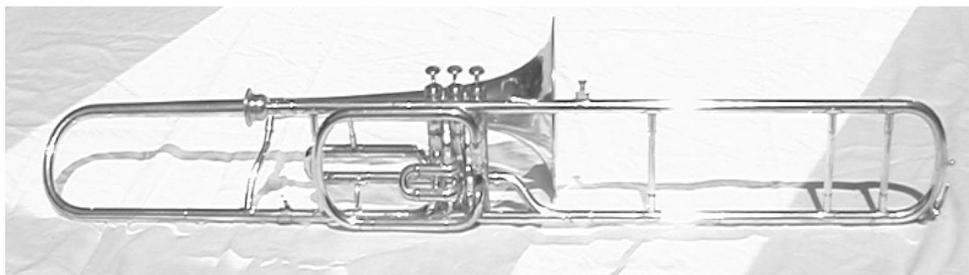


Figure 19. Piston valve trombone by F. Besson, London, 1885.⁷⁶



Figure 20. Rotary valve trombone by Cazzani, Milan, before 1912.⁷⁷



Figure 21. Double piston (Vienna) valve trombone by Van Cauwelveert, Belgium, c. 1880.⁷⁸

⁷⁶ 1885 F. Besson Piston Valve Trombone, Available Online: <http://www.horncollector.com/Trombones/Besson/1885%20Besson%20Valve%20Trombone.htm> [7 May 2005].

⁷⁷ Cazzani Valve Trombone, Available Online: <http://www.neillins.com/TB094.htm> [22 January 2005].

⁷⁸ Van Cauwelveert Vienna Valve Trombone, Available Online: <http://www.neillins.com/TB113.htm> [22 January 2005].

Nineteenth-century valve trombonists chose piston, rotary, or Vienna valves according to the regional trends common to all valve brasses. French and British trombones usually had piston valves, with rotary valves being common further east.⁷⁹ Trombones with Uhlmann's Vienna valve design were played in the Vienna Philharmonic/Vienna State Opera Orchestra from the 1830s until 1883.⁸⁰ Both piston and rotary models were played by American trombonists.⁸¹

Valve trombones retaining the traditional trombone shape (Figures 19, 20, and 21) were common,⁸² yet the weight of these instruments often was disproportionately concentrated at the front.⁸³ This balance problem led trombonists to complain about uneven weight distribution. Manufacturers therefore developed alternative valve trombone designs during the nineteenth century.⁸⁴

One design, depicted in Figure 22, was produced by K. Schmal in Prague.⁸⁵ This instrument, called the *armeeposaune*,⁸⁶ resembled a small

⁷⁹ Bevan, *The Tuba Family*, 76-78.

⁸⁰ Gerhard Zechmeister, "The Role of the (Contra)bass Trombone in the Vienna Sound," *Brass Bulletin* 102 (1998), 20, 23.

⁸¹ Peter H. Adams, "Antique Brass Wind Instruments: Identification and Value Guide" (Atglen, Pennsylvania: Schiffer Publishing, Ltd., 1998); Kitzel.

⁸² Baines and Myers, "Trombone," Online.

⁸³ Clifford Bevan, "Cimbasso Research and Performance Practice," 296-297.

⁸⁴ Baines, *Brass Instruments*, 248; Bevan, "Cimbasso Research and Performance Practice," 297.

⁸⁵ *Armeeposaune* in Bb, "Edinburgh Collection of Historical Musical Instruments," Available Online: < <http://www.music.ed.ac.uk/euchmi/ucj/ucjth3.html> > [22 January 2005].

⁸⁶ Shifrin, "The Valve Trombone," *Brass Bulletin* 112, 124.

euphonium or baritone horn. The compact nature of this instrument made it well-suited for military use.



Figure 22. *Armeeposaune* by K. Schmal, Prague, c. 1880.⁸⁷

Baines, Myers, and Bevan described a valve trombone that was shaped like a helicon, a predecessor of the sousaphone. Instruments of this type were played during the nineteenth century in marching and cavalry bands.⁸⁸ Dutch military trombonists even played these instruments while riding bicycles.⁸⁹

⁸⁷ Armeeposaune in Bb, Online.

⁸⁸ Baines and Myers, "Trombone," Online; Bevan, *The Tuba Family*, 190.

⁸⁹ Bevan, *The Tuba Family*, 190.

Nineteenth-century Italian trombonists were the staunchest supporters of the valve trombone.⁹⁰ Italian composers such as Giuseppe Verdi (1813-1901) actually preferred the contrabass valve trombone over the tuba as the foundation of the brass section. Sometimes known as the *cimbasso* (Figure 23), the contrabass valve trombone was constructed with the valve section angled away from the bell, allowing the weight of the instrument to rest on the floor when the player was seated.⁹¹

Other manufacturers sought to design valve trombones that were more convenient for use in marching bands and orchestra pits while keeping the usual trombone configuration. Such makers produced “short” models, in which the tubing was tightly wrapped to make the instrument more compact (Figure 24).⁹²

Sax introduced a number of innovative brass and woodwind instrument designs. Sax’s instruments were widely used, although his more experimental designs were less common.⁹³ The Sax six-valve trombone in Figure 25 was popular in Belgium⁹⁴ and France⁹⁵ during the nineteenth century.

⁹⁰ Frizane, 16-17.

⁹¹ “19th Century – Cimbasso Describes the Deepest Brass Voice,” *Vienna Symphonic Library*, Available Online: <<http://www.vsl.co.at/english/instruments/brass/cimbasso/History.htm>> [27 January 2005].

⁹² Kitzel, 241.

⁹³ Philip Bate and Wally Horwood, “Sax,” *Grove Music Online*, ed. L Macy, Available Online: <<http://www.grovemusic.com>> [7 January 2005].

⁹⁴ Baines, *Brass Instruments*, 249.

⁹⁵ Jeffrey Jon Lemke, “French Tenor Trombone Solo Literature and Pedagogy Since 1836” (DMA diss., University of Arizona, 1983), 12-13.



Figure 23. Contrabass trombone/*cimbasso* by Maino & Orsi, Milan, late nineteenth century.⁹⁶



Figure 24. Short Model Valve Trombone by John F. Stratton, New York, c. 1890.⁹⁷

⁹⁶ Bevan, *The Tuba Family*, 96-97.

⁹⁷ John F. Stratton Short Model Valve Trombone, Available Online:
 <<http://www.horncollector.com/Trombones/Stratton/1890's%20Stratton%20Valve%20Trombone.htm>> [22 January 2005].



Figure 25. Six-valve trombone by Adolphe Sax, Paris, 1867.⁹⁸

Each of the six valves on this instrument, along with the open position, corresponded to one position on the slide trombone. Because no two valves were used in combination, the six-valve system offered the most slide trombone-like intonation of any commonly used valve trombone.⁹⁹

Two additional Sax valve trombones, the six-valve, seven-bell trombone in Figure 26, and the seven-valve, thirteen-bell trombone in Figure 27, were not as successful as the above design. These instruments presumably were intended to completely eliminate the intonation difficulties associated with the valve trombone, yet never became popular because of their obvious complexity.¹⁰⁰

⁹⁸ "Six-Valve Trombone," in Beecher, "Variations on the Trombone," Online.

⁹⁹ Baines, *Brass Instruments*, 248-249.

¹⁰⁰ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 134.

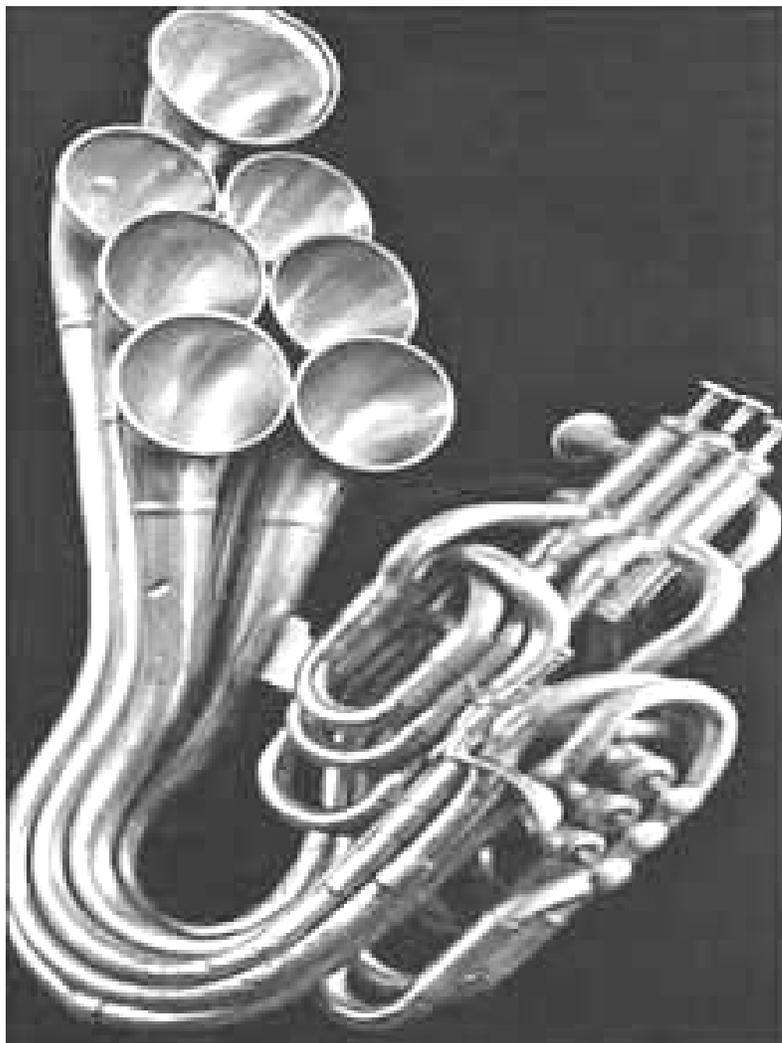


Figure 26. Six-valve, seven-bell trombone by Adolphe Sax, c. 1860.¹⁰¹

The interest shown by manufacturers in developing and refining valve trombone designs indicates that people were buying and using valve trombones. Instrument makers would not have invested time and capital in the development of these instruments if there was no market for them. As discussed briefly in

¹⁰¹ Trombone multipavillons, Available Online:
<<http://www.whc.net/rjones/trompavillon.html>> [22 January 2005].

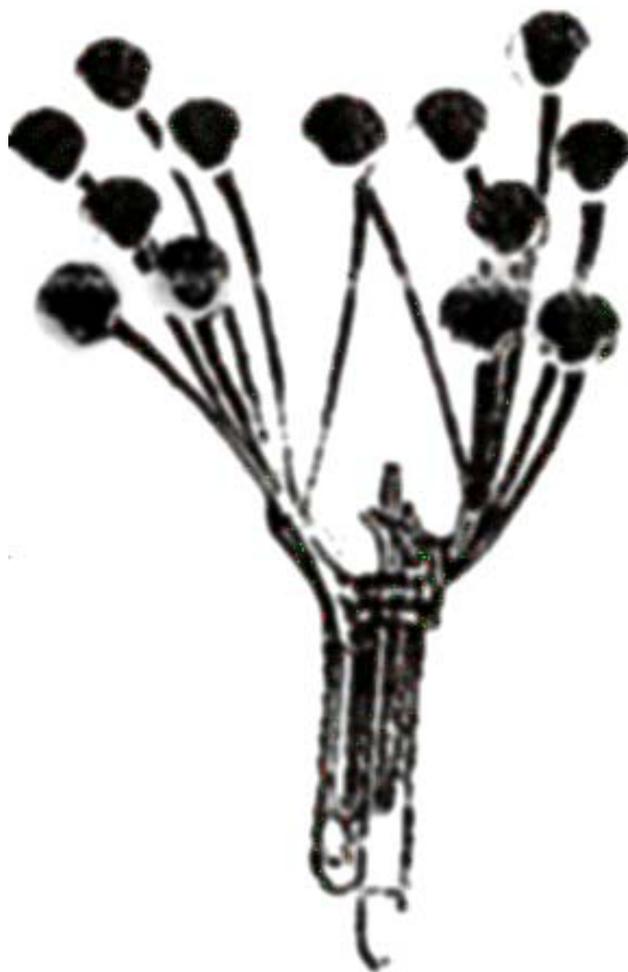


Figure 27. Seven-valve, thirteen-bell trombone by Adolphe Sax, n.d.¹⁰²

Chapter I, valve trombones were common during this period, and even supplanted the slide trombone for a time.¹⁰³

¹⁰² Seven-valve, thirteen-bell trombone, in Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 134.

¹⁰³ Kitzel, 7.

