

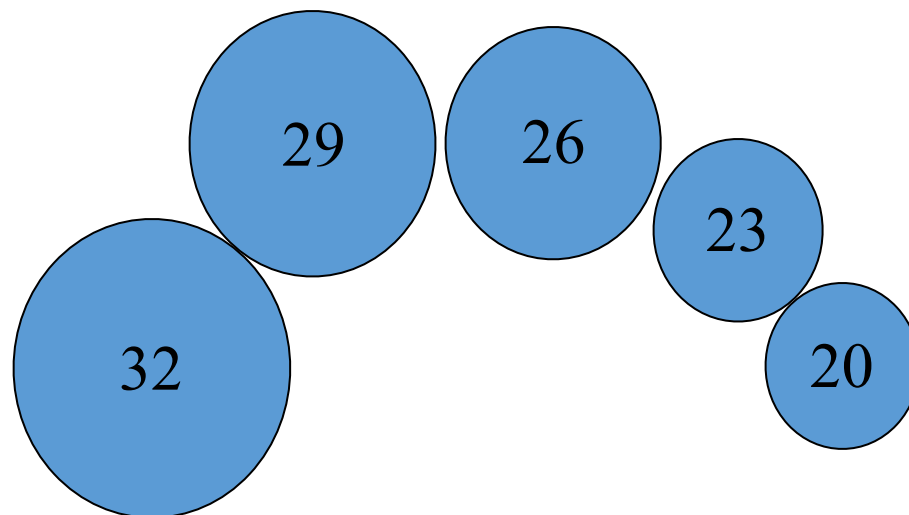
Timpani



Timpani Overview

- May be spelled Tympani in some literature
- Also known as “Kettle Drums”
- German - Pauken
- French - Timbales
- Italian - Timpani
- An established orchestral instrument since 17th Century.
- First timpani players with string bass players
- Loudest orchestral instrument
- Membranophone with Definite Pitch
- Sensitivity to correct pitch

Timpani Set Up



Timpani Parts



Timpani Bowls

- Polished Copper
 - Bright tone and great projection
- Hammered Copper
 - Darker more focused sound
 - Cosmetic attraction
 - Most costly
- Fiberglass
 - Painted a satin copper color
 - Good sound
 - Lightweight
 - Less costly

