



### **ERICH BUCHHAUS**

### **Book Selector**

istening to music is a psychosomatic experience that, as well as promoting harmony and peace, holds the power for inner reassurance and satisfaction which stems from deep within the human spirit. Many people would count themselves the poorer without it. We do not have to go into the science and philosophy of music to find the answer to our question; we simply need to go into our own souls, for that is where music belongs.' (Wade-Matthews, Max. The world encyclopedia of musical instruments.-Lorenz Bks., 2000. p.13.)

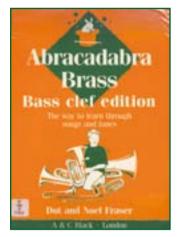
## INTRODUCTION

In this latest journey into the fascinating world of music, attention will be devoted to brass musical instruments. All brass instruments are made of long pieces of coiled tubes of brass or other metals.

Each has a mouthpiece that is either shaped like a cone, a cup, or a funnel depending on the instrument. Their sound comes from the musician's lips as they blow air into the instrument. This airflow causes the instrument to vibrate, resulting in a crisp and distinctive sound. Of course the sound emitting from the brass instrument can be changed as the player alters his lip tension. The greater the tension the higher the sound of the instrument.

Musical instruments and their story have always been part of history, and the story begins with the story of humanity. The first brass instrument that we know about is a trumpet found in a drawing in King Tutankhamen's tomb in Egypt dating to 1500 bCE - over three thousand years ago. The Egyptian trumpet was a long straight tube made of silver or bronze, and was four feet long, capable of only producing a few tones. Over time this trumpet would evolve to become longer and coiled to make the instrument easier to hold. In addition valves and tubing would be added to let players play all the notes in the scale.

### GENERAL



Brass instruments form part of the wind instrument group which includes woodwind instruments. An accurate way to determine whether an instrument is brass or woodwind is to examine how the player produces sound. In brass instruments, the player's lips vibrate, causing the air within to vibrate. In woodwind instruments the player either causes a reed to vibrate (as in a clarinet or oboe), or blows against an edge (as in a recorder), or blows across the edge of an open hole (as in a flute). Hence the saxophone which is typically made of brass is classified as a

woodwind instrument because it produces sound with a vibrating reed.

One interesting difference between woodwind and brass instruments is that woodwind instruments are non-directional. This means that the sound produced resonates in all directions with approximately equal volume. Brass instruments, on the other hand, are highly directional, with most of the sound produced travelling straight outward from the bell. This difference makes it significantly more difficult to record a brass instrument accurately. It also plays a major role in some performance situations, such as in marching bands. (Wikipedia.org/wiki/brass instrument)

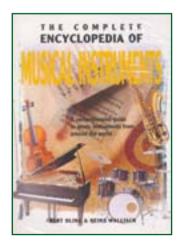
The woodwind section of a modern symphony orchestra usually consists of flutes, clarinets, oboes and bassoons, while the brass section consists of four horns, two trumpets, three trombones and a tuba. Brass instruments originally used at hunting and military functions and even at religious events became standard fare of the orchestra during the 18th century. This was at the time a standard procedure as court orchestras relied on the resources of military bands attached to the same household.

Brass instruments each produce their own distinct unique sound. The brass family can trace its ancestry back to herald trumpets, hunting horns and military bugles. The main instruments of the brass family include the trumpet, horn, trombone and tuba. The

trumpet is the highest-sounding member of the brass family whereas the tuba is the lowest sounding. The trombone is larger than the trumpet, and has a more mellow sound.

### HISTORY

The development of the modern trumpet can be traced back over thousands of years. It would seem that all the major civilisations of the past produced trumpets. Evidence of this is revealed through



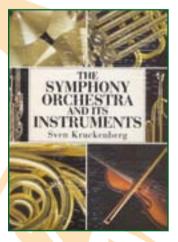
illustrations and sculptures of the time rather than on surviving instruments. The ancient Egyptians used metal trumpets on sacred occasions such as during the worship of Osiris. The Hebrews, after their famed exodus out of Egypt, adopted the trumpet which came to be used by priests during certain rites of the temple. In early medieval Europe the right of owning a trumpet was restricted to the aristocracy. Due to this noble connection the trumpet became the instrument of the cavalry, a section of the army usually associated with the nobility. It was used to maintain morale as well as to sound military signals. This instrument gained further prestige when it came to be used in European courts to announce the arrival of important personages as in the case of when 30 trumpeters announced the entry of Charles VI in Rheims in 1380.

The trumpet is a rather simple instrument, consisting of a long oval-shaped tube, with two bends, a wide mouthpiece at one end, and a flared bell at the other.

The trumpet appeared in the orchestra for the first time in Monteverdi's opera **Orfeo** 

(1607) and featured more widely during the Baroque period in the works of Bach and Handel. However, it lost popularity during the Classical period, but this was only temporary. During the early nineteenth century composers realised its great versatility and technical potential.

The valved trumpet, developed in the 1820s, was effectively introduced to the orchestra by Gioacchino Rossini (1792-1868), to be triumphantly featured in his popular **William Tell** opera in 1829. The valve mechanism became fully developed during the



1830s. Composers found the instrument more versatile as all notes of the octave could be used and keys could be shifted quite freely. This novelty was immediately exploited by composers and many orchestras would include valve trumpets from the 1840s onwards.

Wagner recognised the trumpet's potential and he gave it a leading place in Tannhäuser and Lohengrin. Other composers such as Saint-Saëns and Shostakovich would later ably combine the trumpet and piano in their chamber music compositions. One of the best-known trumpet pieces from the early 1900s is found in Stravinsky's Petrouchka and this set a trend for music to rely more constantly on the trumpet in future compositions.