The Valve Trombone in Nineteenth-Century Performance

Valve brasses were greeted initially with distrust.¹⁰⁴ Opponents of the new instruments argued that valves caused an undesirable change in tone quality,¹⁰⁵ a problem compounded by flaws in the earliest valve designs.¹⁰⁶ Riedl and Périnet eliminated many flaws with their improved rotary and piston valves, respectively,¹⁰⁷ and a greater number of players began to use valve instruments.¹⁰⁸ The adoption of valve instruments by institutions such as the Paris Conservatory¹⁰⁹ also contributed to the greater acceptance of these instruments. Valve brasses were being played by performers throughout Europe¹¹⁰ and the United States¹¹¹ by the 1840s.

As stated in Chapter I, divergent conclusions have been reached regarding the extent to which valve trombones were played during the nineteenth century. Twentieth-century writers indicated that the valve trombone was played exclusively in military bands,¹¹² Italian opera orchestras,¹¹³ and elsewhere in southern and eastern Europe.¹¹⁴ The use of valve trombones in these cases is not

¹⁰⁴ Morley-Pegge, 3.

¹⁰⁵ Myers, 126.

¹⁰⁶ Bevan, *The Tuba Family*, 73.

¹⁰⁷ Baines, *Brass Instruments*, 211-213.

¹⁰⁸ Bevan, *The Tuba Family*, 73.

¹⁰⁹ Lemke, 11.

¹¹⁰ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 128; *Brass Bulletin* 112, 119.

¹¹¹ Eliason, "Brass Instrument Key and Valve Mechanisms," 25-48.

¹¹² Carse, *The Orchestra from Beethoven to Berlioz*, 421.

¹¹³ Wick, 95.

¹¹⁴ Bevan, "Cimbasso Research and Performance Practice," 296.

disputed. Military bandsmen found the valve trombone to be more durable than the slide trombone, and thus better suited to their purposes.¹¹⁵ Italian opera composers, recognizing the ease of technical execution on valve instruments, wrote trombone parts intended to be played on the valve trombone. Additionally, opera orchestra trombonists found valve trombones to be easier to manage in cramped orchestra pits than slide models.¹¹⁶ The use of the valve trombone throughout southern and eastern Europe is well-documented. Dvořák, for example, likely composed most of his symphonies with valve trombones in mind.¹¹⁷

Nineteenth-century trombonists preferred the valve trombone to a greater extent than most twentieth-century authorities realized. Trombonists, composers, and conductors in all areas and levels of performance experimented with the valve trombone and debated the merits of the valve versus those of the slide.¹¹⁸ Players especially appreciated the easier technical and legato execution offered by the valve trombone.¹¹⁹ Although the slide trombone once again was preferred over the valve trombone after the early twentieth century,¹²⁰ during much of the nineteenth century the slide was declining in popularity.¹²¹

¹¹⁵ Carse, *The Orchestra from Beethoven to Berlioz*, 421.

¹¹⁶ Bevan, "Cimbasso Research and Performance Practice," 296.

¹¹⁷ Shifrin, "The Valve Trombone," *Brass Bulletin* 112, 119.

¹¹⁸ Eliason, "Trombone in Nineteenth-Century America," 9.

¹¹⁹ Baines, *Brass Instruments*, 248.

¹²⁰ Čížek, *Brass Bulletin* 74, 28; Kitzel, 7.

¹²¹ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 139.

Trombonists in France and Belgium were especially fond of the valve trombone. As strong advocates of the slide trombone, Paris Conservatory trombone professors lamented the use of the valve trombone in that country, yet were sometimes forced to teach the valve instrument because of its popularity among French players.¹²² Valve trombone proliferation in France is also indicated by eyewitness accounts of valve trombones at the *Opéra-Comique* in Paris,¹²³ and by Sousa's expressed desire to see French trombonists abandon the valve instrument.¹²⁴ French composers of the period found the valve trombone to be a useful addition to bands and orchestras in some cases. Berlioz briefly discussed the instrument in his *Treatise on Instrumentation*, although he generally preferred the slide trombone.¹²⁵ Halévy used the alto valve trombone as a solo instrument in his works,¹²⁶ and trombone solos in *Hamlet*¹²⁷ and *Comte de Carmagnola*¹²⁸ by Ambroise Thomas (1811-1896) have been cited as trombone parts necessitating the use of a valve instrument.

Sax's six-valve trombone was popular in Belgium, and Belgian trombonists of the period played this instrument almost exclusively.¹²⁹ Belgian-

¹²² Lemke, 12-13, 16.

¹²³ Wotton, 634.

¹²⁴ John Philip Sousa, *Marching Along*, Revised Edition, ed. Paul E. Bierley (Westerville, Ohio: Integrity Press, 1994), 190.

¹²⁵ Berlioz, *Treatise on Instrumentation*, 330.

¹²⁶ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 136.

¹²⁷ René Brancour, *Histoire des Instruments de Musique* (Paris: Henri Laurens, 1921), 181.

¹²⁸ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 137.

¹²⁹ Baines, *Brass Instruments*, 249.

born composer César Franck (1822-1890) may have envisioned this instrument when composing his *Symphony in D minor*, given the presence of passages in this work that are especially difficult to negotiate on the slide trombone (Figures 28 and 29).¹³⁰



Figure 28. César Franck: *Symphony in D minor*, Mvt. I, Measures 355-360, Trombone III part.¹³¹

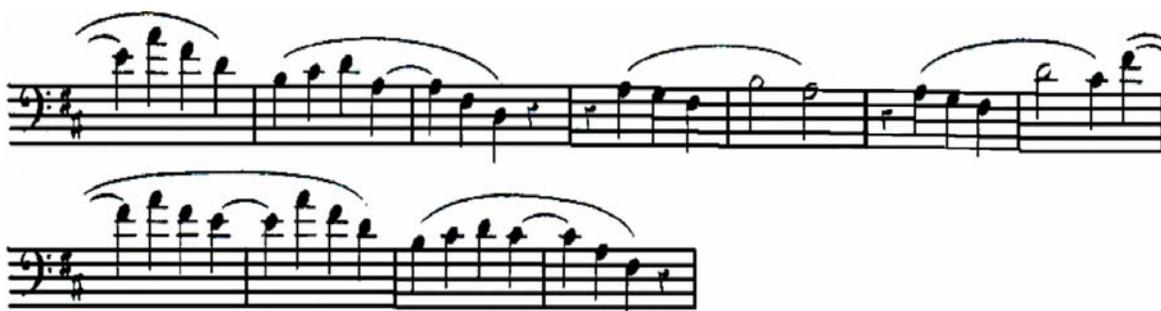


Figure 29. César Franck: *Symphony in D minor*, Mvt. III, Measures 267-277, Trombone III part.¹³²

The excerpt in Figure 28 requires the slide trombonist to move quickly from seventh to first position in the fourth bar, and from seventh to second

¹³⁰ Wotton, 634.

¹³¹ César Franck, *Symphony in D minor*, Trombone III part, in "The Complete Low Brass Excerpts Collection," ed. Gordon Cherry (Vancouver: Cherry Classics, 2002), CD.

¹³² Franck, CD.

position between the fifth and sixth bars. A valve trombonist could execute this passage with relative ease. The extended slurs in Figure 29 also are executed more easily on the valve than the slide trombone.

French trombonists also were fond of the six-valve instrument.¹³³ French contemporaries of Franck, including Camille Saint-Saëns (1835-1921) and Vincent d'Indy (1851-1931) reportedly composed trombone parts with the six-valve trombone in mind.¹³⁴

American manufacturers began to produce valve trombones as early as 1831, and the instrument became popular there during the 1840s.¹³⁵ Slide trombones were rare in the United States by the 1880s.¹³⁶ Instrument catalogs produced by American manufacturers list multiple valve trombones offered for sale and show a marked predilection for the valve instrument. In fact, valve trombones outnumber slide trombones more than two-to-one in these catalogs.¹³⁷ The presence of nineteenth-century valve trombones in the Shrine to Music

¹³³ Lemke, 12-13; Wotton, 634.

¹³⁴ Edmond Leloir, "The Trombone with 6 Independent (*sic*) Valves," *Brass Bulletin* 5/6 (1973), 105.

¹³⁵ Eliason, "The Trombone in Nineteenth-Century America," 6-9.

¹³⁶ Rick Benjamin, *Arthur Pryor: Ragtime Pioneer*, Available Online: <<http://www.paragonragtime.com/pryor.html>> [7 January 2005]; Dillon, 34; Larkin, *The School Musician* (February 1943), 8.

¹³⁷ Adams, 36-142. Adams's book reproduces a number of instrument catalogs dating from 1869-1904. Valve models outnumber slide models 21-9, collectively. Assuming this collection is representative of American manufacturers of the period, this demonstrates a preference for the valve trombone among American manufacturers of the mid to late nineteenth century, a preference which certainly resulted from a similar preference among consumers.

Museum in South Dakota indicates the popularity of that instrument, as well.¹³⁸

The photograph of the Boston Symphony Orchestra trombone section in Chapter I indicates that valve trombone playing in the United States extended beyond bands into the orchestral realm.¹³⁹

British trombonists did not accept the valve trombone as enthusiastically as their French, Belgian, and American counterparts,¹⁴⁰ although some did play the valve instrument. Kitzel indicated that valve trombones were played in some of the early British brass bands,¹⁴¹ and Sir Henry Wood (1869-1944) required his trombonists to play a seven-valve variation of the Sax six-valve design while he was conductor of the Queen's Hall orchestra in London.¹⁴² These instances of valve trombone playing in Britain, however, were atypical. The instrument did not become popular there to the extent that it did elsewhere in Europe and in the United States.

Trombonists in Germany and Austria began to play the valve trombone shortly after its invention. Shifrin indicated that valve trombone playing was widespread in Germany during a brief portion of the mid-nineteenth century.¹⁴³ Especially significant among Austrian trombonists was the use of valve trombones by the Vienna Philharmonic/Vienna State Opera Orchestra beginning

¹³⁸ Kitzel, 273-274.

¹³⁹ Howe, 66.

¹⁴⁰ Gregory, 121.

¹⁴¹ Kitzel, 8.

¹⁴² Gregory, 128.

¹⁴³ Čížek, *Brass Bulletin* 74, 28; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 138-141.

in 1835. A number of significant orchestral works premiered by the Vienna Philharmonic, including Brahms's first two symphonies and Bruckner's *Symphony No. 4*,¹⁴⁴ were therefore premiered by an orchestra that included valve trombones.

The valve trombone was initially well-received by trombonists throughout Europe and the United States, and almost replaced the slide trombone entirely. German trombonists, however, became dissatisfied with the valve instrument soon after adopting it, and began what eventually became a widespread return to the slide trombone.¹⁴⁵ The timing and causes of this return will be discussed in the next chapter.

¹⁴⁴ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 139-140.

¹⁴⁵ Čížek, *Brass Bulletin* 74, 28; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 138-141.

CHAPTER III

THE REEMERGENCE OF THE SLIDE TROMBONE

While the valve trombone became popular following its invention, this acceptance did not continue beyond the early twentieth century.¹ In fact, twentieth-century trombonists overwhelmingly preferred the slide trombone.² Several factors that contributed to this shift in trombonists' instrument preferences and the approximate timing of this change are discussed in the following paragraphs.

Disadvantages of the Valve Trombone

The valve trombone was popular during the nineteenth century, yet trombonists and other musicians considered the slide trombone to be superior both in intonation and in tone quality. Blaikley wrote:

The trombone is the last possible instrument to which to apply pistons with advantage, the reason being the great length of the cylindrical tube, and a very slight interference with the freedom of vibration . . . when you have such a great length of small tube, with so many bends and turns in the tubes as are necessitated by the valve action, is rather a disadvantage. Nothing can be better as far as it goes than the slide."³

¹ Kitzel, 7.

² Čížek, *Brass Bulletin* 74, 28.

³ Blaikley, "The Development of Modern Wind Instruments," 135-136.

Gontershausen also stated that the valve produced an inferior sound to that of the slide trombone.⁴ Sousa believed that the valve trombone represented a compromise in tone quality accepted only by lazy musicians, calling the valve instrument “. . . a poor substitute for the warm, effective, and beautiful tone of the . . . [slide] trombone.”⁵ Paris Conservatory trombone professors Antoine Dieppo (1808-1878) and Paul Delisse (1817-1888) were ardent proponents of the slide despite a growing trend of valve trombone playing there.⁶ Clearly the consensus among nineteenth-century musicians was that the intonation and tone quality of the slide were superior to those of the valve trombone. These characteristics were a major factor prompting players to switch to the slide trombone.