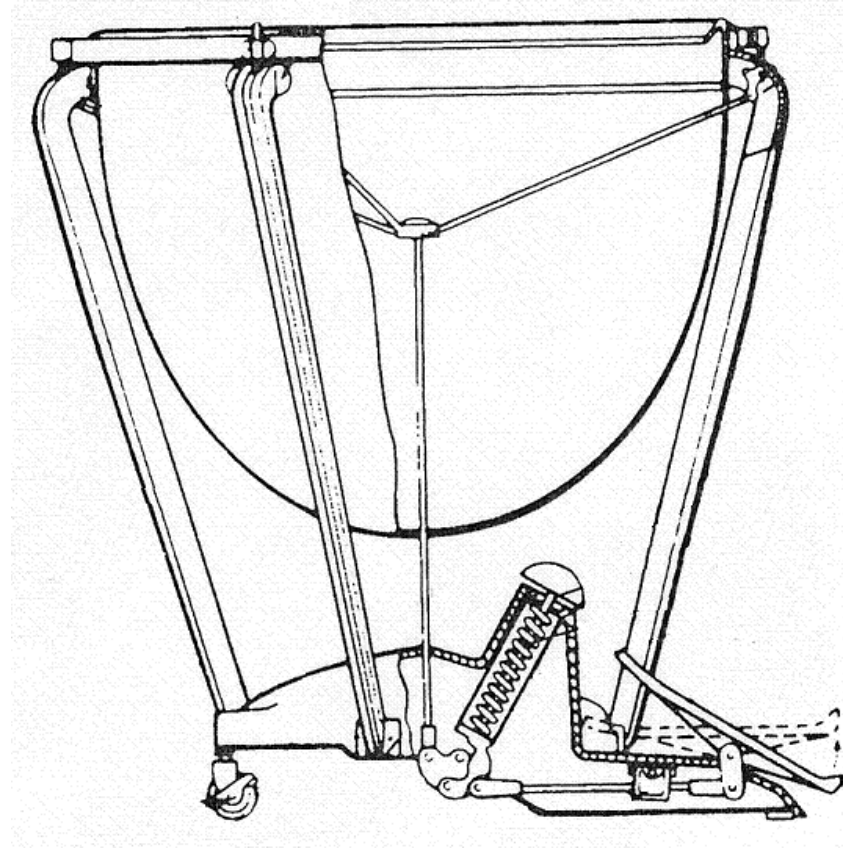
Timpani Heads

- Extended Collar - 1” gap from bearing edge of bowl to hoop
 - More open and focused sound
- Regular Collar (Pre 1979) - small gap
- Smooth White Mylar (Plastic) - Ludwig, Remo
- Clear / Hazy Mylar (Plastic) - Ludwig, Remo
- Evans
- Remo
 - Renaissance
 - Like calf skin
 - Darker tone

Internal Tuning Linkage

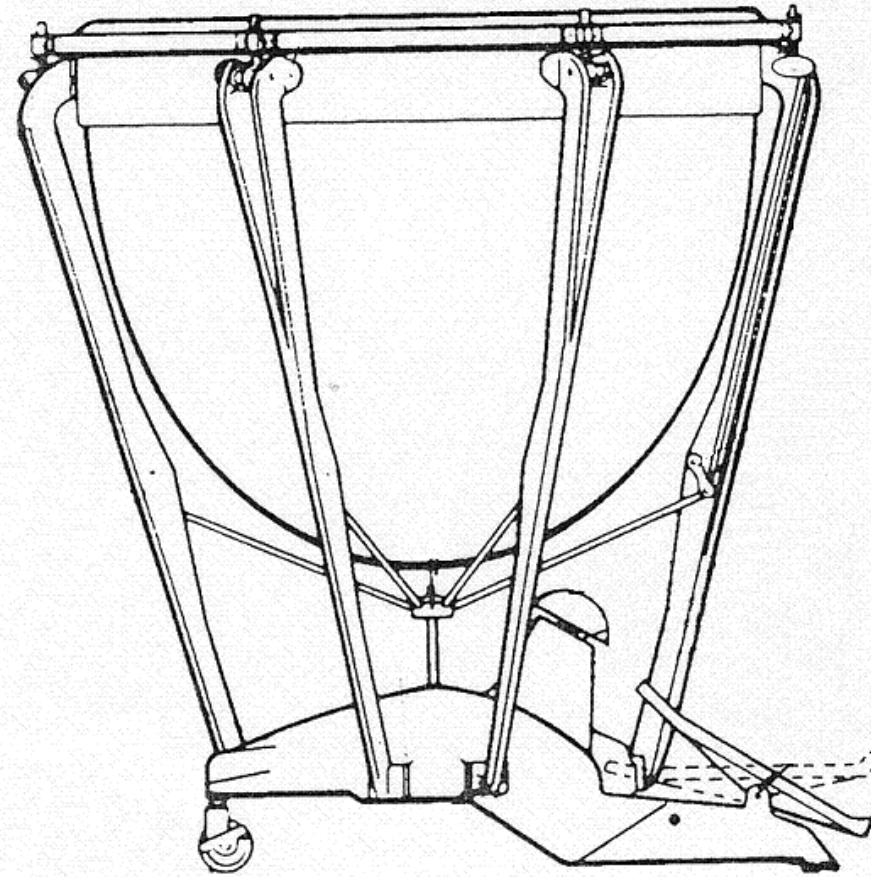
Linkage and spider are
inside bowl.

Safer for in school use.



External Tuning Linkage

Linkage and spider
outside bowl, partly
hidden in the struts.
Nothing inside the bowl.



