

# Percussion Fundamentals

## Timpani

**Timpani {Italian}**  
**Pauken {German}**  
**Timbales {French}**  
**Kettle Drums {English}**

The origins of timpani predate recorded history. It is generally understood that they entered from the East to Europe during the Crusades. The first orchestral use of Timpani is in *Thésée* by Lully (1675).

### Parts of the Timpani:

**Bowl:** usually made of copper or fibreglass. The shape is either parabolic or hemispheric.

**Head or Skin:** Either calfskin or plastic.

**Tuning:** usually with a pedal, sometimes by hand.

**Standard Sizes and Ranges:** Timpani may vary in size and shape. The composer and performer can usually count on the standard set of 4 drums:

20" A-F, 23" D-A, 25" or 26" Bb-F, 28" or 29" F-C, 30" or 32" D-A

Purchasing: Purchase timpani in the following order: (29 & 26 F/F 1 octave 1 pair)

Timpani always sound best when tuned and played in their middle range. The bottom notes (lowest notes in their range) sound muddy and inarticulate.

**Mallets:** Most percussionists have at least three pairs of timpani mallets:

1. General: for soft and other playing.
2. Medium Hard: for loud fairly precise rhythmical playing.
3. Staccato: for staccato and precise articulation.

Composers often call for speciality mallets such as: wooden, or leather covered etc.

**Articulation:** The timpanist is capable of producing a wide range of articulation from legato to staccato.

**Tuning:** Tuning timpani is an art that takes years of intensive study. Just getting the drum in tune with itself (all 8 tuning lugs having equal tension) requires hours of careful preparation. Composers writing for timpani should consult scores of the following composers; Beethoven, Mozart, Tchaikovsky, Strauss, Stravinsky and Bartok to name a few. All pedaling changes must be considered careful, allowing time for the timpanist to properly check pitch against the orchestra. The pedal mechanism is not accurate like the valve on a trumpet or key on a piano.

# Percussion Fundamentals

## Ideophones

# CYMBALS

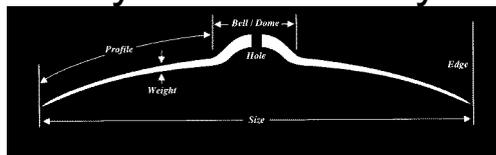
**Piatti or Cinelli {Italian}**  
**Becken or Tellern {German}**  
**Cymbales {French}**  
**Cymbals {English}**

History: The cymbals are some of the oldest documented instruments. Finger cymbals date to the Bronze Age

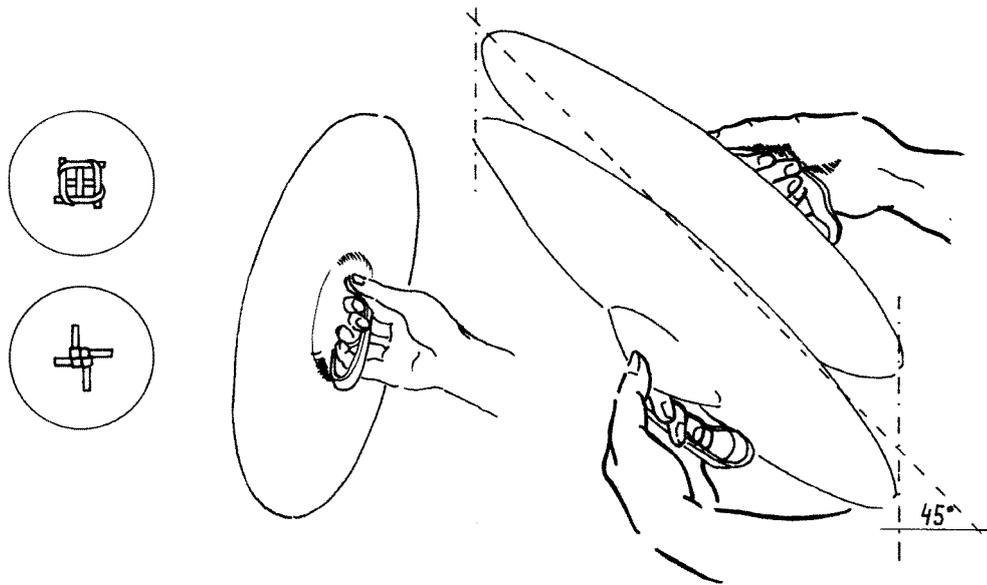
This was the beginning of modern cymbals as we have come to know them. Cymbals, of course, were being made in various sizes and shapes long before 1623 and were in fact one of the earliest of autophonic instruments (ideophones), first appearing during the Bronze Age (2500-1800 B.C.) presumably in the Middle East. They were principally used in the religious rites of a cult which worshiped Cybeles, the Goddess of Fertility. As the influence of this cult spread Westward to Greece, Rome and Egypt, the use of cymbals went along with it. Cymbals have been found in early Egyptian tombs as well as in the ruins of Pompeii. They are mentioned many times in the Bible, both in the New and Old Testaments, for the early Hebrews used cymbals in their religious ceremonies. Later, the Eastern Christian Churches used them and some Eastern Christian sects still use cymbals today in their rites.