The Reemergence of the Slide Trombone

Leading German trombonists were among the first to return to the slide, having mostly abandoned the valve trombone by 1855. These trombonists adopted the slide primarily because of perceived deficiencies in the tuning and tone quality produced on the valve trombone.⁷ German slide trombone performance and pedagogy were the finest in Europe during this period,⁸ so the

⁴ H. W. von Gontershausen, *New eröffnetes Magazin musikalischer Tonwerkzeuge* (Frankfurt, 1955), cited in Shifrin, “The Valve Trombone,” *Brass Bulletin* 111 (2000), 138-139.

⁵ Sousa, 190.

⁶ Lemke, 12-16.

⁷ Gontershausen, cited in Shifrin, “The Valve Trombone,” *Brass Bulletin* 111, 138-139.

⁸ Shifrin, “The Valve Trombone,” *Brass Bulletin* 111, 127-128.

technical difficulties sometimes associated with the slide were not a concern. Additionally, the slide trombone performances of prominent soloists Friedrich August Belcke (1795-1874) and Carl Traugott Queisser (1800-1846) during the first half of the nineteenth century demonstrated the capabilities of the slide to German trombonists.⁹ Dissatisfied with the tuning and tone quality of the valve trombone, the technically proficient Germans readopted the slide relatively early.

A tradition of virtuosic slide trombone playing existed in Austria, as well.¹⁰ Orchestral trombonists in Vienna returned to the slide instrument in 1883, when opera director Wilhelm Jahn (1835-1900) “demanded the use of the new large-bore German slide trombones . . . because of their ‘livelier sound [which] lent a more energetic tone-color to orchestral expression.’”¹¹ Although this demand was the immediate cause for Viennese trombonists’ change to the slide instrument, Jahn’s reason for ordering this switch was the better tone he heard from German slide trombonists.

Trombonists outside Germany and Austria were reluctant to abandon the valve trombone because of perceived technical difficulties associated with the slide.¹² As a result, they continued to play the valve trombone through the turn of the twentieth century, and later. Bohemian trombonists, for example, did not

⁹ Michael Lewis, “Solo Trombone Performances at the Gewandhaus in the 18th [sic. 19th] Century,” *International Trombone Association Journal* 20:3 (1992), 27-32.

¹⁰ C. Robert Wigness, *The Soloistic Use of the Trombone in Eighteenth-Century Vienna* (Nashville: The Brass Press, 1978), 1-2.

¹¹ Wilhelm Jahn, cited in Shifrin, “The Valve Trombone,” *Brass Bulletin* 111, 140.

¹² Blaikley, 132-136; Frizane, 16-17.

begin to switch to slide instruments until the 1890s, and some continued to play the valve trombone in performance well into the twentieth century. Exclusive slide trombone study at the Prague Conservatory was not restored until 1903, following approximately eighty years of valve trombone instruction.¹³

In France, valve trombones were played in performance through the turn of the twentieth century.¹⁴ Likewise, the slide trombone was not reestablished as the instrument of choice in the United States until after 1900.¹⁵ Belgian trombonists played Sax's "six-valver" into the 1930s,¹⁶ and Italian trombonists continued to play the valve trombone well into the twentieth century.¹⁷ Although British trombonists did not endorse the valve trombone to a great extent,¹⁸ those who advocated the valve instrument continued to play it into the early twentieth century.¹⁹

Whereas Shifrin has specifically dated the adoption of the slide by trombonists in Germany, Austria, and Bohemia,²⁰ the precise timing of this change in other countries has not been determined. Approximate dates of trombonists' switch to the slide instrument are revealed by examining late

¹³ Shifrin, "The Valve Trombone," *Brass Bulletin* 112, 120-124.

¹⁴ Sousa, 190.

¹⁵ Eliason, "Trombone in Nineteenth-Century America," 9.

¹⁶ Mertens, 96.

¹⁷ Shifrin, "The Valve Trombone," *Brass Bulletin* 112, 125.

¹⁸ Gregory, 128.

¹⁹ Cyril Ehrlich, Simon McVeigh, and Michael Musgrave, "London," *Grove Music Online*, ed. L. Macy, Available Online: <<http://www.grovemusic.com>> [5 March 2005].

²⁰ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 138-141; *Brass Bulletin* 112, 119-125.

nineteenth and early twentieth-century commentaries regarding the valve and slide trombones. Near the turn of the century, musicians and instrument makers engaged in a vigorous debate regarding the valve versus the slide trombone. Although discussions about the issue usually ended with the conclusion that the slide trombone was superior, the ultimate fates of the two instruments remained unclear at that time.²¹

By 1910, the slide had come to be preferred, yet the valve trombone was still known and considered to be an acceptable “lesser evil” if needed.²² Music educators in Indiana and Illinois, in 1909 and 1913, respectively, specifically indicated valve or slide when discussing trombones.²³ While slide trombones were by then preferred over valve trombones, the generic term “trombone” was not yet understood to denote the slide instrument.

During the 1920s, Carse²⁴ and others displayed a complete unawareness of the former prevalence of the valve trombone. Especially revealing is Brancour’s 1921 indication of relief that the *trombone à pistons* had not replaced the *trombone à coulisse* in France.²⁵ Brancour was apparently unaware of the popularity of the valve trombone in that country just two decades earlier.²⁶ Westrup revealed a

²¹ Eliason, “Trombone in Nineteenth-Century America,” 9.

²² “The Trombone,” *American Musician and Art Journal* 29:20 (1913), 10.

²³ E.B. Birge, *History of Public School Music in the United States* (Philadelphia: Oliver Ditson Company, 1937), 188-189.

²⁴ Carse, *History of Orchestration*, 218.

²⁵ Brancour, 181.

²⁶ Sousa, 190.

similar unawareness, chastising Franck and other composers for writing passages for trombone that were difficult to negotiate on the slide.²⁷ The passages in question were originally intended to be played on the valve trombone.²⁸ Taken together, these comments indicate that the valve trombone was declining in popularity in the 1890s, the slide trombone was more common by the 1910s, and virtually all memory of prevalent valve trombone playing was eliminated by the 1920s. Although the specific dates of trombonists' adoption of the slide in various countries remain unknown, generally speaking, the slide became more popular than the valve trombone throughout Europe and the United States between 1890 and 1925.

Factors Influencing Trombonists' Return to the Slide Trombone

The superior tone quality and intonation of the slide trombone were enough to prompt German and Austrian trombonists to adopt the slide.²⁹ Had these been sufficient reasons for trombonists elsewhere, the switch to the slide trombone in other countries could have occurred in the mid-nineteenth century, as in Germany and Austria. Instead, trombonists throughout the United States and Europe were reluctant to abandon the valve trombone because of the

²⁷ J.A. Westrup, "The Misuse of the Trombone," *The Musical Times* 66:988 (1925), 524.

²⁸ Wotton, 634.

²⁹ Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 138-141.

difficulty of playing technical and legato passages with the slide.³⁰ While these players acknowledged the deficiencies of the valve trombone, additional factors, some addressing their reservations about the slide, also influenced their switch to the slide trombone between 1890 and 1925.

The influence of ensemble conductors and conservatory professors certainly contributed to trombonists' adoption of the slide. Jahn's insistence has already been named as a catalyst for the switch to slide trombones in Vienna.³¹ American bandmasters including Gilmore and Sousa also insisted that performers play the slide trombone.³² In Paris, Professors Dieppo and Delisse promoted the slide instrument in spite of French preferences for the valve trombone. While this endorsement did not immediately halt the proliferation of the valve instrument there, eventually French players did adopt the slide trombone.³³ Slide trombone study was reestablished at the Prague Conservatory in 1903 because Rector Karel Hoffmeister (n.d.) insisted that the slide be adopted, and hired a new trombone professor, Josef Hilmer (n.d.), who implemented this agenda.³⁴ Similarly, in Belgium Professor Jules De Haes (n.d.) of the Royal Conservatory of Antwerp has been credited with promoting the slide trombone

³⁰ Blaikley, 132-136; Frizane, 16-17; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 128.

³¹ Wilhelm Jahn, cited in Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 140.

³² Eliason, "Trombone in Nineteenth-Century America," 9.

³³ Brancour, 181.

³⁴ Shifrin, "The Valve Trombone," *Brass Bulletin* 112, 120-124.

over the Sax “six-valver.”³⁵ In these and similar instances, the valve or slide decision was made for trombonists by their superiors, who chose the slide because of its better sound and intonation.

Two influences that warrant further investigation are the tenor slide trombone with F-attachment, and the euphonium and baritone horn. The tenor slide trombone with F-attachment, or B-flat/F slide trombone (Figure 30), was developed by Sattler in Leipzig in 1839. This attachment, with which the player lowered the fundamental pitch of the instrument by a fourth by engaging a single thumb-operated valve, added several low notes that were previously unavailable on the tenor slide trombone. The original intended purpose of the F-attachment was to facilitate the playing of bass trombone parts on the tenor trombone,³⁶ though trombonists also found that the added valve simplified technical execution.³⁷ The B-flat/F slide trombone offered some of the added technical facility associated with the valve, while mostly maintaining the characteristic sound of the slide instrument.³⁸

The B-flat/F slide trombone was popularized in Germany largely through the solo performances of Queisser. Outside of Germany, the B-flat/F instrument

³⁵ Mertens, 96.

³⁶ Mary Rasmussen, “Two Early Nineteenth-Century Trombone Virtuosi: Carl Traugott Queisser and Friedrich Auguste Belcke, *Brass Quarterly* 5 (1961), 11.

³⁷ Baines, *Brass Instruments*, 246.

³⁸ Benny Sluchin, “Trombone Attachments: Trends and Development,” *Brass Bulletin* 105 (1999), 106-107.



Figure 30. B-flat/F Slide Trombone by Robert Piering, Germany, late nineteenth century³⁹

was not frequently played until the early twentieth century.⁴⁰ The appearance of the B-flat/F slide trombone could have influenced trombonists to abandon the valve trombone, since the B-flat/F instrument constituted an acceptable compromise between the technical facility offered by the valve and the characteristic sound of the slide instrument. If nothing else, perhaps the B-flat/F instrument hastened the return of the slide trombone in Germany, where it was first popularized.

The baritone horn and euphonium emerged from a wide array of new upright valve brasses invented after 1830. The baritone horn was developed from the German *tenorhorn* invented by Stölzel,⁴¹ and the baritone saxhorn.⁴² The ancestry of the euphonium can be traced to the tenor tuba developed by Moritz

³⁹ B-Flat/F Slide Trombone by Robert Piering, Available Online: <<http://www.neillins.com/TB002.htm>> [1 June 2005].

⁴⁰ Baines, *Brass Instruments*, 242-246.

⁴¹ Bevan, *The Tuba Family*, 73.

⁴² Baines, *Brass Instruments*, 253-258.

in 1838, and Sax's bass saxhorn.⁴³ Both instruments were pitched in B-flat like the tenor valve trombone, with the euphonium being characterized by a more sonorous tone than the baritone horn due to the wider, more conical tubing of the euphonium.⁴⁴ In America a five-valve euphonium with two bells, the extra bell facilitating a more baritone horn-like sound, was popular at the turn of the twentieth century (Figure 31).⁴⁵



Figure 31. Holton Double-bell Euphonium, 1928.⁴⁶

⁴³ Bevan, *The Tuba Family*, 90-91.

⁴⁴ Baines, *Brass Instruments*, 255.

⁴⁵ Bevan, *The Tuba Family*, 91-92.

⁴⁶ Holton Double-bell Euphonium, Available Online:

<<http://www.horncollector.com/Baritones%20&%20Euphoniums/Double%20Bell%20Euphoniums/Frank%20Holton/1928%20Frank%20Holton%20Double%20Bell.htm>> [1 June 2005].

The baritone horn and euphonium may have eliminated the possibility of an enduring role for the valve trombone in performance. Belcke reportedly performed solos on the early German *tenorhorn* during the first half of the nineteenth century.⁴⁷ In British band and brass band music the euphonium was frequently employed as a solo instrument.⁴⁸ Euphoniumists including Joseph Raffayolo (d. 1895) and Simone Mantia (1873-1951) popularized their instrument in the United States.⁴⁹ Conversely, solo performances on the valve trombone were uncommon until the early twentieth century, when jazz performers including Kid Ory (1886-1973)⁵⁰ and Juan Tizol (1900-1984)⁵¹ played the valve trombone even though the slide instrument was by then more popular.

Although the euphonium and baritone horn could not have directly influenced trombonists to adopt the slide, the advent of these instruments may have contributed to the increasing obsolescence of the valve trombone. The roles of the F-attachment and the baritone horn and euphonium in the reemergence of the slide trombone are worthy of further investigation.

Hearing and learning from accomplished slide trombonists was an important motivator for players to adopt the slide. In Scandinavia, the role of

⁴⁷ Bevan, *The Tuba Family*, 73.

⁴⁸ Bevan, *The Tuba Family*, 94.

⁴⁹ Bridges, 96.

