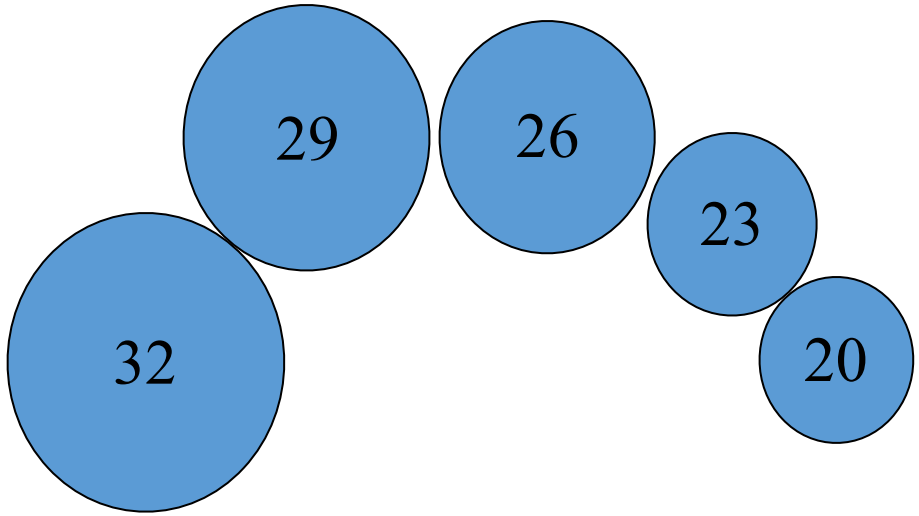
Timpani

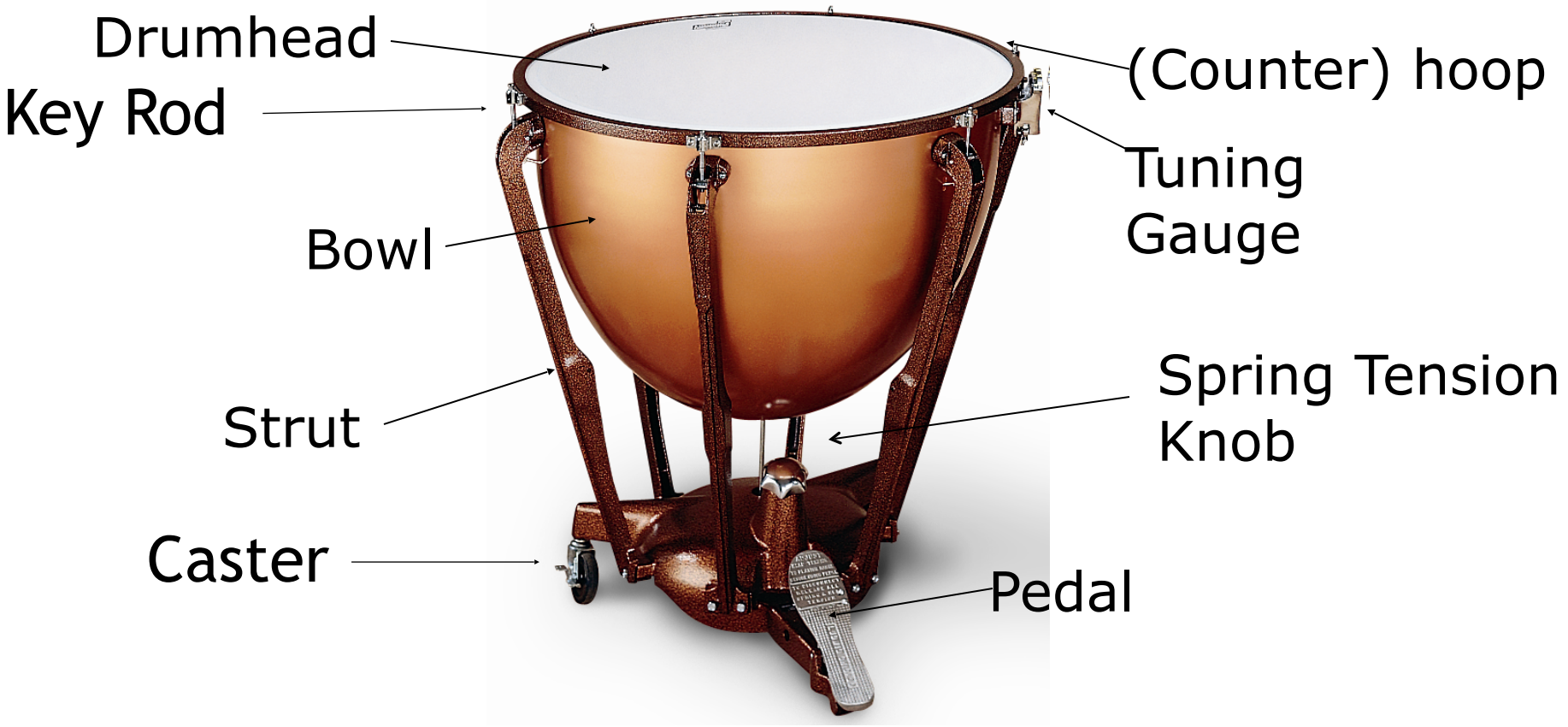
Timpani Overview

- 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

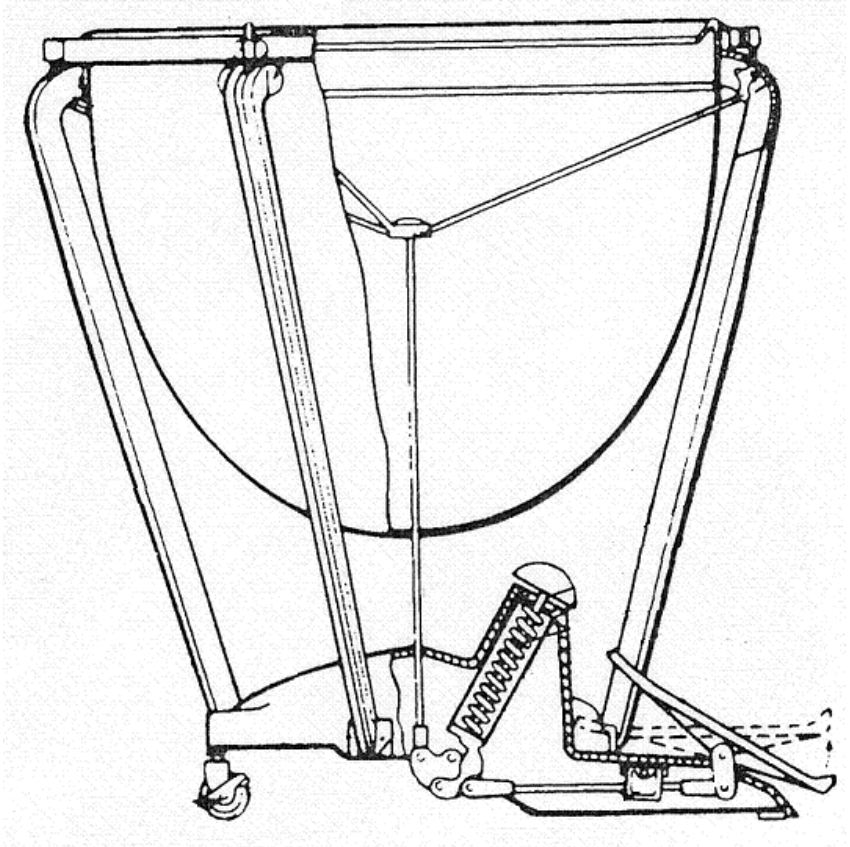
Timpani Heads

- 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

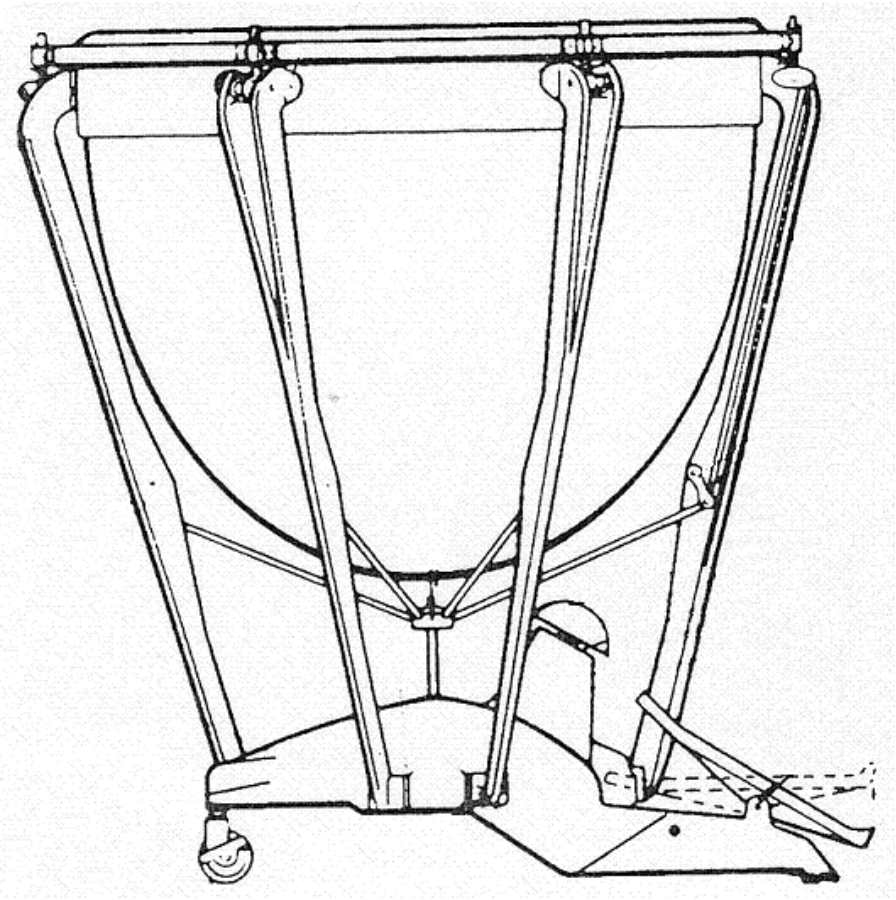
