

# Brass Instruments

6 Articles

Check articles you have read:

☐

**Brass**  
338 words

☐

**Friends & Relatives (Brass)**  
172 words

☐

**Tuba**  
279 words

☐

**French Horn**  
327 words

☐

**Trombone**  
271 words

☐

**Trumpet**  
279 words

# Brass

By John Bertles

This text is provided courtesy of the New York Philharmonic.



*Brass Instruments*

Trumpets and horns have a very, very ancient history. Two trumpets were found in the tomb of the Egyptian King Tutankhamun: one was made of silver, the other of bronze. Trumpets and horns have been made from animal horns, ivory, wood, and even, in places like Polynesia and Mexico, conch shells. Often they were used to sound signals, such as to call people to worship – or to battle.

The ancient Hebrews played temple trumpets made of silver and gold; they were called *hatzotzerot*. The *shofar* used in Jewish services is still made of a ram's horn, as in ancient days. In India, a small silver trumpet called a *karna* is made in a variety of sizes up to 4 feet. And in Switzerland, huge wooden alphorns have been played by country people since the Middle Ages. In the 18th century, the music of Turkish military bands was very popular, and composers like Beethoven and Mozart capitalized on their popularity by composing "Turkish marches." Turkish military bands featured trumpets called *boru*, plus lots of cymbals, timpani, and drums.

The word *trombone* is Italian, and it means "large trumpet." At different times starting about 1820, builders have tried building trombones with valves instead of slides, hoping to make them easier to play. But trombonists generally feel that, without the slide, some of the special personality of their instrument is lost. The *serpent*, which began to be played in Europe around 1600, looked just like the thing it was named after. Serpents were not made of brass. They were usually made of wood and

leather, with metal fittings. But they had cup-shaped mouthpieces, just like our brass instruments of today.

After the serpent came something called the ophicleide. This funny name comes from Greek words that mean "keyed serpent." Ophicleides were low-voiced brass instruments that were played in Europe for the first part of the 19th century. Finally, in 1835, someone in Germany invented the tuba, and this became the standard bass instrument of the brass family.

# Friends & Relatives (Brass)

This text is provided courtesy of the New York Philharmonic.

## Trumpet



*Trumpet*

The Hawaiians make a trumpet from a rolled ti leaf! It is called a pu la'i. Among the Inga tribe of Native Americans in Colombia, cow's horns are used as trumpets.

## Trombone



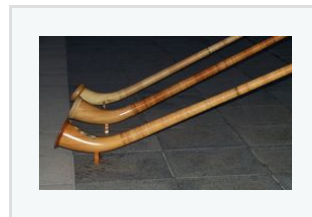
*Trombone*

The people of Uganda play several different kinds of interesting side-blown trumpets. They can be made of gourds, ivory, or animal horns, or wood covered with animal skin. The longest ones, which are most like trombones, are called agwara. They are usually played for dancing.

## Tuba

The Tucano, a Colombian Indian tribe, make trumpets out of tree bark. Some of them are more than 15 feet long!

In Switzerland and other Alpine nations, people also play long, long wooden wind instruments called Alphorns, with a big, deep sound like a tuba.



*Alphorn*

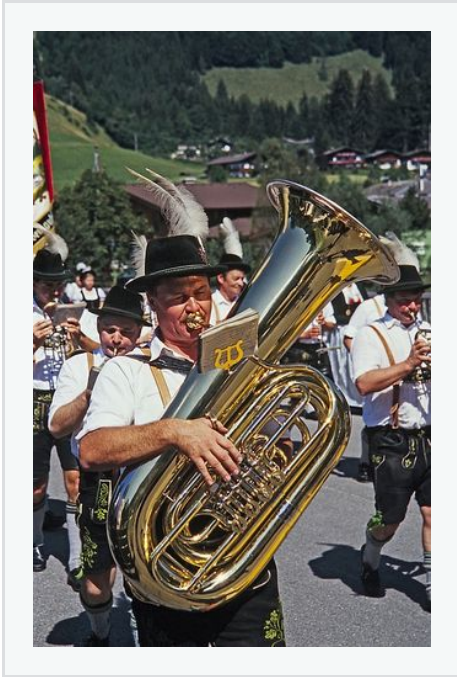
**Horns**

In Hawaii, signals are sent by blowing a pukani, or "sounding horn." It is made from a big shell.

In Latvia and Lithuania, small horns are made from goat horns. The Latvians call theirs an azrags; the Lithuanians call theirs an ozragis.

# Tuba

This text is provided courtesy of the New York Philharmonic.



Tuba

The biggest brass instrument has a wide, conical bore, giving it a round, mellow tone like a big horn. Tubas have a cup-shaped mouthpiece and usually have four valves. Occasionally a fifth or a sixth valve is added to help the player control intonation, or tuning. Tubas have been built in all kinds of keys, but the standard orchestra tuba of today is pitched in C.

When really low-voiced brass instruments began to be developed in the early 1800s, inventors first produced something called an ophicleide (ahf-i-clyde), which was something like a tuba but taller and thinner, and had keys, like a saxophone, instead of valves like a trumpet. Ophicleides looked a bit like a wide brass bassoon with a bell. Newspaper reporters used to make fun of ophicleides, calling them "chromatic bullocks."

When the tuba was developed in the 1820s and 1830s, it began to replace the ophicleide in bands and orchestras. Tubas made better sound and were easier to play in tune. Hector Berlioz, a French composer who was a talented and adventurous orchestrator, was the first to use tubas in his scores.