⁵⁰ José Hosiasson, "Ory, Kid," *Grove Music Online*, ed. L. Macy, Available Online: <<http://www.grovemusic.com>> [1 June 2005].

⁵¹ Eddie Lambert and Barry Kernfeld, "Tizol, Juan," *Grove Music Online*, ed. L. Macy, Available Online: <<http://www.grovemusic.com>> [1 June 2005].

Danish trombonist Anton Hansen (1877-1947) in promoting the slide instrument is well-documented. Hansen began learning the slide instrument during the late nineteenth century, when slide trombones were rare in Denmark. Through the course of a long performing and teaching career, he influenced trombonists throughout Scandinavia to choose the slide trombone.⁵²

While the slide trombone was rare in the United States by the 1880s,⁵³ a few accomplished slide trombonists did emerge there. Frederick Neil Innes (1854-1926), trombone soloist with the Gilmore Band, was regarded highly.⁵⁴ Others including Frank Holton (1858-1942)⁵⁵ and euphonium/trombone doubler Mantia⁵⁶ also were accomplished players. The skilled playing of individuals such as these demonstrated the technical capacity of the slide to American trombonists.

Unique among American slide trombonists was Arthur Pryor, whose playing career coincided almost exactly with trombonists' return to the slide instrument.⁵⁷ Pryor's immense technical virtuosity and international notoriety enabled him to influence the instrument choices of trombonists in both America

⁵² Per Gade, "Anton Hansen (1877-1947): Father of Trombone Playing in Scandinavia," *Brass Bulletin* 27 (1979), 27-33.

⁵³ Benjamin, Online; Dillon, 34; Larkin, *The School Musician* (February 1943), 8.

⁵⁴ Bridges, 94-96.

⁵⁵ Bridges, 93-94.

⁵⁶ Bridges, 96-98.

⁵⁷ Frizane, 83.

and Europe. His contribution to the propagation of the slide trombone will be detailed in the following chapter.

Although the valve trombone initially was popular throughout America and Europe, trombonists grew dissatisfied with the tone quality and intonation of that instrument, which were judged to be inferior to those of the slide trombone. These inadequacies prompted an early return to the slide by trombonists in Germany and Austria. Trombonists in other countries were initially reluctant to abandon the valve trombone, yet did so between 1890 and 1925. Factors contributing to this eventual change included the influence of ensemble directors and conservatory professors, the development of the F-attachment, the baritone horn and euphonium, and the exposition of fine slide trombone playing by prominent performers. Among this latter group, Arthur Pryor eclipsed other trombonists in both technical ability and worldwide fame, enabling him to inspire players in the United States and Europe to adopt the slide trombone as their instrument of choice.

CHAPTER IV

ARTHUR PRYOR: EXPONENT OF THE SLIDE TROMBONE

Arthur Pryor's slide trombone playing was characterized by an unmatched rapidity of execution and quality of tone.¹ Pryor developed an international reputation for outstanding playing,² demonstrating the technical capabilities and superior tone quality of the slide trombone through solo performances,³ recordings,⁴ and publication of solo compositions.⁵ His expertise as a performer of the slide trombone is legendary, and trombonists during and after his time attempted to emulate his playing style.⁶ Trombonists' change in preference from the valve to the slide trombone coincided with Pryor's playing career,⁷ and is thought to have occurred partly as a result of Pryor's legendary performances.

Pryor's Technical Execution

Audiences and critics were astounded by Pryor's prodigious execution. A critic in Omaha, Nebraska, expressed total amazement at Pryor's ability:

¹ Robert Isele, quoted in Frizane, 43.

² "Arthur Pryor," *The Metronome* (June 1905), 10.

³ Bridges, 102.

⁴ Frizane, 19.

⁵ Frizane, 82-92.

⁶ Bridges, 104-105; Frizane, 11, 82

⁷ Blaikley, 132-136; Gregory, 121; Dillon, 34; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 133-134; Wotton, 634.

His execution set the prairies afire; his vibrating pedal tones rattled the windows of the Theater and killed the gold fishes and stunned the canaries all the way out to the packing plant where even the iron gates trembled.⁸

Pryor's colleagues marveled at his playing, as well. Trombonists in the Leipzig Gewandhaus Orchestra, however, responded to his playing with indignation, saying "No one can play so well. It is a Yankee trick!"⁹ Others offered more respectful comments:

The marvelous technique of Pryor spoiled many pseudo trombone soloists . . . because we know that imitation is destructive, even though it is the sincerest form of flattery.¹⁰

During his playing career, Pryor was considered to be the most accomplished slide trombone performer in the world.¹¹ His fast, yet clean execution of difficult technical passages amazed those who heard him play¹² and established new performance parameters for slide trombonists.¹³

One of Pryor's legendary technical achievements was his 4½-octave range, which extended from F¹ to B-flat⁵. To achieve facility throughout such a wide

⁸ Unnamed Omaha, Nebraska, music critic, quoted in Bridges, 103.

⁹ German trombonists quoted in Frizane, 16.

¹⁰ Henry Woebler, quoted in Bridges, 105.

¹¹ Larkin, *The School Musician* (February 1943), 8.

¹² James Erdman, "Arthur Pryor . . . An Endangered American Legacy," *International Trombone Association Journal* 27:4 (1999), 20.

¹³ Henry Woebler, quoted in Bridges, 105.

range was unprecedented for trombonists during that period.¹⁴ Pryor's pedal tones were especially noted. One critic even referred to them as "the shot heard round the world."¹⁵ Given the rather small bell and bore of his instrument, 6.25 inches and .458 inches, respectively, the full sound Pryor achieved in the low range was considered to be remarkable by those who heard him perform.¹⁶ When combined with the other aspects of his advanced technique, Pryor's range contributed to a technical package that astounded his audiences.

Rapid articulation was another element of Pryor's technique. French cornet virtuoso Jean-Baptiste Arban (1825-1889) is considered to be among the first to apply multiple-tonguing to brass instruments.¹⁷ This technique, in which the player achieves a very fast tonguing speed by alternating "ku" syllables with the normal "tu" syllables, had been adopted by American cornetists including Levy and others during the mid-nineteenth century.¹⁸ Pryor incorporated multiple tonguing into his slide trombone playing, performing rapid musical lines previously believed impossible on the slide trombone.¹⁹ Pryor's solo compositions frequently included passages that required multiple tonguing.²⁰

¹⁴ Frizane, 13.

¹⁵ Bridges, 103.

¹⁶ Frizane, 13.

¹⁷ Bridges, 2.

¹⁸ Jules Levy, *Grand Russian Fantasia* (New York: Carl Fischer, 1954).

¹⁹ Frizane, 7.

²⁰ Pryor, *Solos for Trombone*.

Pryor's articulation also included the fluent use of the natural lip slur, in which the player is required to alternate between notes on different partials without tonguing, stopping the airflow, or creating a glissando. Pryor's solo compositions reveal that rapid slurring was as integral to his playing as rapid tonguing, with series of one-octave slurs frequently occurring. Pryor's writing in *The Patriot* (Figure 32)²¹ and *Blue Bells of Scotland* (Figure 33)²² offers representative examples.



Figure 32. Arthur Pryor: *The Patriot*, Measure 24 (cadenza), Solo Trombone part.²³

This extended cadenza in *The Patriot* includes two series of one-octave slurs. Figure 30 illustrates the use of octave slurs "in tempo."

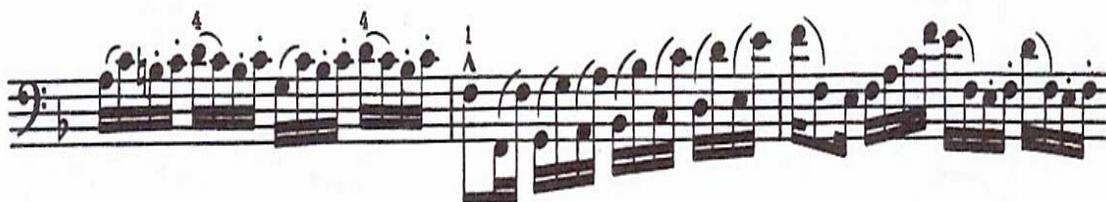


Figure 33. Arthur Pryor: *Blue Bells of Scotland*, Measures 72-74, Solo Trombone part.²⁴

²¹ Pryor, *Solos for Trombone*, Solo Trombone part, 12-13.

²² Pryor, *Solos for Trombone*, Solo Trombone part, 17-19.

²³ Pryor, *Solos for Trombone*, Solo Trombone part, 12.

²⁴ Pryor, *Solos for Trombone*, Solo Trombone part, 18.

This excerpt also includes a series of one-octave slurs. Unlike the previous excerpt, *Blue Bells of Scotland* requires the performer to execute the slurs in the second bar while maintaining a consistent Allegro tempo.²⁵

An unnamed friend of Pryor, quoted by Bridges, observed Pryor playing difficult slurring exercises that he “didn’t think possible on the trombone.”²⁶ Matty Shiner (1913-2003), a student of Pryor during the 1930s and later Professor of Trombone at Duquesne University, indicated that the study of lip slurs was an integral part of Pryor’s teaching.²⁷

Pryor’s rapid tonguing and slurring, while impressive, were useless if not combined with incredibly fast slide movement. Solo compositions such as *Blue Bells of Scotland*²⁸ demonstrate that Pryor not only tongued and slurred with great speed, but also manipulated the handslide with equal speed and accuracy (Figure 34). The final variation of *Blue Bells of Scotland* requires multiple tonguing, rapid lip slurs, and an extended high range, all of which must be executed while quickly moving the slide. In fact, the player is required to utilize all of the first six positions in rapid succession in order to perform this variation. Two elements of Pryor’s technique were essential in achieving extremely rapid

²⁵ Pryor, *Solos for Trombone*, Solo Trombone part, 18.

²⁶ Bridges, 103.

²⁷ Matty Shiner, quoted in Frizane, 41.

²⁸ Pryor, *Solos for Trombone*, Solo Trombone part, 17-19.

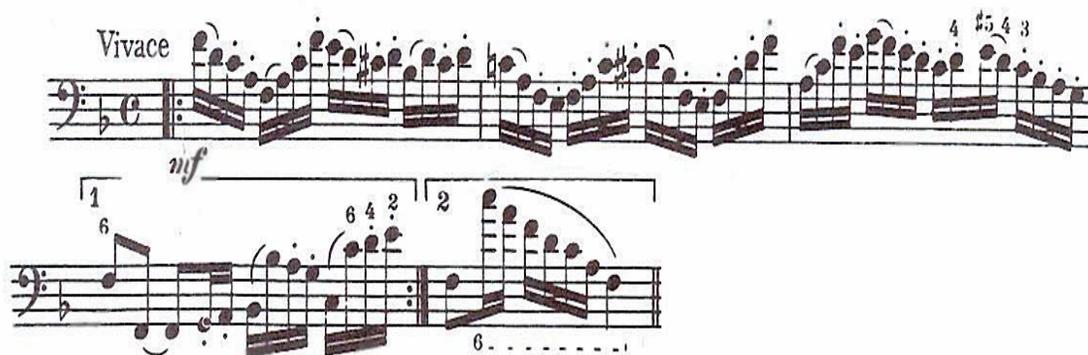


Figure 34. Arthur Pryor: *Blue Bells of Scotland*, Measures 94-98, Solo Trombone part.²⁹

slide movement: first, the use of alternate slide positions, and second, a relaxed method of holding and manipulating the slide.³⁰

The use of alternate slide positions, or positions other than those normally employed for certain notes, was integral to Pryor's slide technique. Bridges indicated that "Pryor probably used more alternate positions in his prime playing days than any other trombone soloist."³¹ Shiner recalled being instructed by Pryor to use alternate positions when executing difficult technical passages.³² Pryor enjoyed lyrical, expressive playing, and insisted that performances be musical regardless of tempo or technical difficulty.³³ Pryor's predilection for using alternate positions likely stemmed from his insistence on musicality. Using

²⁹ Pryor, *Solos for Trombone*, Solo Trombone part, 19.

³⁰ Matty Shiner, quoted in Frizane, 41.

³¹ Bridges, 101.

³² Matty Shiner, quoted in Frizane, 41.

³³ Frizane, 41.

alternate positions reduces the number of shifts in the direction of slide movement, creating a more fluid technique.