Linkage and spider are inside bowl.

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

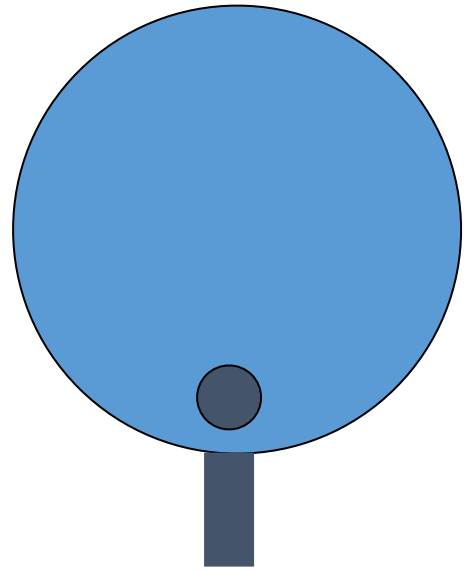
- French – Thumbs on top
  - Mobility
  - Lighter Touch
  - Pull sound out of drum
- German – Thumbs to the side
  - Powerful
  - Push sound in to drum
- American – Hybrid Crossover
  - In between French & German

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

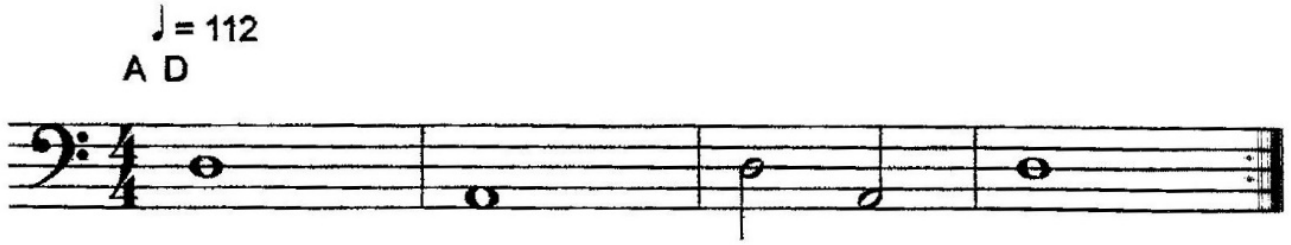
- Timpani Gauges
- Tuning Forks
- Pitch Pipe
- Matching Pitches
- Interval Recognition
- Listening to Low Brass / String Bass
- Sympathetic Vibrations (Feel vs Hear)