Richard Wagner, the German opera composer who had very definite ideas about orchestration, had a special instrument developed for his opera orchestra, which has come to be called the Wagner Tuba. Wagner Tubas are like small tubas with rotary valves, and a few later composers – including Bruckner, Stravinsky, and Strauss – wrote parts for them too.

Once in a while, you will see a tuba player use an enormous mute. Tuba mutes were introduced in 1897 by Richard Strauss, who wanted the muted effect for his tone poem Don Juan.

# French Horn

This text is provided courtesy of the New York Philharmonic.



*French Horn*

The horn is a long, long tube, conical in shape, that is coiled into a circular form. It has a small, deep, tulip-shaped mouthpiece and a very wide bell.

Ancient horns were made of animal horns (like the Jewish shofar) or conch shells, which are still heard in Polynesia and occasionally even in jazz. Conch shell horns are very loud indeed, and were used in Polynesia to send signals over long distances.

Horns were used in Renaissance Europe for sounding hunting calls. These horns were small, sometimes with just one small loop in the middle, and were played on horseback. They were really

only intended to play a couple of notes, since hunting calls were not really tunes but simply rhythmic patterns.

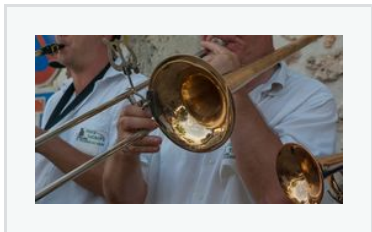
Modern horns usually have four rotary valves, but in the early days, they had none, and the horn player had to have a lot of flexibility about his/her lips and breath control. Even with valves, horns are considered extremely difficult to play with any control. Philip Myers, the Philharmonic's Principal Horn, says that horn players are well advised to become high-register or low-register specialists; no horn player can be expected to play the entire range of his instrument with equal virtuosity.

If you keep an eye on the horn players in an orchestra, you will realize that they keep their right hand inside the bell all the time. This aids in the instrument's tuning and tone, giving it a soft, haunting, and almost distant quality. When the instruction "bells up" is given by the composer, the players lift their bells high up in the air to create a specially bright and brilliant sound.

Horn players can get another special effect by stuffing their right hand tightly inside the bell. This is done when their part requires "stopped horn". It gives a thin, tinny, highly penetrating sound. And, like other brass instruments, horn players can use mutes to change their tone.

# Trombone

This text is provided courtesy of the New York Philharmonic.



*Trombone*

Trombones consist of a long, thin, coiled tube with a cup-shaped mouthpiece on one end and a bell on the other, just like a big trumpet. What isn't just like a trumpet is the slide. Where a trumpeter changes pitches by using valves, which in effect change the length of the instrument, the trombonist moves a slide in and out, constantly making his instrument visibly longer and shorter as he plays.

Early trombones were called sackbuts or sagbuts. This funny word probably comes from an old French word, *sacquer* (sah-coor), meaning "to draw out." It also may come from an old Spanish term, *sacabuche* (sa-ca-bush), meaning "to draw out the innards."

Trombones seem to have begun appearing in the 1400s. By the 1500s they were being made in all sizes and were used in groups, in town bands, court bands, and mixed ensembles. Many composers liked the sound of a trombone trio, and wrote for alto, tenor, and bass trombones. These days, two or three tenor trombones and one bass trombone make up the normal trombone section.

By the late 1700s, composers had begun to include trombones in their orchestras. Believing that trombones have a stately or noble sound, some composers used them in church music or for special dramatic effects, as Mozart did in the closing moments of his opera *Don Giovanni*.

The first composer to use trombones in a symphony was Beethoven, in his Fifth Symphony. Hector Berlioz, that adventurous French Romantic composer, especially liked trombones and said they could portray anything[...]. For some wild and crazy trombone parts, listen to his *Symphonie Fantastique*.

# Trumpet

This text is provided courtesy of the New York Philharmonic.



*Trumpet*

Trumpets are depicted in ancient Egyptian drawings dating back to almost 1500 BC. Early trumpets were made of everything from elephant tusks and human thigh bones to pottery and glass. The little cornetti of the Renaissance in Europe were usually made from leather-covered wood.

Trumpets have historically been used in military settings, like in battles – sometimes with kettledrums – and for signals and fanfares. This is partly because they tended to make a loud sound that carried a long way. But during the 1600s, the trumpet began to be accepted more into "art music"

and trumpeters developed a softer playing style for use in indoor settings.

During the Baroque Era, trumpeters were real "stars," very highly paid for their virtuosic playing. They formed guilds that regulated their training and limited the number of people who could play the trumpet. Bach, Handel, and English composer Henry Purcell all wrote splendid music for famous trumpet players of their day.

These 18th-century trumpeters had no valves on their instruments. They made different pitches by control of their lips and breath. Later in the century, trumpet builders began experimenting with keys, making it easier to play different notes. Finally, in the 1820s, French and German players began using valve trumpets, which gave the trumpet player much more freedom.

Orchestra trumpets in Europe often are designed with rotary valves, like horns. These rotary-valve trumpets have a slightly rounder, more horn-like sound than American trumpets, which are built with piston valves and have a brighter, edgier sound. The distinctive sound of the rotary-valve trumpets can be heard on recordings of the Vienna Philharmonic and the Berlin Philharmonic, among other orchestras.