Pryor's method of operating the handslide also reflected his appreciation for lyrical playing and fluid technique. Rather than using the elbow as the primary agent of slide motion, Pryor suggested that the slide be handled "loosely so that the wrist and fingers don't stick."³⁴ Pryor favored using all of the joints in the hand, wrist, and arm when moving the slide. He believed that moving the slide in this manner enabled the player to perform rapid passages while maintaining a smooth, fluid slide motion.³⁵

Pryor's phenomenal technical execution contributed to his ability and fame as a slide trombonist, yet he was equally famous in his day for his tone quality and lyrical playing.³⁶ In fact, Pryor believed the development of virtuosic technique was of secondary importance to cultivating a beautiful, singing style of playing.³⁷

Pryor's Tone Quality and Expression

As with Pryor's technique, those who heard his playing lavished compliments upon him for his tone quality. Pryor's sound led one Dublin critic to rethink his perception of the trombone:

³⁴ Matty Shiner, quoted in Frizane, 41.

³⁵ Frizane, 41.

³⁶ Bridges, 102-103.

³⁷ Matty Shiner, quoted in Frizane, 41.

It was almost too much to believe that such a pure and exquisitely beautiful tone would be produced on an instrument whose usual characteristics are aggressive.³⁸

Bridges also addressed Pryor's tone quality and musicality. To him, Pryor's ability to maintain his beautiful sound and expression while executing difficult technical passages set him apart from other trombonists:

THAT TONE is unforgettable, to my way of thinking. There were other players . . . who technically could play most anything Pryor played, but they never came off quite the same as Pryor's playing the same piece.³⁹

When the letter containing the above quote was written, trombonists able to match Pryor's technical skills were common. Few, however, could perform rapid technical passages while maintaining the tone quality and expression exhibited in Pryor's playing.⁴⁰ Erdman lamented trombonists' tendency to use Pryor's works as a vehicle for showboating while ignoring Pryor's emphasis on fine musicianship. This tendency, Erdman suggested, constituted "a travesty of Pryor's intent."⁴¹ In spite of his great technical prowess, Pryor did not view his playing as a vehicle for egotism, but as a legitimate means of personal

³⁸ Unnamed Dublin critic, quoted in Frizane, 14.

³⁹ Glenn D. Bridges, quoted in Frizane, 12.

⁴⁰ Frizane, 12.

⁴¹ Erdman, 20.

expression. The technical feats were simply part of Pryor's larger scheme of comprehensive musicianship.

Pryor "actually preferred slow, lyric ballads and operatic arias to the fast, spell-binding display pieces." He often elected to perform hymns or arias before launching into virtuosic displays. Pryor also tended to program lyrical works as encore pieces.⁴² His solo performances were marked by both flawless technique and an overwhelmingly pleasing sense of musicianship. Bridges wrote:

Everyone knows that Pryor electrified his audiences with his great execution when he played such numbers as: *Air Varie [sic]*, *Annie Laurie*, *My Old Kentucky Home*, *Blue Bells of Scotland*, *Polka Fantastic*, *The Patriot*, etc., but the old timers would tell you that, they were delighted to hear him play his encores, which included: *Silver Threads Among the Gold*, *The Holy City*, *Ben Bolt*, *Oh, Dry Those Tears*, and dozens of others, which displayed his beautiful golden tone, and demonstrated his great musicianship and inborn talent.⁴³

Pryor performed amazing technical feats on the slide trombone, yet never neglected to play with the finest tone quality possible. Every musical work played by Arthur Pryor, no matter how fast or slow, was delivered with a beautiful tone and consummate musicianship. During his performing career with the Sousa and Pryor bands, Pryor demonstrated his unique combination of technical prowess and musical sensitivity to a worldwide audience.

⁴² Frizane, 12.

⁴³ Bridges, 102-103.

International Slide Trombone Celebrity

Pryor's solo performances with the Sousa and Pryor bands made him famous throughout the United States and Europe. While he was locally well-known before joining Sousa, Pryor's fame grew exponentially after he joined the Sousa Band, arguably the most popular musical organization in the world.⁴⁴ During Pryor's eleven years with the group (1892-1903), the Sousa Band toured the United States almost perpetually, and made three successful European tours.⁴⁵ Pryor regularly performed solos in Sousa Band concerts after 1893,⁴⁶ demonstrating his prowess on the slide trombone to American and European audiences.⁴⁷

Musicians and audiences in America were astounded by Pryor's skill as a performer. Frizane wrote regarding an early Pryor solo performance with Sousa:

Pryor showed his trombone solos to Sousa, but the conductor was reluctant to feature him yet. Finally, while at the [Columbian] Exposition, he announced to Sousa that if he didn't get to perform a solo, he would return to St. Joseph. Sousa gave in, and in the rain that day he played his own composition "Thoughts of Love" to a crowd who just stood in awe, then cheered and threw their hats in the air.⁴⁸

⁴⁴ Sousa, xvi. (This citation is from the forward by Bierley.)

⁴⁵ Sousa, viii-ix.

⁴⁶ Frizane, 10.

⁴⁷ Frizane, 15.

⁴⁸ Frizane, 10.

Such audience reactions became typical for Pryor's solo performances, and contributed to his nationwide recognition as a slide trombone virtuoso. As one writer stated, "his rise to preeminence on the 'slip horn' was little short of miraculous."⁴⁹

European musicians and audiences, including the rulers of Great Britain, Prussia,⁵⁰ Ireland, and Russia,⁵¹ marveled at Pryor's ability, as well. Pryor's performances in Germany led trombonists to dub him the "Paganini of the trombone."⁵² One group of Italian trombonists, firmly committed to the valve trombone, believed that Pryor must have possessed superhuman abilities to play the slide trombone so well.⁵³ Members of The Trombonist Club of Paris responded to a Pryor performance there with astonishment:

Is Pryor any good? I should say so. If all the members of this club were to meet in this room with their instruments and each of them was to play everything he knew, and then if all this playing were combined and all the knowledge of the different members were united in one grand whole, the ensemble would not make a single measure of Pryor's wonderful performance. Can Pryor play? Umph!!!⁵⁴

⁴⁹ Larkin, *The School Musician* (February 1943), 8.

⁵⁰ Frizane, 15.

⁵¹ "Arthur Pryor," *The Metronome* (June 1905), 10.

⁵² Frizane, 16.

⁵³ Frizane, 16-17.

⁵⁴ J. Scott Ames, "Arthur Pryor," *The Music World* (November 1907), 2, quoted in Frizane,

In Britain Pryor's playing not only was well-received, but also remembered long after his performances there. A 1910 London performance of Pryor's solos by trombonist Bert Smith drew chants of "Pryor, Pryor!" from the audience. Listeners there recalled Pryor's skill ten years after hearing him perform.⁵⁵

Pryor's numerous solo performances generated popular success and visibility in the United States and in Europe. As one writer stated:

Arthur Pryor needs no introduction to the thousands who knew him for years as assistant conductor and trombone soloist with Sousa's band. It was during his electrically successful term with this organization that he was christened The Trombone King, and he has firmly established in two continents his indisputable right to the title.⁵⁶

Public solo performance was not the only means by which Pryor promoted the slide trombone. Pryor also demonstrated his abilities by recording his solo works.

Recording Industry Pioneer

Pryor had an almost prescient awareness of trends and developments in the music industry.⁵⁷ One example of this awareness was his perception that

⁵⁵ Larkin, *The School Musician* (March 1943), 32.

⁵⁶ "Arthur Pryor," *The Metronome* (June 1905), 10.

⁵⁷ Frizane, 43.

would-be cornet players were adopting the trumpet instead,⁵⁸ while colleagues such as Sousa Band cornet soloist Herbert L. Clarke (1867-1945) remained ardent supporters of the cornet.⁵⁹ Pryor's 1913 prediction that "in another twenty years everybody will be using trumpets" was indeed fulfilled.⁶⁰

Another example of this awareness was Pryor's involvement with the emerging recording industry. Pryor began working with recordings while with the Sousa organization. Sousa did not believe there to be a market for the new "canned music," and only agreed to schedule recording sessions because they provided work for band members.⁶¹ Pryor, therefore, conducted Sousa Band recordings both during and after his official association with Sousa's band.⁶²

Pryor's work in the recording industry increased after he left the Sousa organization. He was employed by the Victor Company as a staff conductor beginning in 1904,⁶³ and made recording a key element of his band's output. Unlike the Sousa Band, Pryor's band toured for only the first few years of its existence (1903-1909), after which Pryor focused upon recording projects and summer concert series.⁶⁴

⁵⁸ Larkin, *The School Musician* (February 1943), 8.

⁵⁹ Frizane, 43-44.

⁶⁰ Larkin, *The School Musician* (February 1943), 8.

⁶¹ Frizane, 19.

⁶² Frizane, 18-19, 31.

⁶³ Bridges, 104; Frizane, 30.

⁶⁴ Frizane, 29-33.

Pryor's venture into recording was both productive and lucrative.⁶⁵

Williams stated that Pryor's organization "recorded an estimated 5,000 takes and placed 2,000 titles in the Victor Phonograph Company recording Entry Books."⁶⁶

The Pryor Band's recordings included compositions in a variety of styles:

The selections included all the popular kinds of pieces of that day, such as marches, waltzes, gavottes, medleys, patriotic airs, fantasies, novelties, hymns, serenades, and paraphrases. There were also cakewalks and rags. . . .⁶⁷

Schwartz stated that "In the *Victor Book of the Opera*, published in 1912, Pryor's band is listed as recording overtures, finales, marches, selections, and fantasias from approximately fifty operas."⁶⁸ The list of the Pryor organization's recordings was both immense and incredibly diverse.

Solo recordings by Pryor were featured in early releases by both the Sousa and Pryor bands. In fact, "the last thing that Pryor did while he was with the Sousa Band was to conduct it in a series of recordings for Victor in August and September of 1903. On some of these he was the featured soloist."⁶⁹ Pryor also included solo renditions in early recordings of his band, although these were

⁶⁵ Frizane, 32-33.

⁶⁶ Frederick P. Williams, "The Times as Reflected in the Victor Black Label Military Band Recordings From 1900-1927," *Association for Recorded Sound Collections Journal* 4 (1972), 39, cited in Frizane, 32.

⁶⁷ Frizane, 32.

⁶⁸ H.W. Schwartz, *Bands of America* (New York: Doubleday and Co., 1957), 200, quoted in Frizane, 32.

⁶⁹ Frizane, 19.

gradually eliminated as Pryor's professional focus shifted from solo performance to conducting.⁷⁰

Pryor's fifty-nine solo recordings⁷¹ were a relatively small part of his recorded output, yet enabled Pryor to demonstrate his playing style and the capabilities of the slide trombone to a wider audience. The phonograph was rapidly becoming a common fixture in homes throughout the world,⁷² and the Victor Company was posting astronomical sales figures.⁷³ Despite Sousa's reservations,⁷⁴ people were buying recorded music. By utilizing this new medium, Pryor enabled those unable to hear his playing in live performance to hear it in their homes.

Composer of New Music for Slide Trombone

During his lifetime, Pryor was one of the most well-known and highly regarded composers in the world.⁷⁵ He composed in a decidedly popular style; "it was music intended for listening, music intended to give immediate pleasure."⁷⁶ The accessibility of Pryor's music to the listener, combined with Pryor's fame as a soloist and bandmaster, ensured a wide audience for his works.

⁷⁰ Bridges, 103; Frizane, 33-34.

⁷¹ Bridges, 105-106.

⁷² Paul C. Edie, "History of the Victrola," Available Online: <<http://www.victor-victrola.com/ABOUT.htm>> [6 March 2005].

⁷³ Michael Kevin Smith, "The Victor Brass Quartet: Its Genesis, History, and Literature" (DMA diss., University of Illinois, 2001), 100.

⁷⁴ Frizane, 19.

⁷⁵ "Arthur Pryor," *The Metronome* (October 1907), 9.

⁷⁶ Frizane, 49.

As popular taste gravitated away from concert bands toward the big bands of the 1930s and 1940s,⁷⁷ the market for most of Pryor's compositions deteriorated. Pryor's solos for slide trombone were an exception to the dearth of lasting interest in his work, since many were in continuous publication throughout the twentieth century and into the twenty-first.⁷⁸ Combining expressive melody with virtuosic technical displays, Pryor's solo compositions further "[perpetuated] his reputation as a trombonist,"⁷⁹ and were an additional means by which Pryor demonstrated the capabilities of the slide trombone in both tone quality and technique.

Pryor began to compose trombone solo works during the late 1880s,⁸⁰ and published them during two periods, the first from 1895-1915 and the second in the late 1930s.⁸¹ Most of the early publications were works performed by Pryor during his playing career. Frizane asserted that "the later compositions no doubt were written many years earlier,"⁸² yet offered little evidence of this. Certainly some of the 1930s publications were written earlier. *Fantastic Polka*, for example, was recorded by Pryor in 1910,⁸³ yet did not appear in print until 1939.⁸⁴ Some of

⁷⁷ Frizane, 76-77.

⁷⁸ Frizane, 82; Pryor, *Solos for Trombone*.

⁷⁹ Frizane, 82.

⁸⁰ Frizane, 7.

