

The Cambridge Encyclopedia of Brass Instruments

Thirty-two experts from fifteen countries join three of the world's leading authorities on the design, manufacture, performance and history of brass musical instruments in this first major encyclopedia on the subject. It includes over 100 illustrations, and gives attention to every known brass instrument which has been regularly used, with information about the way they are played, the uses to which they have been put and the importance they have had in classical music, sacred rituals, popular music, jazz, brass bands and the bands of the military. There are specialist entries covering every inhabited region of the globe and essays on the methods that experts have used to study and understand brass instruments. The encyclopedia spans the entire period from antiquity to modern times, with new and unfamiliar material that takes advantage of the latest research. From *Abblasen* to *Zorzi Trombetta da Modon*, this is the definitive guide for students, academics, musicians and music lovers.

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Guide to Using the *Encyclopedia*

This book is aimed at specialists and non-specialists: anyone who has an interest in increasing their knowledge of brass instruments, the way they are and have been made, played and understood in different places and times. We have encouraged clarity from our contributors, but have not discouraged the use of technical language where it is needed. We have been aware that the book will be used by readers throughout the world and that they will need to search for information from different starting points; this has been foremost in our minds when designing the way the book is organised and for that reason a following section headed 'Navigating the Book' is especially important.

After an introductory overview essay, the bulk of the content is made up of a series of entries arranged in a single alphabetical sequence. This is followed by five appendices: respectively, composite lists of instruments that seem to have been restricted to local use and the regions in which they are found, the pitch ranges of brass instruments, a compendium of information about makers of brass instruments, a list of major collections in which brass instruments are important and a bibliography of older didactic and theoretical works that are significant to brass instruments.

SELECTION OF ENTRIES

Though the entries are in a single sequence, we selected items for inclusion by considering four broad categories from which they could be drawn: instruments, topics and themes that cast light on the way brass instruments are used in the present and have been in the past, biographical entries and entries on works of music. We feel we have covered the most obvious items that will be expected of the book, and by also including several overview essays on historical and other themes, we hope to have minimised major oversights. The following additional information will clarify the structure of the book and how its various parts have been brought together.

INSTRUMENTS

We have included entries on all brass instruments in modern use and most others that have been, or were intended for use, in Western music. Also included are entries on several lip-vibrated instruments that are fabricated from natural objects such as animal tusks and horns, instruments that are known to have been used in antiquity and those made solely for ceremonial or devotional use. Many instruments that are not the subject of individual entries are mentioned and described in alternative entries such as those devoted to regions of the world. Additionally Appendix 1 contains a list of instrument names that appear to have only very local uses.

Just three instruments that do not fit into our brass instrument classification are given entries: *Tromba marina*, *Mock trumpet* and *Shawm*. The first two are included to clarify why they are associated with words meaning trumpet, the third because of the frequency with which this instrument was linked with the trombone and probably its players in the sixteenth century.

TOPICS AND THEMES

This category contains entries relevant to performance, items relating to parts of instruments, the acoustics of brass instruments and topics such as jazz which have been influential on brass playing.

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We have also included entries on major fields of enquiry relevant to brass instruments and the methods their researchers use including *Iconography*, *Anthropology*, *Performance practice*, *Acoustics* and *Organology*. We have been keen to ensure that the scope of the book is not restricted geographically and culturally to Europe and North America. For this reason we commissioned substantial articles on *Nordic countries*, *Russia*, *South America*, *China*, *Japan*, *India*, *Africa* and *Australasia*. There are also shorter articles on musical practices that are exclusive to particular parts of the world such as *Balkan Bands* and *Banda Sinaloense*. To help the book be more than a sum of its parts, the entries on the main style-periods of Western music discuss brass instruments in wider historic and aesthetic contexts: *Antiquity*, *Medieval and Renaissance*, *Baroque*, *Classical*, *Romantic* and *Modernism*.

BIOGRAPHICAL ENTRIES AND WORKS OF MUSIC

Entries are included on performers, instrument makers, scholars and others who have been important to the development and understanding of brass instruments and their repertoires. Limiting the number of biographical entries on performers has been taxing because there have been so many brilliant virtuosi. For this reason we had to settle on a different way of selecting players for inclusion other than their stellar abilities. Our criterion has been simple: we have included entries only on players who have caused a major and discernible change or extension to the idiom of the instrument they play. We have stuck to this rule even though many great players have been omitted, but in so doing we have been aware of the many other biographical reference works in which great brass players are listed.

MUSICAL INSTRUMENT MAKERS

The standard reference work on brasswind instrument makers is *The New Langwill Index* edited by William Waterhouse (1993). Time has passed and more information has come to light since the publication of what remains a central text in brass instrument scholarship. We had neither the space nor the desire to replace that text within this book, but we felt a need to present as much up-to-date information as is possible about makers. This has been done through the provision of an extensive appendix (Appendix 3) supplemented by a general entry on *Manufacturing* and a small number of entries on particularly important makers in the main alphabetical sequence of the book.