Timpani Interval Training

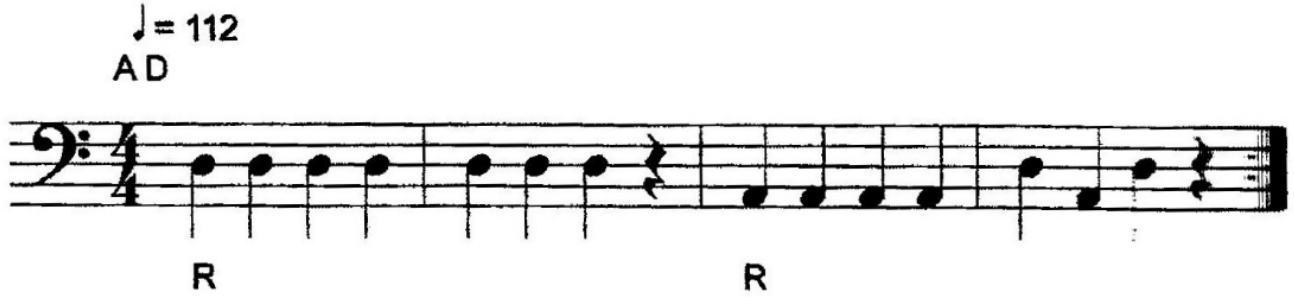
- Hardest element of accurate timpani playing - Tuning
- Solfege Singing - Do, Re, Mi, Fa, Sol, La, Ti, Do
  - Minor 2nd - Jaws
  - Major 2nd – Do, Re, (Happy Birthday)
  - Minor 3rd – Brahms Lullaby
  - Major 3rd – Do, Re, Mi
  - Perfect 4th – Here Comes the Bride / George of the Jungle
  - Raised 4th (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.