⁸¹ Frizane, 83.

⁸² Frizane, 84.

⁸³ Bridges, 103.

⁸⁴ Frizane, 140.

the later works, such as *La Petite Suzanne* (1937)⁸⁵ and *Starlight* (1939),⁸⁶ are much less technically demanding than the earlier works. Perhaps these works were not written for Pryor to perform himself, but rather as performance materials for young trombonists. Whatever the circumstances surrounding the composition of individual works, Pryor provided the world with slide trombone solos that were unsurpassed at the time in terms of melodic beauty, technical virtuosity, and audience appeal.⁸⁷

Many of Pryor's melodies were based upon folksongs, hymns, and similar tunes.⁸⁸ Pryor's preference for beautiful melodies over technical displays has already been discussed.⁸⁹ Because of this preference, his famous technical showpieces often were based upon simple, lyrical melodies, such as those depicted in Figures 35 and 36. In both *Blue Bells of Scotland* and *Annie Laurie*, the lyrical melody is followed by increasingly rapid variations on the original theme.

Pryor is best known, however, for his technical virtuosity on the slide trombone,⁹⁰ a trait amply demonstrated in his solo compositions. Technical displays in Pryor's works sometimes occur in short bursts, as in *Thoughts of Love* (Figure 37).

⁸⁵ Pryor, *Solos for Trombone*, Solo Trombone part, 2-4.

⁸⁶ Pryor, *Solos for Trombone*, Solo Trombone part, 22-24.

⁸⁷ Frizane, 82-83.

⁸⁸ Steve M. Wolfenbarger, "The Solo Trombone Music of Arthur Pryor," *International Trombone Association Journal* 11:3 (1983), 20-21.

⁸⁹ Frizane, 83.

⁹⁰ Bridges, 102.

Figure 35. Arthur Pryor: *Blue Bells of Scotland*, Measures 24-43, Solo Trombone part.⁹¹

Figure 36. Arthur Pryor: *Annie Laurie*, Measures 29-46, Solo Trombone part.⁹²

⁹¹ Pryor, *Solos for Trombone*, Solo Trombone part, 17.

⁹² Arthur Pryor, *Annie Laurie*, Edited by Glenn P. Smith (Cleveland, Ohio: Ludwig Music, 1958), Solo Trombone part, 3.

Figure 37. Arthur Pryor: *Thoughts of Love*, Measures 134-150, Solo Trombone part.⁹³

These brief, four-measure phrases must be played quickly, requiring the player to execute rapid lip slurs and slide motion. The excerpt from *Fantastic Polka* in Figure 38 also is somewhat brief and includes multiple tonguing along with lip slurs and quick slide movement.

Figure 38. Arthur Pryor: *Fantastic Polka*, Measures 118-129, Solo Trombone part.⁹⁴

⁹³ Pryor, *Solos for Trombone*, Solo Trombone part, 9.

⁹⁴ Pryor, *Solos for Trombone*, Solo Trombone part, 7.

Although the previous two excerpts are somewhat short, in other works Pryor included more extended rapid passages. *Air Varie*, the most difficult of Pryor's compositions for solo slide trombone,⁹⁵ requires the player to combine rapid tonguing, slurring, and slide motion with the ability to move quickly and freely throughout the range of the instrument (Figure 39).

The publication of his solo compositions for slide trombone was an additional means by which Pryor demonstrated the technical and tonal capabilities of his instrument. The success of this endeavor is demonstrated by the continuous publication of Pryor's solo works,⁹⁶ and by the immediate and continued performance of these works after Pryor's performing career ended. After Pryor, a new generation of virtuoso slide trombonists, including Gardell Simons (1878-1945),⁹⁷ Bert Smith,⁹⁸ former valve trombonist Charles Anthony Cusumano (1883-1925),⁹⁹ and others, continued Pryor's legacy by performing his works and composing others in a similar style.¹⁰⁰ In subsequent decades, military band trombonists including Robert Isele (b. 1918)¹⁰¹ and Larry Wiehe (1928-

⁹⁵ B.H. Walker, "I Teach the Solo Brass," *The School Musician* (April 1952), 27, quoted in Frizane, 137.

⁹⁶ Frizane, 82; Pryor, *Solos for Trombone*.

⁹⁷ Bridges, 106-108.

⁹⁸ Larkin, *The School Musician* (March 1943), 32.

⁹⁹ Bridges, 92-93.

¹⁰⁰ Bridges, 107.

¹⁰¹ Erdman, 20.

The image shows a musical score for the Solo Trombone part of Arthur Pryor's *Air Varie*, measures 154-175. The score is written in bass clef with a key signature of one flat. It consists of six staves of music. The first staff begins with a *slow* tempo marking and includes dynamics like *delta va* and *fast*. The second staff is marked *fast* and includes a *GODA* section. The third staff starts with *accel.* and *fast*. The fourth staff continues with *accel.* and *fast*. The fifth staff features *6th* and *4th* positions. The sixth staff includes *delta va*, *accel.*, and *delta va* markings. The score is rich with technical details such as fingerings, slurs, and dynamic markings.

Figure 39. Arthur Pryor: *Air Varie*, Measures 154-175, Solo Trombone part.¹⁰²

1992)¹⁰³ continued to perform Pryor's works, as did countless professional, amateur, and student trombonists.¹⁰⁴ By publishing his compositions for solo slide trombone, Pryor further demonstrated the tonal and technical capabilities of his instrument, ensured the immediate continuance of his playing style after

¹⁰² Arthur Pryor, *Air Varie*, Edited by Jaroslav Cimera (Chicago: Chart Music, 1946), Solo Trombone part, 3.

¹⁰³ Andrew Neal Necessary, "Larry Wiehe (1928-1992): Phenomenal Trombonist" (Ph.D. diss., University of North Carolina at Greensboro, 2002).

¹⁰⁴ Erdman, 20.

his performing career ended, and encouraged the propagation of slide trombone playing in subsequent generations.

Pryor's Role in the Return of the Slide Trombone

As stated, trombonists outside Germany and Austria were reluctant to adopt the slide trombone because of reservations about technique.¹⁰⁵ Pryor's work left no doubt that technical fluency was possible on the slide trombone. His unprecedented skill as a slide trombonist and international notoriety positioned him to influence the instrument preferences of trombonists throughout America and Europe. The timing of Pryor's playing career, given its simultaneity with trombonists' adoption of the slide instrument,¹⁰⁶ suggests that Pryor's work influenced trombonists to abandon the valve in favor of the slide trombone.

The 1900 article in which Sousa discusses the valve and slide trombones provides further indication of Pryor's influence. Sousa was aware of the prevalence of valve trombones in the United States and most of Europe and attributed their use "to the laziness of instrumentalists,"¹⁰⁷ not to a legitimate artistic goal. In this article, he criticized the French system of government funding of musical organizations, blaming this subsidization for the laziness of

¹⁰⁵ Blaikley, 132-136; Frizane, 16-17.

¹⁰⁶ Frizane, 83.

¹⁰⁷ Sousa, 190.

musicians who elected to use the valve trombone.¹⁰⁸ If the livelihood of musicians was guaranteed regardless of performance quality, Sousa reasoned, they would have no motivation to pursue the highest performance standards possible. If their livelihood was not guaranteed, depending instead upon popular acceptance and patronage, musicians would need to strive for performances high in artistic and entertainment value in order to survive.¹⁰⁹ Sousa believed the slide trombone, with its “warm, effective, and beautiful tone,” to be more effective than the valve trombone in pursuing high musical standards.¹¹⁰

Sousa intended the performances of his band to promote artistic refinements in musical organizations throughout the world, in addition to providing entertainment and financial gain. His call for the replacement of the valve with the slide trombone in France¹¹¹ exemplifies this intent. Sousa found the sound of the valve trombone to be abhorrent compared to that of the slide and desired to see the valve instrument abandoned entirely.¹¹²

The idea that Sousa’s espousal of the slide trombone influenced trombonists’ return to that instrument is supported by Eliason, who placed Sousa’s comments in the context of the larger debate regarding the valve and slide trombones:

¹⁰⁸ Sousa, 187, 190.

¹⁰⁹ Sousa, 188.

¹¹⁰ Sousa, 190.

¹¹¹ Sousa, 190.

¹¹² Sousa, 190.

Sousa's comment in 1900 about the use of alto horns and valve trombones in French bands: "They are only poor concessions to the laziness of instrumentalists, and are a poor substitute for the warm, effective, and beautiful tone of the French horn and the trombone" concluded the controversy and marked the end of the valve trombone challenge."¹¹³

In 1900 the question of which trombone, valve or slide, would remain in use was not definitively answered.¹¹⁴ By writing his article, Sousa, the most popular and influential musician in the world,¹¹⁵ provided the final "nail in the coffin" for the idea that the valve would ever permanently replace the slide trombone.¹¹⁶ Pryor, as Sousa's immensely popular trombone soloist,¹¹⁷ was Sousa's means of demonstrating the technical capabilities and superior sound of the slide trombone in practice. Sousa, with Pryor as his catalyst, effectively ended the debate regarding the slide versus the valve trombone, resulting in the restored preeminence of the slide trombone.

Pryor developed a level of technical proficiency that few trombonists could match. Pryor's tonal range, rapid tonguing and slurring, and phenomenal slide technique amazed his hearers. His performances were marked by flawless execution combined with beautiful tone and musical expression.

¹¹³ Eliason, "The Trombone in Nineteenth-Century America," 9.

¹¹⁴ Eliason, "The Trombone in Nineteenth-Century America," 9; Shifrin, "The Valve Trombone," *Brass Bulletin* 111, 138-140.

¹¹⁵ Sousa, xvi. (This citation is from the forward by Bierley.)

¹¹⁶ Eliason, "The Trombone in Nineteenth-Century America," 9.

¹¹⁷ Herbert L. Clarke, quoted in Larkin, *The School Musician* (March 1943), 15, 32.

Pryor aptly demonstrated the technical and tonal capabilities of the slide trombone throughout the United States and Europe. He astonished audiences through his solo performances, demonstrating the pleasing tone quality of the slide trombone and a level of technical virtuosity previously not believed possible on that instrument. By issuing recordings of his solo works, Pryor demonstrated these abilities and characteristics to a wider audience. By publishing his solo compositions, he ensured the continued development of slide trombone performance and the propagation of his style.

Pryor's fame enabled him to influence the instrument choices of trombonists in both the United States and Europe. The coincidence of his playing career with trombonists' return to the slide instrument suggests that Pryor had a role in this return. The Sousa article credited with ending the valve versus slide debate places Pryor in that debate, as well, further indicating that Pryor's work led trombonists to adopt the slide trombone. The change to the slide trombone and Pryor's influence will be discussed further in the final chapter.

CHAPTER V
THE VALVE TROMBONE, THE SLIDE TROMBONE,
AND ARTHUR PRYOR IN PERSPECTIVE

The invention of the valve radically changed the design, construction, and function of brass instruments. Although finger holes, keys, and hand technique had been used to produce chromatic pitches, valves provided brass players with a greater range of notes and a more consistent tone quality than earlier methods. The valve also facilitated the development of the tuba family.

The slide trombone, theoretically, did not need the improvements offered by the valve, since it had been fully chromatic since the fifteenth century. When viewed in light of new technical improvements, however, the slide was seen as unwieldy and cumbersome, and therefore, inadequate for performing technically difficult music. The valve trombone was invented during the 1820s, and trombonists began to prefer the valve over the slide trombone.

Despite the popularity of the valve trombone, players were aware of the limitations of that instrument. The intonation compromises inherent in all practical valve systems were not found on the slide trombone, and the tone quality produced on the valve trombone was judged to be inferior to that of the slide instrument. These deficiencies led trombonists in Germany and Austria to

readopt the slide instrument during the mid-nineteenth century, after only a brief period of valve trombone playing. Elsewhere, trombonists believed that the technical difficulties associated with the slide negated the advantages of the slide trombone with regard to intonation and tone quality. The ease of technical execution on the valve trombone was viewed by these players as the primary consideration.

Nevertheless, the slide trombone was reestablished as the instrument of preference in most of Europe and the United States between 1890 and 1925. While the deficient tone quality and intonation of the valve trombone were the primary considerations prompting trombonists to adopt the slide instrument, other factors influenced this change, as well. Mandates from ensemble directors and conservatory professors who preferred the slide, the development of the F-attachment, the emergence of the baritone horn and euphonium, and the espousal of the slide by prominent trombonists all contributed to players' decision to adopt the slide instrument. The slide trombone playing of Arthur Pryor, whose virtuosity and influence far exceeded those of his contemporaries, also influenced this change.

Pryor cultivated a level of virtuosic technique previously thought to be impossible on the slide trombone, while exhibiting a gorgeous tone and sensitive interpretation. As soloist with the Sousa and Pryor bands, he demonstrated the capabilities of the slide trombone throughout the United States and Europe.