EARLY LITERATURE

Didactic and theoretical literature (along with surviving instruments and repertoire) constitutes the largest body of primary source information on musical performance for brasswind instruments before the twentieth century. Many of these sources are cited in entries in the *Encyclopedia*. Additionally a very extensive list of sources of this type is included as Appendix 5.

NAVIGATING THE BOOK

The main tools used for linking related topics of information are the cross-referencing system, the index and the bibliography.

Cross-references between entries are given within parentheses at appropriate points in the text using the format (see *Sackbut*).

Where appropriate, cross-referencing extends to the appendices using the same process (see Appendix 2).

The Index is extensive and brings together words and terms from the book as a whole in a single alphabetical sequence. A preface to the Index provides more information about how it is presented.

All secondary and primary sources cited in the book are referenced in the bibliography which is organised (for ease of reference) so that the author/date key appears at the front of each bibliographical record.

ALPHABETICAL LISTINGS AND CROSS-REFERENCING BY ALTERNATIVE DESCRIPTORS

The entry titles (the headers) in the main A–Z sequence of the *Encyclopedia* are in alphabetical order. There are no definite articles in the header phrases, so for example, it is *Black Dyke Band* rather than *The Black Dyke Band*.

Works of music are usually given by title, as in *Fanfare for the Common Man*, but certain works are most helpfully described as a group, in which case the first word in the header is the name of the composer, as in *Mozart's horn concertos* and *Handel's trumpet parts*.

Some entries could have been put under more than one header. A case in point is the entry on *Breathing*, which covers most of the physiological issues of playing. In this case the main entry is under *Breathing* in the main sequence, but a separate header *Anatomy of playing* is also included in the sequence carrying no more than a cross-reference to the main entry. The Index also highlights all entries that are the subject of an entry in the main sequence in the composite list of instrument makers.

REFERENCING AND THE BIBLIOGRAPHY

In-text referencing is restricted to the author/date as in (Dietrich 2005).

Early texts are cited by the name of the original author rather than that of a subsequent translator or editor, for example (Mersenne 1636–7) rather than (Chapman 1957) and, as is the case in this example, where a work has been published in parts or incrementally, are usually cited by the range of dates of the original publication. Citations of other reference works and major learned journals are indicated by abbreviations which are explained later in this section and in a preface to the general bibliography.

The list of early theoretical and didactic works (Appendix 5) identifies some of the institutions that hold copies of the works cited using the standard RISM *Sigla*. A key to the RISM *Sigla* used in this book is given at the end of Appendix 5.

Similarly relevant extracts of the *Sigla* devised by Arnold Myers for use in *The Grove Dictionary of Musical Instruments* (2014) are given in Appendix 4.

Up to three further reading recommendations are given at the conclusion of most entries. The bibliography gives full details of all cited works.

Major reference works and academic journal titles are abbreviated in the running text as follows (this list also appears as a preface to the main bibliography):

<i>AmZ</i>	<i>Allgemeine musikalische Zeitung</i>
<i>ANB</i>	<i>American National Biography Online</i>
<i>BB</i>	<i>Brass Bulletin</i>
<i>BWQ</i>	<i>Brass and Woodwind Quarterly</i>
<i>EM</i>	<i>Early Music</i>
<i>FoMRHI</i>	<i>Fellowship of Makers and Researchers of Historical Instruments Quarterly</i>
<i>GDMI II</i>	<i>The Grove Dictionary of Musical Instruments</i> (2014), Laurence Libin (ed.), 2nd edition, Oxford, Oxford University Press
<i>GMO</i>	<i>Grove Music Online</i>
<i>GSJ</i>	<i>Galpin Society Journal</i>
<i>HBSJ</i>	<i>Historic Brass Society Journal</i>
<i>ITEAJ</i>	<i>International Tuba Euphonium Association Journal</i>
<i>ITSJ</i>	<i>International Trombone Society Journal</i>
<i>JASA</i>	<i>Journal of the Acoustical Society of America</i>
<i>JAMIS</i>	<i>Journal of the American Musical Instrument Society</i>
<i>JAMS</i>	<i>Journal of the American Musicological Society</i>
<i>JiHS</i>	<i>The Horn Call, Journal of the International Horn Society</i>

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<i>JITG</i>	<i>Journal of the International Trumpeters' Guild</i>
<i>KDG</i>	<i>Komponisten der Gegenwart</i>
<i>MIMO</i>	<i>Musical Instrument Museums Online</i>
<i>ML</i>	<i>Music and Letters</i>
<i>MT</i>	<i>The Musical Times</i>
<i>NG</i>	<i>The New Grove Dictionary of Music and Musicians</i> (1980), Stanley Sadie (ed.), London, Macmillan
<i>NG2</i>	<i>The New Grove Dictionary of Music and Musicians</i> (2001), Stanley Sadie and John Tyrell (eds.), 2nd edition, Oxford, Oxford University Press
<i>NGDAM</i>	<i>The New Grove Dictionary of American Music</i> (1986), H. Wiley Hitchcock, and Stanley Sadie (eds.), London, New York, Macmillan
<i>NGDJ</i>	<i>The New Grove Dictionary of Jazz</i> (2002), Barry Kernfeld (ed.), Oxford, Oxford University Press
<i>NGDMI</i>	<i>The New Grove Dictionary of Musical Instruments</i> (1984), Stanley Sadie (ed.), London, New York, Macmillan
<i>ODNB</i>	<i>Oxford Dictionary of National Biography</i> (2004), Oxford, Oxford University Press
<i>PMA</i>	<i>Proceedings of the Musical Association</i>
<i>PRMA</i>	<i>Proceedings of the Royal Musical Association</i>

AUDIO RECORDINGS

Sound recordings are mentioned in a small number of entries, the entry on *Jazz* for example. The details of these recordings are dealt with in-text and sufficient contextual information is always provided for them to be traced.