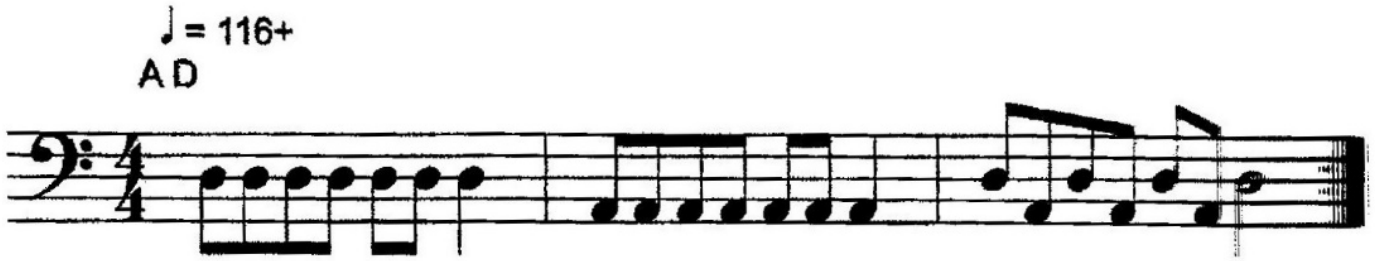


MEDIUM LIFT
Follow the bounce of the mallet off
the head. Lift up

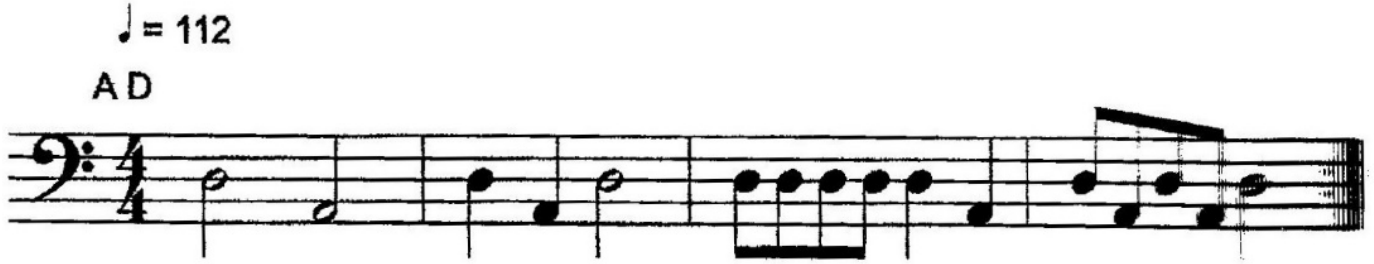


Timpani Performance Technique 2

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

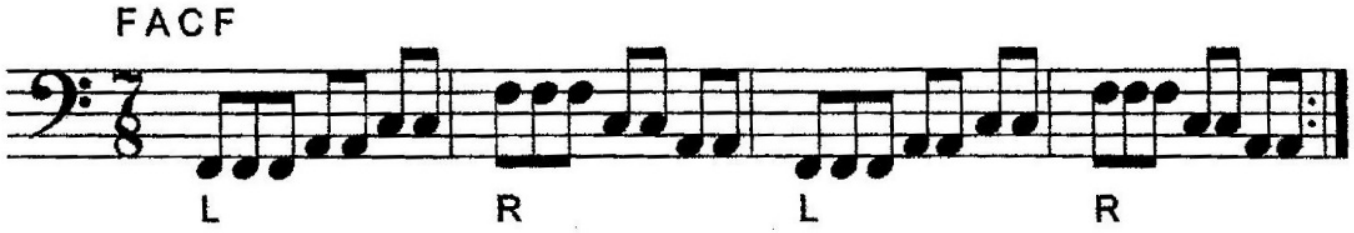


COMBINATION LIFTS
Make the sound consistent in all Rhythms.

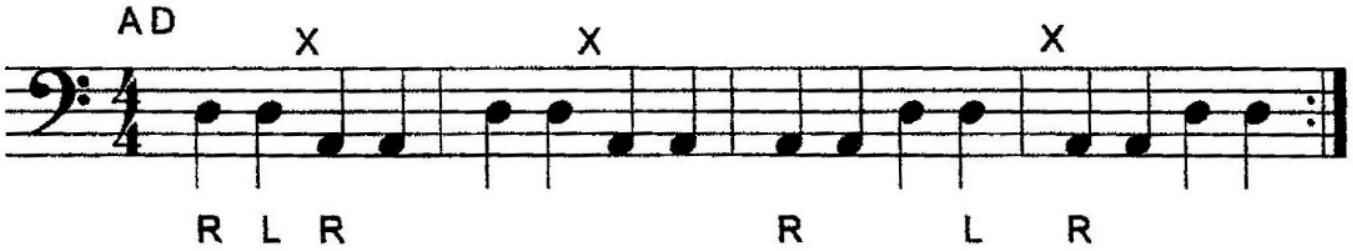


Timpani Performance Technique 3

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



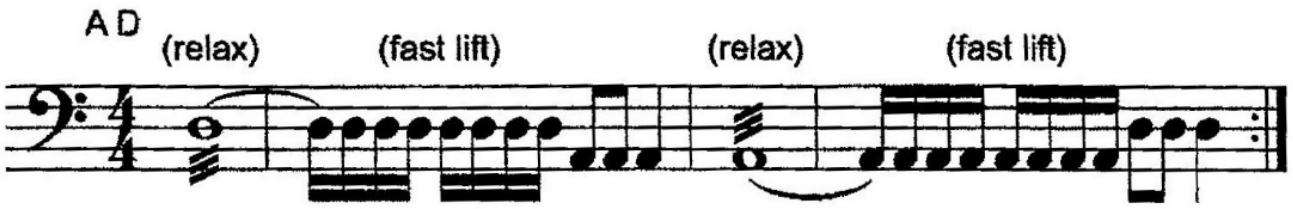
CROSS STICKING
Make sure the beating spot is the same
for both mallets.