Timpani Sets

- Set of 2 (26" & 29") -
 - Simple beginner music
- Most common add on - 23"
 - Extended range - High
- Final add on - 32"
 - Extended range - Low
- Set of 4 (23", 26", 29", 32")
 - The most common timpani set up for full range
- Set of 5 (20" 23", 26", 29", 32")
 - Used for contemporary music - Advanced.

Timpani Mallets

- Articulations
 - Soft
 - Medium Soft
 - Medium Hard (General)
 - Hard (Staccato)
- Mallet Selection
 - Blend of notes in ensemble
 - Articulation
 - Tone
 - Roll Quality or Smoothness



Timpani Grips

- French - Thumbs on top
 - Mobility
 - Lighter Touch
 - Pull sound out of drum
- German - Thumbs to the side
 - Powerful
 - Push sound in to drum
- American - Hybrid Crossover
 - In between French & German

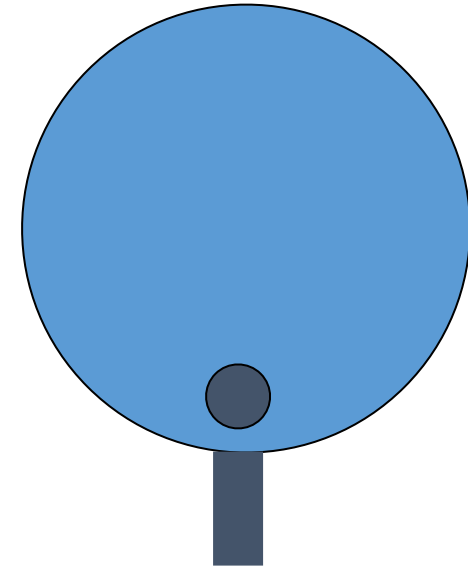


Timpani Stroke

- **Full Stroke**
 - 6” - 8” Motion Range
 - Mezzo Forte Dynamic
- **Wrist Stroke**
 - 3” - 4” Motion Range
 - Piano dynamic
- **Arm Stroke**
 - High 12”+ Motion Range
 - Forte - Double forte dynamic

Playing Area on Timpani

- 6 O'Clock facing each drum
 - Left Hand / Right Separation
- 2" - 4" in from edge of timp head
- Center is a dead sound
 - Rarely used
 - Special sound effect only



Dampening / Muffling

- **Dampening**

- With fingers

- Direct finger dampening
 - Swipe for more indirect dampening
 - Hand to Hand dampening
 - Keep timpani notes from ringing in to each other

- **Muffling**

- With mutes

- Less ring / less resonance / dry staccato sound
 - Special effects

Sticking – Moving from Drum to Drum

- Right Hand Lead / Left Hand Lead
- Sticking - Hand to Hand
- Doubling - Double Note with same hand to move to next drum more efficiently

Drum Choice for Best Sound

- Where do pitches sound best on each size drum
 - Determine range of desired note
 - Know range of each size drum
 - What is best register for each size drum
- 32” - Low D - A
- 29” - Low F - C
- 26” - Low Bb - F
- 23” - Low D - F
- 20” - Low F - C

Timpani Rolls

- Sustain Sound - Single Stroke Action
- Determining Factors
 - Register / Pitch
 - Dynamic Level
 - Hardness of Mallet
- Roll Beginnings
- Roll Endings
- Cresendos
 - Accelerate Roll Speed

Timpani Tuning

- Timpani Gauges
- Tuning Forks
- Pitch Pipe
- Matching Pitches
- Interval Recognition
- Listening to Low Brass / String Bass
- Sympathetic Vibrations (Feel vs Hear)

Timpani Interval Training

- Hardest element of accurate timpani playing - Tuning
- Solfege Singing - Do, Re, Mi, Fa, Sol, La, Ti, Do
 - Minor 2nd - Jaws
 - Major 2nd - Do, Re, (Happy Birthday)
 - Minor 3rd - Brahms Lullaby
 - Major 3rd - Do, Re, Mi
 - Perfect 4th - Here Comes the Bride / George of the Jungle
 - Raised 4th (Tri-tone) - Maria from West Side Story
 - Perfect 5th - (Do, Mi, Sol) Twinkle Twinkle, Star Wars Theme
 - Major 6th - NBC
 - Minor 7th - There's a Place For Us from West Side Story
 - Major 7th - Bali Hai' from South Pacific
 - Octave - Some Where Over the Rainbow

Timpani Performance Technique 1

SLOW LIFT

Follow through the ring of the drum with your arm motion.

