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# A History of Brass Instruments

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MAN Wind instruments

### A HISTORY OF BRASS INSTRUMENTS

A Special Studies Presented to Mr. Jim Smith Ouachita Baptist University

In Partial Fulfillment of the Requirements for the Course Music H490

> by Mary Beth Mangrum Fall 1969

# 247

#### A HISTORY OF BRASS INSTRUMENTS

The wind instruments—instruments in which the sound results from vibrations of a column of air produced either mechanically or by the human breath—are usually divided into the woodwinds and the brasses. The brasses include the French horn, cornet, trumpet, tuba, and trombone, all of which, except the last, are fixed—tone instruments, producing only one sound at a time and not able to play in perfect tune.

Musical instruments were not "invented." They developed slowly and comparatively late. They developed from stamping feet and slapping hands. A prehistoric forerunner of ancient brass instruments was the hollow stick without a mouthpiece, used to distort the voice in order to frighten away evil spirits.

In Roman times a trumpet, called the buccina, was chiefly used by the military; it required great lung power. The lituus was a curved Roman trumpet, also made of bronze and of military use; like the buccina, it could produce only tones of the natural overtone scale.

Two brass instruments of the middle ages were the buysine (buisine) of medieval France, descended from the straight Roman tuba, used at tournaments and feasts, often with drums or flutes; and the lur, a curved herdsman's horn, made of two

or four wooden staves glued together, wrapped round with bast or cord, or bound with birchback. Modern descendants of the lur are the alphorn or alpenhorn, used by Alpine herdsmen, and the Scandinavian lur.

Late in the fifteenth century, the trombone first came into use. The pitch of the trombone is varied by moving the slide in or out, thus altering the length of the column of vibrating air. Since about 1600, the trombone family (alto, tenor, bass, and double bass) has existed in basically the same form as today. The slide makes it possible to play a chromatic scale. Sackbut (from the French word Sacqueboute, "pull-push") is the old English name for trombone. The modern valve trombone makes it possible to play more difficult passages.

The trumpet of medieval times had a form similar to the modern instrument, but its thicker metal, narrower bell, and larger mouthpiece produced mellower tones. At about 1830, the valve trumpet came into general use; the system of valves invented by Blükmel and Stölzel in about 1815 was applied to trumpets, horns, and other brass instruments. The valve trumpet is capable of producing a chromatic scale. Another type of trumpet is the bass trumpet, sounding an octave lower than the ordinary trumpet, used by Wagner in "The Ring" and by Richard Strauss in "Elektra." The clarino, or clarion, was a small, high pitched, rather shrill trumpet used in the time of Handel.

Among the distant ancestors of modern horns are animal's horns and tusks. The shofar is made from a ram's horn and has no mouthpiece; it is the only ancient Hebrew instrument still used in Jewish religious services. The Roman bronze horn, called a cornu, with a wooden crosspiece, was perhaps derived from deer horns; the connu was used in the Roman army and at feasts and ceremonies. The Nordic bronze lur--usually found in symmetric pairs--was originally made from the tusks of a mammoth. The oliphant, a short thick horn carved from an elephant tusk, ornamented in gold or ivory for distinguished knights, was brought to Europe from Byzantium in the tenth century. The Orientals also had richly ornamented horns.

The hunting horn of medieval Europe had natural tones similar to those of the bugle. It probably derived from the Roman horn. Descendants of the hunter's horn are the posthorn, a coiled form of coach horn; the key bugle, used for military signaling at the end of the eighteenth century; the bugle, a similar, but unkeyed instrument; and the french horn (German waldhorn, indicating its origin--French cor allemand). The original unkeyed french horn had the soft tones of the modern horn but could produce only the tones of the overtone series. The key-operated valve horn has had its present form, except for minor improvements, since about 1830. It is favored by German musicians, while the piston-operated French horn of today is generally preferred elsewhere. The American euphonium corresponds to the German

baritone horn. The saxhorns, invented in about 1843 by Adolphe Sax, are a uniformly constructed family of cornets, horns, and tubas. These are nine in number, differing only in size, with a range from one octave above soprano to one octave below double bass. The ophicleide is a large bass bugle with holes and keys and a chromatic scale.

The cornet, first made in France in about 1825, resembles a squat, keyed trumpet. An improved key bugle, it is brasher, yet warmer in tone quality than the trumpet; it has a chromatic scale, and was called for by Berloiz in some of his scores. It is a standard band instrument today. Later variations on the construction of the cornet were the althorn, the tenor horn, and the bass tuba. First made in Berlin in 1835, the bass tuba, with its chromatic scale, is the chief bass instrument of brass bands.

Tuba is a term loosely applied to various deeptoned instruments used as the bass of the brass in an orchestra or a military band. These include the tenor tuba or euphonium (used chiefly in military and brass bands) and the two forms of bombardon (bass tuba and double-bass tuba). When made in a circular form, for carrying on the shoulder when marching in a military band, the double-bass tuba is called a helicon. The sousaphone is a special form of helicon constructed in 1899 for the American march composer Sousa. The so-called Wagner tubas devised by Wagner in 1876 to obtain a special

effect for The Ring of the Nieblung comprised two tenor and two bass tubas which were really modified horns, and one true double-bass tuba. The lower saxhorns and lower flügelhorns are also sometimes classed as tubas.

The mouthpieces of the common brass instruments are different from one another slightly; the horn has a slightly conical bore, the trumpet a cup-shaped bore, and the bass tuba, a wider cup-shaped bore.

Another branch of the horn family has died out; the members of this branch include the cornetto directto (Italian strat cornet), made of wood or ivory, very hard to blow, and which disappeared at the beginning of the seventeenth century; and the cornetto, a slightly curved instrument otherwise similar to the cornetto directto, but easier to blow. It went out of use during the seventeenth century. The serpent, a large wooden tube covered with leather, with a winding shape enabling the player to reach the six holes, is a bass instrument with a chromatic scale. It became obsolete in about 1835.

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