SCIENTIFIC TERMS AND MEASUREMENTS

Almost invariably entries on musical instruments contain scientific descriptors. The following conventions are used consistently:

Frequencies are given in hertz (Hz), that is, cycles per second.

Lengths given in millimetres are measured lengths. The traditional convention to denote the nominal sizes of instruments in feet (ft) which serves to distinguish one instrument from another at the same nominal pitch, but of half or double the tube length is also used. For example, a natural trumpet might be in 7-ft D while a small orchestral trumpet playing the same repertoire could be in 3½-ft D.

NOTE PITCHES

The American Standard system is used to describe note pitches. In this system middle C is called C₄ and A₄ = 440 Hz (Figure 1).

Figure 1 The American Standard system used to describe note pitches.



MUSICAL TERMS AND CONVENTIONS

UK musical terms and conventions are used throughout. So, *crotchet* and *quaver* rather than *quarter* and *eighth* note, and *bar* rather than *measure*.

INSTRUMENT NAMES AND ABBREVIATIONS

‘Horn’ is used to signify any one of the many types of instrument that might be properly described by that name (tenor horn, hunting horn, etc. but not ‘horn’ as used in jazz parlance for any wind instrument). Consistently ‘french horn’ (lower case ‘f’) is used for the orchestral horn.

‘Trombone’ is used to describe that instrument in all periods of music, unless a more antiquated expression (such as ‘sagbut’) is used in quotation.

Cornet/s refers to the nineteenth-century valve instrument, cornett/s to the Renaissance instrument.

Several instruments are known by different names in different countries even if the common language is English. Alternative names are indicated in parenthesis (*Euphonium* (or euphonion, tenor tuba; Fr. *saxhorn basse*; Ger. *Baryton, Tenorbasshorn*; It. *eufonio, bombardino, flicorno basso*; Sp. *eufonio*). The Index provides an alternative to the main alphabetical sequence for finding an instrument that has more than one name.

Where it has been necessary to use abbreviated names for musical instruments, we have used the following conventions:

hn	french horn	k trpt	keyed trumpet	pf	pianoforte
h hn	hand-horn	cnt	cornet	hp	harp
v hn	valve horn	trbn	trombone	str	strings
a hn	alto horn	b trbn	bass trombone	perc	percussion
t hn	tenor horn	tba	tuba	timp	timpani
bar hn	baritone horn	euph	euphonium	orch	orchestra
flug	flugelhorn	oph	ophicleide	SATB	chorus
trpt	trumpet	serp	serpent	org	organ
n trpt	natural trumpet	b saxh	bass saxhorn		
b trpt	bass trumpet	saxtrba	saxotromba		

BIOGRAPHICAL ENTRIES

The following conventions are applied consistently for biographical entries:

- Surnames are followed by given names; titles and honorifics are not used.
- The name by which a subject was known is not bracketed but other given names are, as in *Berlioz, (Louis) Hector*.
- If a subject was also known by a nickname or alias that name is included in quotation marks, as in *Gillespie, (John Birks) ‘Dizzy’*.
- Where there is more than one given name and no reason to do otherwise, each given name is provided without privilege to any one in particular as in *Queisser, Carl Traugott*.
- A feature of brass instrument performance is the frequency with which family dynasties have been important. In such cases the headers indicate the family (such as *Bassano family*) rather than its individual members.

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DATES AND MATTERS OF ACCURACY

Birth and death dates of persons are usually given in parentheses where such details are known. It has not been consistently possible for all such information to be provided, or provided with a level of accuracy of which we are entirely confident: some birth and death dates are open to doubt. Where we are unsure we have deferred to other major reference works such as the *Oxford Dictionary of National Biography*, the *American Biographical Dictionary* and *Oxford Music Online*. However, many of the subjects mentioned in this book are important to the story of brass instruments, but did not gain a wider celebrity and as such have evaded the main works of record. Where necessary we have taken one of the usual measures to indicate our uncertainty; for example, *Il Dolcemelo* c.1600 and Joseph Halliday (Haliday) c.1772–1827(?).

Dates of works of music are the dates of composition rather than dates of first performance unless explained otherwise.

Chronological eras are described as CE (the Common Era) and BCE (Before the Common Era)

ILLUSTRATIONS OF INSTRUMENTS

Most brass instruments have detachable mouthpieces. Instruments have been photographed with a mouthpiece if there is a reasonable likelihood that the mouthpiece was originally supplied by the maker of the instrument shown. Otherwise, they have been photographed without a mouthpiece.

Acknowledgements

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