$\text{♩} = 112$
A D



A musical staff in bass clef with a 4/4 time signature. The tempo is marked as quarter note = 112. The key signature is one flat (B-flat). The notation consists of four measures: the first measure has a half note on B-flat; the second measure has a half note on D; the third measure has a quarter note on B-flat followed by a quarter note on D; the fourth measure has a half note on B-flat. The staff ends with a double bar line.

MEDIUM LIFT

Follow the bounce of the mallet off the head. Lift up

$\text{♩} = 112$
A D



A musical staff in bass clef with a 4/4 time signature. The tempo is marked as quarter note = 112. The key signature is one flat (B-flat). The notation consists of four measures: the first measure has a quarter note on B-flat; the second measure has a quarter note on B-flat; the third measure has a quarter note on B-flat; the fourth measure has a quarter note on B-flat. The notation is repeated for a total of eight measures. The staff ends with a double bar line. The letter 'R' is written below the first and fifth measures.

Timpani Performance Technique 2

FAST LIFT

Lift up and play lightly to get clean Rhythms without pounding.

♩ = 116+
AD



COMBINATION LIFTS

Make the sound consistent in all Rhythms.

♩ = 112
AD



Timpani Performance Technique 3

WARM UP EXERCISE

Lift up and play lightly to get clean Rhythms without pounding.

FACF

L R L R

Detailed description: This musical exercise is written on a single bass clef staff in 7/8 time. The rhythm is a sequence of four eighth notes followed by a quarter note, repeated four times. The notes are G2, F2, E2, D2, and C2. Above the staff, the letters 'FACF' are written above the first, second, third, and fourth measures respectively. Below the staff, the letters 'L', 'R', 'L', and 'R' are written under the first, second, third, and fourth measures respectively, indicating alternating mallet strokes.

CROSS STICKING

Make sure the beating spot is the same for both mallets.

AD X X X

R L R R L R

Detailed description: This musical exercise is written on a single bass clef staff in 4/4 time. The rhythm is a sequence of two eighth notes followed by a quarter note, repeated four times. The notes are G2, F2, and E2. Above the staff, the letters 'AD', 'X', 'X', and 'X' are written above the first, second, third, and fourth measures respectively. Below the staff, the letters 'R L R', 'R', 'L R', and 'R' are written under the first, second, third, and fourth measures respectively, indicating alternating mallet strokes.

Timpani Performance Technique 4

COMPLEX CROSS STICK

Double stick only when absolutely necessary or between slower rhythms.

Musical notation for Complex Cross Stick technique in 12/8 time. The notation shows two measures of music. The first measure starts with an accent (AD) and a cross stick (X) on the first note, followed by a cross stick (X) on the fourth note. The second measure starts with a cross stick (X) on the first note, followed by a cross stick (X) on the fourth note. The rhythm is a series of eighth notes. The notation is written in bass clef with a 12/8 time signature. Below the staff, the stick patterns are indicated as RLRLRLRLRLRL and RLRLRLRLRLRL.

ARTICULATING ROLLS AND RHYTHMS

Accent the first note of the roll and relax the body of the roll. Lift the 16th notes:

Musical notation for Articulating Rolls and Rhythms in 4/4 time. The notation shows two measures of music. The first measure starts with an accent (AD) and a roll of 16th notes. The second measure starts with a roll of 16th notes. The notation is written in bass clef with a 4/4 time signature. Above the staff, the articulation instructions are indicated as (relax) and (fast lift). Below the staff, the stick patterns are indicated as RLRLRLRLRLRL and RLRLRLRLRLRL.

Timpani Performance Technique 5

MATCHING NOTE LENGTH

Note length is determined by the wind and string instruments with similar parts.