# OTHER BRASS INSTRUMENTS

#### Trombone

Another important brass instrument is the trombone, a natural trumpet in the bass range. It was rebuilt by inserting the ends of an extra U-shaped slide into its sound tube. The name 'trombone' means simply a big trumpet, and although they do not look much alike, they are closely related. Trombones were initially used mainly in church music and later in opera. Mozart exploited this quality in



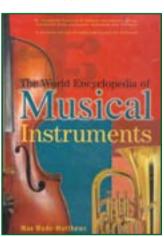
his operas **The magic flute** and **Don Giovanni**, and in his famous **Requiem**.

#### Tuba

The tuba is the lowest-pitched and largest instrument of the brass group with a total tubing length of up to 14m. Dating from Roman times it served as a signal horn used in the field, it developed over time, especially during the nineteenth century when many lasting changes were perfected. The tuba now plays the bass part in the opera and symphony. After World War II the tuba has come to enjoy a new lease of life in jazz and more progressive forms of music.

### French horn

Tracing its ancestry back to the use of animal horns by primitive man, the modern horn took a recognisable form during the 18th century. It consists of a long, coiled, cylindrical tube that widens around the middle into a cone and ends in a wide bell. It became known in England at this time as the French horn. This instrument, whose origins could be traced to the old hunting horn, underwent many changes especially during the 19th century when valves were introduced and the natural horn developed into a chromatic



instrument. It is the only brass instrument played with the fingers of the left hand. The French horn has a broad expressive range and was used in various ways from the nineteenth century onwards. The chromatic or valved horn made its orchestral debut in Halevy's opera La juive (1835). Different composers such as Mozart, Beethoven, Brahms and others would, over time, create a varied repertory of compositions that would best capture the distinctive sound qualities of this instrument. It can sound heroic or sad with equal ease, yet is the most difficult to play. In terms of both function and sound, the horn stands between

the woodwind and brass instruments and actually links them.

### THE JAZZ CONNECTION

Many might argue that the trumpet can be considered a major influential instrument in the history of jazz, while pianists would disagree. The trumpet together with its mellower cousin, the cornet, frequently used in New Orleans marching bands, came to play a principal melodic role in early jazz ensembles. Some jazz practitioners would engineer novel performance techniques that had scarcely been dreamt of during the trumpet's limited treatment in classical music. The instrument's range came to be dramatically increased and in the work of jazz musicians such as Louis Armstrong showed itself to be capable of a dazzling virtuosity. During the heyday of the big bands in the 1930s and 1940s, the size of the trumpet section would increase to four or five. Trumpeters did their best to keep up with the escalating pace of jazz in the 1940s and 1950s until the emergence of Miles Davis and Chet Baker, associated with the introduction of cool jazz. Since the 1960s there have been few influential developments in trumpet technique.

### **CONCLUSION**

The subject matter covering man's inventiveness in his search for music-making objects and their development up to the present is vast and something that can only be briefly covered here. As in the previous articles on musical instruments readers must be aware that this article is only introductory. Following is a selected booklist.

### BOOKLIST

### History and description

Abrashev, Bozhidar. The illustrated encyclopedia of musical instruments: from all eras and regions of the world.- Konemann, c2006. Diagram Group. Musical instruments of the world: an illustrated encyclopedia.- Paddington P, 1976.

Kruckenberg, Sven. The symphony orchestra and its instruments. Tiger Bks., 1997.

Morrison, Richard. Orchestra - the LSO: a century of triumph and turbulence.- Faber, 2005.

Oling, Bert. The complete encyclopedia of musical instruments: a comprehensive guide to music instruments from around the world.- Rebo, c2003.

Wade-Matthews, Max. The world encyclopedia of musical instruments.- Lorenz Bks., 2000.

#### Self-instruction and technique

General

Chandler, Paul. **Manual for brass**.- Moravian Brass Band Union of S.A., [2004?].

Fraser, Dot. Abracadabra brass: bass clef edition.- Black, 1995. Fraser, Dot. Abracadabra brass: treble clef edition.- Black, 1995.

#### Trumpet / trombone

Dale, Delbert A. Trumpet technique. Oxford U.P., 1982.
Fairweather, Digby. How to play trumpet. Elm tree Bks., 1985.
Pinksterboer, Hugo. The rough guide to trumpet & trombone, flugelhorn & cornet. Rough Guides, 2001.
Taggliagan, Alan, Abrasadakan trumpet & Plack, 1995.

Tomlinson, Alan. Abracadabra trumpet.- Black, 1995.

Wastall, Peter. Learn to play trombone & euphonium.- Boosey, 1990.

#### French horn

Fraser, Dot. Abracadabra French horn.- Black, 1998. Tuckwell, Barry. Horn.- Macdonald, 1983.

Tuckwell, Barry. **Playing the horn: a practical guide.**- Oxford U.P., 1978.

### Additional/general interest

Cooke, Mervyn. The chronicle of jazz.-Thames, c1997. Shukman, Henry. Travels with my trombone: a Caribbean journey.-Flamingo, 1992.

### Juvenile non-fiction

Archibald, Paul. Playing the trumpet and brass.- F.Watts, 2003. Archibald, Paul. Trumpet and brass.- Watts Bks., 1993. Dearling, Robert. Woodwind & brass instruments.- Chelsea House, 2001.

Knight, MJ. Brass and woodwind.- F. Watts, 2005.

Note: All titles available in Provincial Library stock