Timpani Performance Technique 4

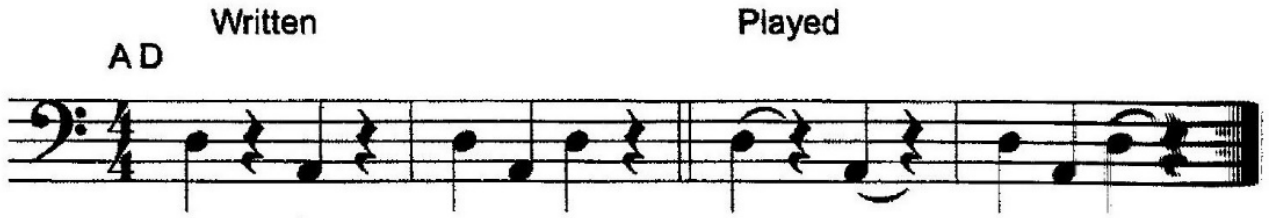
COMPLEX CROSS STICK
Double stick only when absolutely necessary or between slower rhythms.

ARTICULATING ROLLS AND RHYTHMS
Accent the first note of the roll and rel
the body of the roll. Lift the 16th notes

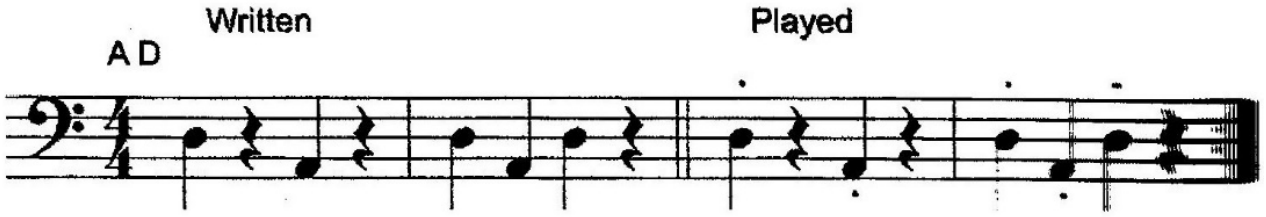


Timpani Performance Technique 5

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

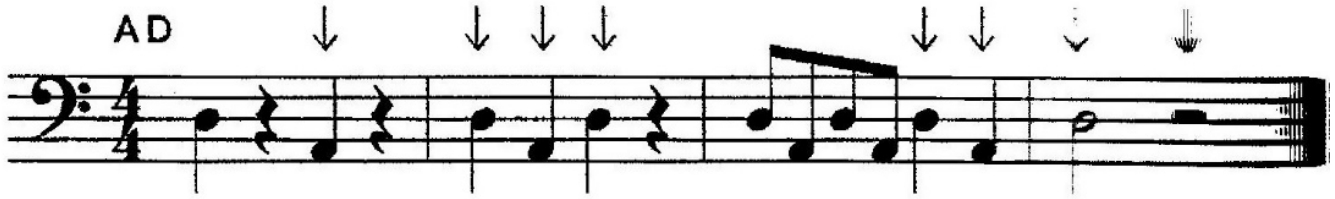


DAMPENING SHORT STACCATO NOTES
Listen to the ensemble to determine note length and dampening.

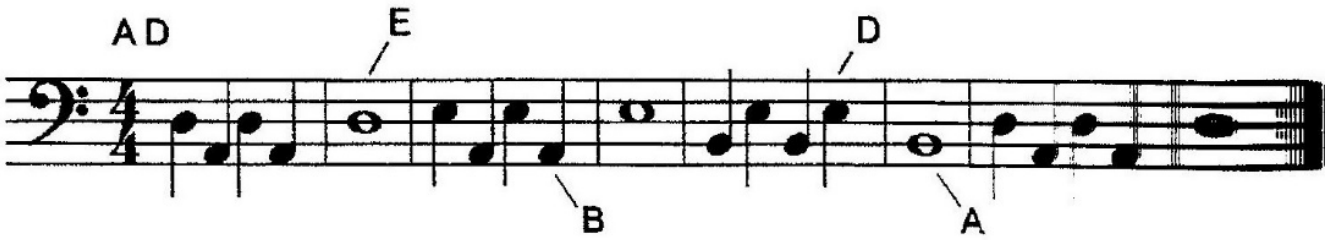


Timpani Performance Technique 6

LEGATO DAMPENING
Simultaneously dampen and strike the new note.