AD Written Played



A musical staff in bass clef with a 4/4 time signature. The staff is divided into two sections by a double bar line. The first section, labeled 'Written', contains a sequence of notes with stems and flags, indicating a specific note length. The second section, labeled 'Played', shows the same sequence of notes but with curved lines above the notes, indicating that the notes are played with a longer duration than written.

DAMPENING SHORT STACCATO NOTES

Listen to the ensemble to determine note length and dampening.

AD Written Played

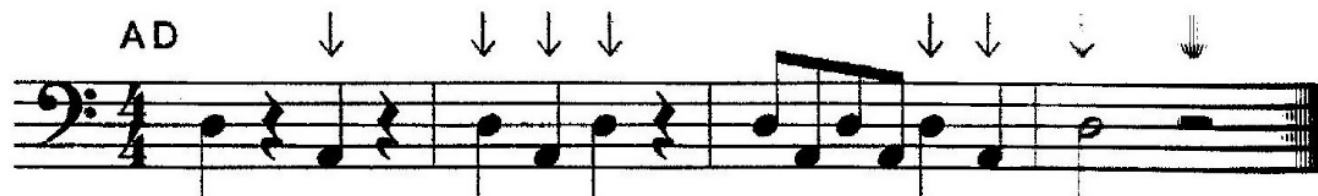


A musical staff in bass clef with a 4/4 time signature. The staff is divided into two sections by a double bar line. The first section, labeled 'Written', contains a sequence of notes with stems and flags, indicating a specific note length. The second section, labeled 'Played', shows the same sequence of notes but with dots above the notes, indicating that the notes are played with a shorter duration than written.

Timpani Performance Technique 6

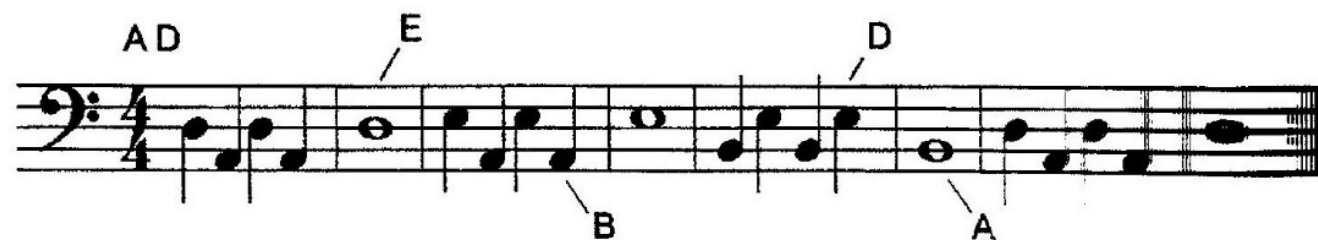
LEGATO DAMPENING

Simultaneously dampen and strike the new note.



PEDALING

Pedal new note on down beat, not Before. Do not do a glissando.




Timpani Performance Technique 7

ARTICULATING RHYTHMS

Emphasize the first note of a 16th note pattern.

♩ = 132+
A D "Lift"



FAST RHYTHM

ARTICULATION

Emphasize the 16th notes for clear articulation without pounding.

A, D



Timpani Performance Technique 8

STICKING CHOICES

Double sticking between drums allows for good lift and quality of sound.

A, D

L R L L R R

Detailed description: This musical notation is written on a bass clef staff in 4/4 time. It consists of two measures. The first measure contains a quarter note, followed by an eighth note, a quarter note, and another eighth note. The second measure contains a quarter note, followed by an eighth note, a quarter note, and another eighth note. The notes are grouped into pairs, with the first pair in the first measure and the second pair in the second measure. The notes are marked with 'L' and 'R' below them, indicating the sticking choices for each note.

CROSS STICKING FAST RHYTHMS

Try to avoid double sticking on one Drum to avoid pounding or over playing.