The story of how cymbals came to be used in secular Western music, however, begins with their use in Turkey by the famous Janizary bands. The Janizaries were an elite corps of the Turkish Army (formed in the 14th century A.D.) which marched into battle behind the stirring music of a band composed of woodwinds (mainly flutes and double reed instruments) and percussion. Three kinds of percussion instruments were used in these bands which together created an effect which later was often imitated by the Europeans. These instruments were the bass drum, triangle and cymbals. The most well known of these early appearances in Western music is Haydn's Symphony No. 100 (Military), in which the Janizary effect was incorporated into the second and the last movements. The premiere performance of this work in London was an immediate sensation. The effect was subsequently used in Mozart's Overture to The Abduction From the Seraglio, and in the finale of the Symphony No. 9 (Choral), of Beethoven, to mention a few of the better known examples.

## Cymbal anatomy



# Cymbal Exercise



Allegro non troppo

1. *a 2* *p* *f*

*p* *f* *pp* *f* *ff*

The basic technique used for any loud cymbal crashes is as follows:

- The right and left hand grasp the straps as earlier described.
- The right hand is held above the left hand.
- The cymbals should be held at an angle to each other.
- The right cymbal then strikes the left cymbal at this angle. Both hands should travel in the opposite direction (the right hand down and the left hand up).

The cymbals will actually hit at two different times, the bottom portion meeting first and the top portion immediately after. They must be so close, however, that only one sound is heard. This will avoid the possibility of trapping air inside the cymbals and producing an unwanted sound. After the cymbals are struck, they should be held up so as to sustain the sound.

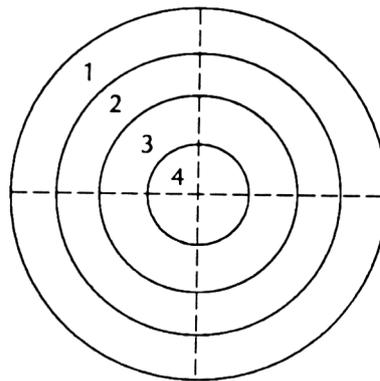
To produce a very short cymbal crash, the cymbals are struck as before and immediately pulled to the chest or shoulder to muffle the sound.

# Percussion Fundamentals

## Membranophone

### Bass Drum

**Gran Cassa {Italian}**  
**Grosse Trommel {German}**  
**Grosse Caisse {French}**  
**Bass Drum {English}**



**Figure #18**  
**Playing Area**

1. Tone is much less resonant and thinner. Pitch tends to be higher.
2. Desirable playing area. Tone quality is excellent with maximum resonance and richness.
3. Also desirable area. Tone is less resonant. Tends to produce a harder tone.
4. The Nodal area, or center of the drum head. Used only occasionally for special non-resonant percussive effects.

Moderato

1. Musical notation for a bass drum exercise in 2/4 time, marked Moderato. The first staff starts with a forte (f) dynamic and ends with a piano (p) dynamic. The second staff starts with a piano (p) dynamic and ends with a forte (f) dynamic.