Pryor further promoted the slide trombone by recording and publishing his solo compositions. The coincidence of Pryor's playing career and the return of many players to the slide trombone suggests that Pryor influenced this change, a conclusion supported by Sousa's written espousal of the slide instrument during Pryor's association with the Sousa Band.

The precise extent of Pryor's influence upon trombonists' adoption of the slide may never be known. Circumstances indicate a connection between Pryor's work and the switch to the slide, given the simultaneity of the two occurrences. With his worldwide fame, for Pryor to have exercised no influence in this regard seems impossible. In the absence of a written or spoken statement by Pryor on the subject, however, the evidence for his involvement in trombonists' return to the slide instrument remains primarily circumstantial. Future studies may discover such a statement.

Although not as effective as a statement by Pryor would be, the 1900 article by Sousa discussing the valve and slide trombones places Pryor in the debate regarding the two instruments. While Sousa has been credited with ending the valve versus slide debate in favor of the slide trombone, his argument would have lacked authority were he unable to demonstrate the claimed superiority of the slide instrument in practice. Pryor's playing served as the practical counterpart to Sousa's article, providing Sousa's argument with the legitimacy needed to influence trombonists to adopt the slide.

Trombonists' switch to the slide instrument was a complex process, contributed to by a multiplicity of factors. Pryor's work was by no means the only one. Some factors have been explored in the relevant literature, while others should be studied further. The impact of trombonists other than Pryor has been discussed extensively. Paris Conservatory trombone professors actively promoted the slide instrument, ensuring that at least some slide trombone playing occurred in France during the nineteenth century. After 1903, professors at the Prague Conservatory likewise promoted the slide trombone. In Scandinavia, Anton Hansen has been cited as a major influence. His switch to the slide trombone was an outgrowth of German preferences. Jules De Haes has been cited as an influence among Belgian trombonists, though the influences prompting him to choose the slide are unknown.

In America, trombone soloist Frederick Neil Innes predated Pryor by several years. While Pryor's technical expertise and fame were greater, Innes is remembered as a talented performer, bandmaster, and teacher. Likewise, Frank Holton, Simone Mantia, and others may have played some role in prompting American trombonists to adopt the slide instrument.

In addition to prominent trombonists, ensemble directors who preferred the slide encouraged and often required their players to switch to the slide trombone. The change to the slide instrument by the Vienna Philharmonic/Vienna State Opera trombone section in 1883 has been credited to the better

sound of the slide trombone, although the observation that the slide instrument was superior came not from the trombonists themselves, but from director Wilhelm Jahn. While the better tone quality of the slide trombone was the ultimate reason for these trombonists' adoption of the slide, the immediate cause of that change was directorial fiat. In America, bandmasters such as Sousa and Gilmore likewise began to demand exclusive use of the slide trombone shortly before Pryor's career.

Other possible influences include the appearance of the euphonium and baritone horn, and the development of the tenor slide trombone with F-attachment. Offering an identical range of notes and a better tone quality, the euphonium and baritone horn might have made the valve trombone appear to be an unnecessary hybrid. The F-attachment, introduced shortly after the valve trombone, addressed some of the technical difficulties that prompted trombonists to abandon the slide while mostly maintaining the tonal characteristics of the slide instrument. While the ease of legato and technical playing was not significantly increased, the F-attachment eliminated the need for quick moves from first to sixth or seventh position, and added new low notes and alternate positions to the slide trombone. The possible roles of the F-attachment and the euphonium and baritone horn in trombonists' return to the slide should be studied further.

Whatever the influence of the above factors, the better sound and intonation of the slide trombone were the primary reasons for trombonists' return to the slide. All other influences, including Pryor's work, were supplementary. References to the advantages of the slide trombone in these areas abound in nineteenth, twentieth, and twenty-first-century sources. Trombonists in Germany, the first to switch to the slide, did so solely because of the better sound and intonation of the slide trombone. The ensemble directors and conservatory professors who mandated slide trombone playing likewise did so because of these superior characteristics of the slide instrument. Even those trombonists who retained the valve through the early years of the twentieth century acknowledged the superior sound of the slide instrument, defending their preferences for the valve trombone on the basis of technical or logistical difficulties associated with the slide.

If the slide did not enable players to produce a superior sound, any other reasons given to abandon the valve in favor of the slide trombone would be insufficient. Despite comments from Sousa that valve trombonists avoided the slide due to laziness, these players correctly asserted that the valve trombone offered easier execution than the slide trombone. In technically difficult and legato passages the valve trombonist had a distinct advantage over the slide trombonist. Even intonation, in which the slide trombone was superior in skilled hands, could be worse on the slide when played by a novice. Players were

required to work hard to realize the advantages offered by the slide trombone, and in some cases had to be convinced that rapid technical playing was even possible with the slide. Trombonists would not have endured this hard work and uncertainty if the slide trombone did not yield an improved musical result. The role of supplementary factors in prompting trombonists to adopt the slide was to eliminate players' reservations regarding technique while reinforcing already held notions of the superior tone quality and intonation of the slide trombone.

Arthur Pryor's unique combination of technical virtuosity, beautiful tone, and worldwide influence enabled him to address players' concerns regarding the slide. His execution of difficult technical passages established that fast playing was possible on the slide trombone, but had he not played these passages with a beautiful sound, he would not have motivated valve trombonists to adopt the slide. Valve trombonists could already play technical passages with a poor sound, and with much less physical exertion than with the slide. Pryor's contribution was his ability to execute rapid passages while maintaining a gorgeous sound and expressive musicality. In so doing, Pryor effectively demonstrated the superiority of the slide instrument to American and European trombonists, leading to the reestablishment of slide trombone hegemony on both continents.

BIBLIOGRAPHY

Books

- Adams, Peter H. *Antique Brass Wind Instruments: Identification and Value Guide*. Atglen, Pennsylvania: Schiffer Publishing, Ltd., 1998.
- Baines, Anthony. *Brass Instruments: Their History and Development*. London: Faber and Faber Limited, 1976. Reprint: New York: Dover Publications, 1993
- Bate, Phillip. *The Trumpet and Trombone: An Outline of Their History, Development, and Construction*, 2nd ed. New York: W.W. Norton and Company, 1978.
- Berlioz, Hector. *Memoirs of Hector Berlioz from 1803 to 1865, Comprising His Travels in Germany, Italy, Russia, and England*. Translated by Rachel Holmes and Eleanor Holmes. Revised by Ernest Newman. New York, Alfred A. Knopf, Inc., 1932. Reprint: New York: Dover Publications, 1966.
- Berlioz, Hector and Richard Strauss. *Treatise on Instrumentation*. Translated by Theodore Front. New York: Edwin F. Kalmus, 1948. Reprint: New York: Dover Publications, 1991.
- Berger, Kenneth Walter. *Band Encyclopedia*. Evansville, Indiana: Band Associates, 1960.
- Bevan, Clifford. *The Tuba Family*. New York: Charles Scribner's Sons, 1978.
- Birge, E.B. *History of Public School Music in the United States*. Philadelphia: Oliver Ditson Company, 1937.
- Brancour, René. *Histoire des Instruments de Musique*. Paris: Henri Laurens, 1921.
- Bridges, Glenn. *Pioneers in Brass*. Detroit: Sherwood Publications, 1965.
- Carse, Adam. *The History of Orchestration*. London: Kegan Paul, Trench, Trubner, and Company, Limited, 1925. Reprint: New York: Dover Publications, 1964.

- Carse, Adam. *The Orchestra from Beethoven to Berlioz*. Cambridge, U.K.: W. Heffer & Sons, Ltd., 1948.
- Daubeny, Ulric. *Orchestral Wind Instruments, Ancient and Modern*. Freeport, New York: Books for Libraries Press, 1920.
- Farmer, H.G. *The Rise and Development of Military Music*. London: W. Reeves, 1912.
- Fasman, Mark J. *Brass Bibliography*. Bloomington, Indiana: Indiana University Press, 1990.
- Galpin, F.G. *A Textbook of European Musical Instruments, Their Origin, History, and Character*. New York: E.P. Dutton and Co., 1937.
- Garofalo, Robert Joseph and Mark Elrod. *Pictorial History of Civil War Era Musical Instruments and Military Bands*. Missoula, Montana: Pictorial Histories Publishing Co., Inc., 1985.
- Gregory, Robin. *The Trombone: The Instrument and Its Music*. New York: Praeger Publishers, 1973.
- Grout, Donald Jay and Claude V. Palisca. *A History of Western Music*. Fifth Edition. New York: W.W. Norton and Company, 1996.
- Guion, David M. *The Trombone: Its History and Music, 1697-1811*. New York: Gordon and Breach, 1988.
- Herbert, Trevor and John Wallace, eds. *The Cambridge Companion to Brass Instruments*. Cambridge, U.K.: Cambridge University Press, 1997.
- Hipkins, A.J. *Musical Instruments*. Edinburgh: A. and C. Black, 1921.
- Howe, M.A. DeWolfe. *The Boston Symphony Orchestra: 1881-1931*. Boston: Houghton Mifflin Company, 1931.
- Lane, G.B. *The Trombone: An Annotated Bibliography*. Lanham, Maryland: Scarecrow Press, 1999.
- Lane, G.B. *The Trombone in the Middle Ages and the Renaissance*. Bloomington, IN: Indiana University Press, 1982.

- Morley-Pegge, Reginald. *The French Horn*. Second Edition. New York: W.W. Norton and Company, 1973.
- Sachs, Curt. *The History of Musical Instruments*. New York: W.W. Norton and Co., 1940.
- Sousa, John Philip. *Marching Along*. Revised Edition, ed. Paul E. Bierley. Westerville, Ohio: Integrity Press, 1994.
- Thompson, J. Mark, ed. *Solos for the Student Trombonist*. Second edition. Vuarmarens, Switzerland: The Brass Press, 2004.
- Wick, Denis. *Trombone Technique*. Oxford, U.K.: Oxford University Press, 1971.
- Wigness, C. Robert. *The Soloistic Use of the Trombone in Eighteenth-Century Vienna*. Nashville: The Brass Press, 1978.
- Wind Instruments of European Art Music*. London: Horniman Museum, Inner London Educational Authority, 1974.
- Wood, Henry J. *My Life of Music*. London: Victor Gollancz, 1946.

Articles

- "Arthur Pryor." *The Metronome* (June 1905), 10-11.
- "Arthur Pryor." *The Metronome* (October 1907), 9-10.
- "Arthur Pryor and His Band." *The Metronome* (February 1905), 13.
- "Arthur Pryor and His Band at Willow Grove Park." *The Metronome* (July 1906), 10-11.
- Benjamin, Rick. "Arthur Pryor: Ragtime Pioneer." *The Mississippi Rag* 21 (1993), 5-6.
- Bevan, Clifford. "Cimbasso Research and Performance Practice: An Update." In *Perspectives in Brass Scholarship*. Stuyvesant, New York: Pendragon Press, 1997, 289-299.

- Bevan, Clifford. "Final Thoughts on the Cimbasso." *TUBA Journal* 26:3 (1999), 56-57; 28:1 (2000), 107-109.
- Bevan, Clifford. "On the Cimbasso Trail." *Sounding Brass & The Conductor* 8:2 (1979), 57-58.
- Blaikley, D.J. "The Development of Modern Wind Instruments." *Proceedings of the Musical Association*, 12th Session (1885-1886), 125-138.
- Carse, Adam. "Brass Instruments in the Orchestra: An Historical Sketch." *Music and Letters* 3:4 (1922), 378-382.
- Čížek, Bohuslav. "Josef Kail (1795-1871), Forgotten Brass Instrument Innovator." *Brass Bulletin* 73 (1991), 64-75; 74 (1991), 24-29.
- Danner, Phyllis. "John Philip Sousa: The Illinois Collection." *Notes* 55:1 (1998), 9-25.
- Dennis, Willie. "The History of the Trombone." *The Metronome* (March 1957), 34-35.
- Dillon, Steve. "Arthur Pryor: Poet of the Trombone." *The Instrumentalist* 40:4 (1985), 34-38.
- Dittmer, J.S. and Joel Elias. "Thoughts of Love – Reminiscences of Arthur Pryor." *International Trombone Association Journal* 13:2 (1985), 20-23.
- Drew, John. "The Emancipation of the Trombone in Orchestral Literature." *International Trombone Association Journal* 9 (1981), 2-3.
- Eitzen, Mary-Margaret. "Band March Composers – Arthur Pryor." *The Instrumentalist* 25:6 (1971), 28.
- Eliason, Robert E. "Early American Valves for Brass Instruments." *Galpin Society Journal* 23 (1970), 86-96.
- Eliason, Robert E. "The Trombone in Nineteenth-Century America." *International Trombone Association Journal* 10:1 (1982), 6-10.