$\text{♩} = 100$
A, D

X X

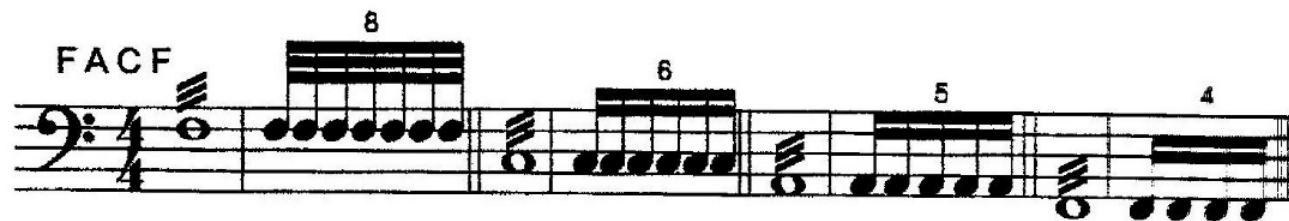
R L R R R R L R

Detailed description: This musical notation is written on a bass clef staff in 4/4 time. It consists of two measures. The first measure contains a quarter note, followed by an eighth note, a quarter note, and another eighth note. The second measure contains a quarter note, followed by an eighth note, a quarter note, and another eighth note. The notes are grouped into pairs, with the first pair in the first measure and the second pair in the second measure. The notes are marked with 'R', 'L', and 'X' below them, indicating the sticking choices for each note. The tempo is marked as quarter note = 100.

Timpani Performance Technique 9

ROLL SPEEDS FOR DIFFERENT PITCHES (HEAD TENSIONS)

The higher the note, the faster the roll.
Use the feel of the mallet rebound and your ears to determine roll speed.



STICKING FOR ROLLS

Lead down with the left hand.
Lead up with the right hand.
Use an odd number of strokes to turn your hands around.



Timpani Performance Technique 10

MEASURING LONG TIMPANI ROLLS

Accent the first note and find the relaxed “roll speed” (often 16th notes). Slow and smooth rolls sound better than fast and forced rolls.

♩ = 132

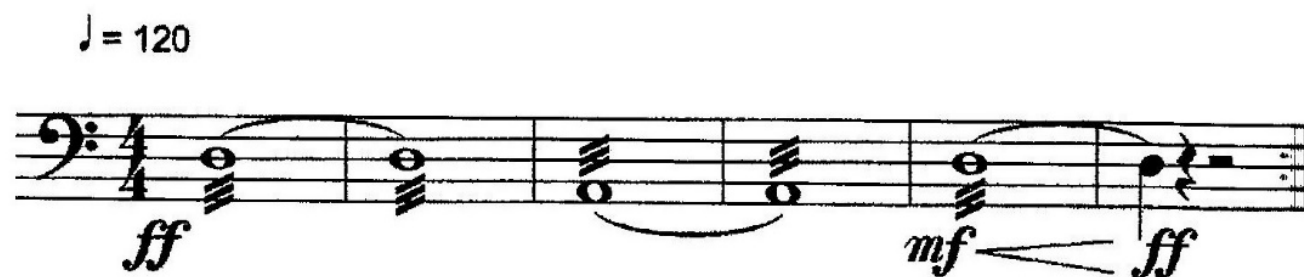
Written Played



LOUD ROLLS WITHOUT EDGE

Lean over the drum putting the tension in your chest, not your wrists. Slower even rolls sound better than fast rolls.

♩ = 120



Timpani Performance Technique 11

MEASURED ROLLS

Plan sticking and roll speed according to tempo.

♩ = 80
AD

8
.....

16
.....

R L R

FAST TEMPO ROLLS

Articulate the first note of the roll and relax the rest.

♩ = 132+
AD

4
....

4
....

R R R L L L L

Timpani Performance Technique 12

MEASURED ROLLS AT FAST TEMPOS

Use odd numbered strokes. Use 5's wh
4's are too slow and 6's are too fast.

♩ = 108+

AD 5 5 5 5

.....

L R L R L R L

ROLLS AT MODERATE TEMPO

Articulate the first note of the roll and
Relax the rest.

♩ = 88+

AD 6 6

.....

R R R L L L L