- Erdman, James. "Arthur Pryor . . . An Endangered American Legacy." *International Trombone Association Journal* 27:4 (1999), 20.
- Gade, Per. "Anton Hansen (1877-1947): Father of Trombone Playing in Scandinavia." *Brass Bulletin* 27 (1979), 27-40; 28 (1979), 13-28, 29 (1980), 81-94.
- Guion, David M. "Felippe Cioffi: A Trombonist in Antebellum America." *American Music* 14:1 (1996), 1-41.
- Heyde, Herbert. "On the Early History of Valves and Valve Instruments in Germany (1814-1833)." *Brass Bulletin* 24 (1978), 9-32; 25 (1979), 41-50; 26 (1979), 69-82; 27 (1979), 51-62.
- Jameson, Philip. "The Arthur Pryor Trombone (1888-1988): A Centennial Tribute." *International Trombone Association Journal* 16:3 (1988), 30-31.
- Janisch, Joseph H. "Research Report: An Investigation of Nineteenth-Century Musical Performance Practice as It Pertains to the 'Festgesang: An Die Künstler,' Opus 68, by Felix Mendelssohn-Bartholdy." *Choral Journal* 44:4 (2003), 51-55.
- Lapie, Raymond and Benny Sluchin. "Slide Trombone Teaching and Method Books in France (1794-1960)." *Historic Brass Society Journal* 9 (1997), 4-29.
- Larkin, Curtis H. "Memories of Arthur Pryor and His Band." *The School Musician* (February 1943), 8-9, 25; (March 1943), 14-15, 32.
- Leloir, Edmond. "The Trombone with 6 Independent (*sic*) Valves." *Brass Bulletin* 5/6 (1973), 97-105.
- Lewis, Michael. "Solo Performances at the Gewandhaus in the 18th [*sic*. 19th] Century." *International Trombone Association Journal* 20:3 (1992), 27-32.
- Koehler, Elisa. "In Search of Hummel: Perspectives on the Trumpet Concerto of 1803." *International Trumpet Guild Journal* 27:2 (January 2003), 7-17.
- MacLean, Charles. "On Some Causes of the Changes of Tone Colour Proceeding in the Most Modern Orchestra." *Proceedings of the Musical Association* 21 (1894-1895), 77-102.

- Mertens, Albert. "The Trombone in Belgium." *Brass Bulletin* 5/6 (1973), 93-96.
- Meucci, Renato and William Waterhouse. "The Cimbasso and Related Instruments in 19th- Century Italy." *Galpin Society Journal* 49 (1996), 143-179.
- Myers, Arnold. "Design, Technology, and Manufacture Since 1800." In Trevor Herbert and John Wallace, eds., *The Cambridge Companion to Brass Instruments*. Cambridge, U.K., Cambridge University Press, 1997, 115-130.
- Mudge, Suzanne. "Arthur Pryor: This is Your Life!" *International Trombone Association Journal* 15:2 (1987), 28-29.
- Poole, H. Edmund and David Halton. "A Catalogue of Musical Instruments Offered for Sale in 1839 by D'Almaine & Co., 20 Soho Square." *Galpin Society Journal* 35 (1982), 2-36.
- Prout, Ebenezer. "On the Growth of the Modern Orchestra During the Past Century." *Proceedings of the Musical Association* 5 (1878-1879), 34-59.
- Pryor, Arthur. "How to Play a March." *Musical Courier* 26 September 1931, 45, 56.
- Rasmussen, Mary. "Two Early Nineteenth-Century Trombone Virtuosi: Carl Traugott Queisser and Friedrich Auguste Belcke." *Brass Quarterly* 5 (1961), 3-17.
- Raum, J. Richard. "The Eighteenth-Century Trombone: Rumors of its Death were Premature." *Brass Bulletin* 77 (1992), 87-101; 78 (1992), 93-97.
- Ross, C. "Brass Scoring Techniques of the 19th Century." *Woodwind World – Brass And Percussion* 16:2 (1977), 49-50.
- Schwartz, H.W. "The Story of Orchestra and Band Instruments." In *Music Lovers' Encyclopedia*. Compiled by Rupert Hughes. New York: Doubleday, Doran, and Company, 1939, 811-817.
- Shifrin, Ken. "Trombone Myth Busters No. 2: Rossini Wrote the *William Tell* Overture for Valve Trombones – NOT!!!" *International Trombone Association Journal* 25:4 (1997), 44-47.

Shifrin, Ken. "The Valve Trombone in the Nineteenth Century Orchestras of France, Germany, Austria, and Bohemia, with Special focus on the Trombone Works of Dvořák." *Brass Bulletin* 111 (2000), 126-144, 112 (2000), 118-126.

Sluchin, Benny. "Trombone Attachments: Trends and Development." *Brass Bulletin* 105 (1999), 104-110.

Smith, Glenn P. "Paris National Conservatory Contest Pieces for Trombone." *International Trombone Association Journal* 5 (1977), 23-24.

Streeter, Thomas W. "Historical and Musical Aspects of the 19th-Century Bass Trombone." *International Trombone Association Journal* 3 (1975), 23-24; 4 (1976), 33-36; 5 (1977), 25-35.

"The Trombone." *American Musician and Art Journal* 29:20 (1913), 10.

"Thousands Enjoy Pryor." *Jacobs' Band Monthly* (March 1918), 64.

Westrup, J.A. "The Misuse of the Trombone." *Musical Times* 66:988 (1925), 524-525.

Wolfenbarger, Steve. "The Solo Trombone Music of Arthur Pryor." *International Trombone Association Journal* 11:1 (1983), 13-15; 11:2 (1983), 27-29; 11:3 (1983), 20-25.

Wotton, Tom S. "The Misuse of the Trombone." (Letter to the Editor written in response to above article by J.A. Westrup.) *Musical Times* 66:989 (1925), 634.

Zahl, Wesley. "Instruments and Instrumentation: The Brass." *Jacobs' Band Monthly* 17 (September 1932), 6-7; (November 1932), 6.

Zechmeister, Gerhard. "The Role of the (Contra)bass trombone in the Vienna Sound." *Brass Bulletin* 102 (1998), 19-28; 103 (1998), 93-99.

Dissertations

Callison, Hugh Anthony. "Nineteenth-Century Orchestral Trombone Playing in the United States." DA diss., Ball State University, 1986.

Eliason, Robert E. "Brass Instrument Key and Valve Mechanisms Made in America before 1875 with Special Reference to the D.S. Pillsbury Collection in Greenfield Village, Dearborn, Michigan." DMA diss., University of Missouri at Kansas City, 1968.

Frizane, Daniel Evans. "Arthur Pryor (1870-1942): American Trombonist, Bandmaster, and Composer." DMA diss., University of Kansas, 1984.

Kitzel, Larry. "The Trombones of the Shrine to Music Museum." DMA diss., University of Oklahoma, 1985.

Lemke, Jeffrey Jon. "French Tenor Trombone Solo Literature and Pedagogy since 1836." DMA diss., University of Arizona, 1983.

Necessary, Andrew Neal. "Larry Wiehe (1928-1992): Phenomenal Trombonist." Ph.D. diss., University of North Carolina at Greensboro, 2002.

Nicholson, Joseph Milford. "A Historical Background of the Trombone and Its Music." DMA diss., University of Missouri – Kansas City, 1967.

Smith, Michael Kevin. "The Victor Brass Quartet: Its Genesis, History, and Literature" (DMA diss., University of Illinois, 2001).

Internet Resources

"19th Century – Cimbasso Describes the Deepest Brass Voice," *Vienna Symphonic Library*, Available Online:
<<http://www.vsl.co.at/english/instruments/brass/cimbasso/History.htm>> [27 January 2005].

Bate, Philip and Wally Horwood. "Sax." *Grove Music Online*. Edited by L. Macy. Available Online: <<http://www.grovemusic.com>> [7 January 2005].

Bate, Philip and Edward H. Tarr. "Valve." *Grove Music Online*. Edited by L. Macy. Available Online: <<http://www.grovemusic.com>> [11 May 2005].

Baines, Anthony, Trevor Herbert, and Arnold Myers. "Trombone." *Grove Music Online*. Edited by L. Macy. Available Online:
<<http://www.grovemusic.com>> [22 January 2005]

- Beecher, Bob. "Variations on the Trombone." Available Online:
 <<http://home.att.net/~bobbeeher/trombone/trombone.html>>,
 <<http://home.att.net/~bobbeeher/trombone/trombone-p2.html>> [6
 January 2005].
- Benjamin, Rick. "Arthur Pryor: Ragtime Pioneer." Available Online:
 <<http://www.paragonragtime.com/pryor.html>> [30 December 2004].
- "The Brass Players Museum." Available Online:
 <<http://www.neillins.com/brass.htm>> [22 January 2005].
- "Brassband historie." Available Online:
 <<http://home.c2i.net/marianne.kristiansen/huk/brassband.htm>> [27
 January 2005].
- Dahlqvist, Reine. "Weidinger, Anton." *Grove Music Online*. Edited by L. Macy.
 Available Online: <<http://www.grovemusic.com>> [16 October 2004].
- Eddie, Paul C. "History of the Victrola." Available Online:
 <<http://www.victor-victrola.com/ABOUT.htm>> [6 March 2005].
- "Edinburgh University Collection of Historic Musical Instruments." Available
 Online: <<http://www.music.ed.ac.uk/euchmi>> [22 January 2005].
- Ehrlich, Cyril, Simon McVeigh, and Michael Musgrave. "London." *Grove Music
 Online*. Edited by L. Macy. Available Online:
 <<http://www.grovemusic.com>> [5 March 2005].
- Guion, David. "A Short History of the Trombone." Available Online:
 <[http://www.trombone.org/articles/library/viewarticles.asp?
 ArtID=254](http://www.trombone.org/articles/library/viewarticles.asp?ArtID=254)> [30 December 2004].
- Hosiasson, José. "Ory, Kid." *Grove Music Online*. Edited by L. Macy. Available
 Online: <<http://www.grovemusic.com>> [1 June 2005].
- Jones, R. "Instruments à Vent Anciens." Available Online:
 <<http://www.whc.net/rjones/antiques.html>> [22 January 2005].
- Lambert, Eddie and Barry Kernfeld. "Tizol, Juan." *Grove Music Online*. Edited by
 L. Macy. Available Online: <<http://www.grovemusic.com>> [1 June 2005].

Lovrien, David, ed. "John Philip Sousa: American Composer, Conductor, and Patriot." Available Online: <<http://www.dws.org/sousa>> [20 July 2004].

Macy, L., ed. *Grove Music Online*. Available Online: <<http://www.grovemusic.com>> [28 November 2004].

"MFA Collections Database." Available Online: <<http://www.mfa.org/artemis>> [7 May 2005].

National Music Museum. "Elements of Brass Instrument Construction." Available Online: <<http://www.usd.edu/smm/UtleyPages/Utleyfaq/brassfaq.html>> [7 May 2005].

Shifrin, Ken. "The Alto Trombone in the Orchestra: 1800-2000." Ph.D. diss., Oxford University, 2000. Available Online: <<http://www.trombonesociety.org.uk/shifrin/index.htm>> [20 November 2004].

Totman, Eric. "Eric Totman's Past & Present Brass Wind Instrument Collection." Available Online: <<http://www.horncollector.com>> [22 January 2005].

"Vintage Brass Band Pictures." Available Online: <<http://www.harrogate.co.uk/harrogate-band/vbbp-uk.htm>> [26 November 2004].

Wilken, David. "A Brief History of Brass Instruments." Available Online: <<http://www.unca.edu/~dwilken/brasshistory.html>> [6 January 2005].

Scores/Sheet Music

Arban, Jean-Baptiste. *Arban's Complete Conservatory Method for Trumpet*. Edited by Edwin Franko Goldman and Claude Gordon. New York: Carl Fischer, 1982).

David, Ferdinand. *Concertino, Op. 4*. Edited by Robert Mueller. New York: Carl Fischer, 1944.

Franck, César. *Symphony in D minor*, Trombone III part. In "The Complete Low Brass Excerpts Collection." Edited by Gordon Cherry (Vancouver: Cherry Classics, 2002), CD.

Levy, Jules. *Grand Russian Fantasia*. New York: Carl Fischer, 1954.

Pryor, Arthur. *Air Varie*. Edited by Jaroslav Cimera. Chicago: Chart Music, 1946.

Pryor, Arthur. *Annie Laurie*. Edited by Glenn P. Smith. Cleveland, Ohio: Ludwig Music Publishing company, 1958.

Pryor, Arthur. *Solos for Trombone*. New York: Carl Fischer, 2002.