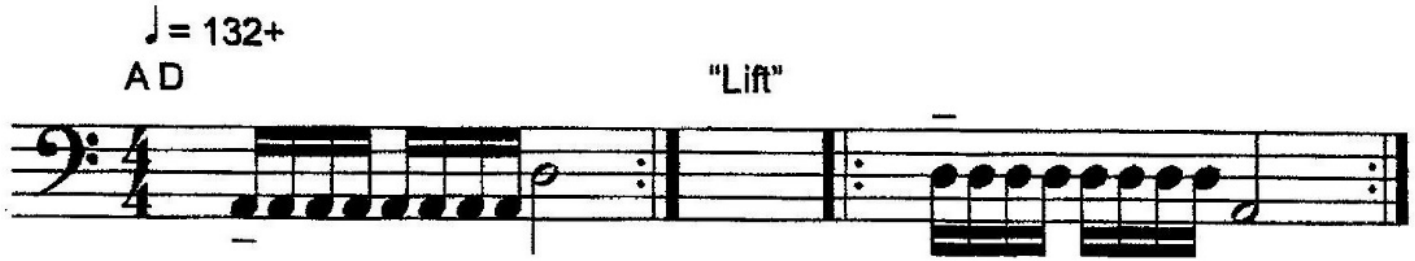


PEDALING
Pedal new note on down beat, not Before. Do not do a glissando.

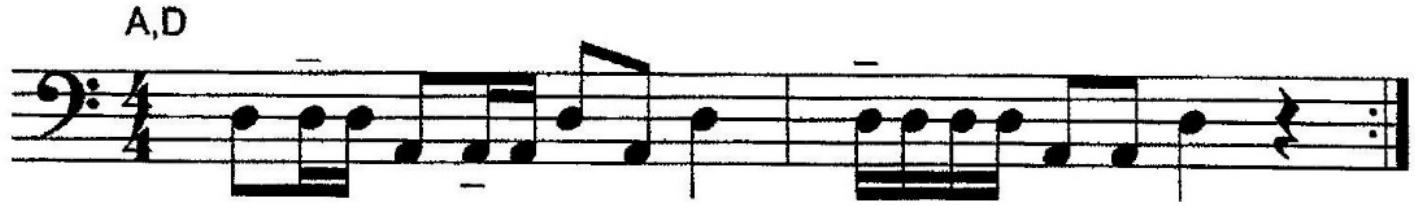


Timpani Performance Technique 7

ARTICULATING RHYTHMS
Emphasize the first note of a 16th note pattern.

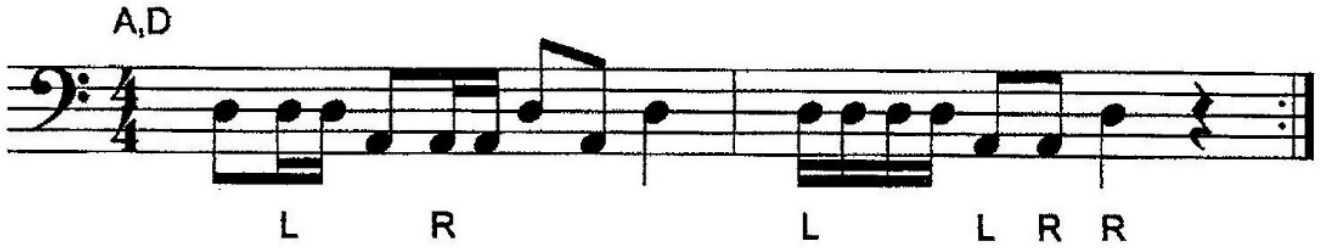


FAST RHYTHM ARTICULATION
Emphasize the 16th notes for clear articulation without pounding.

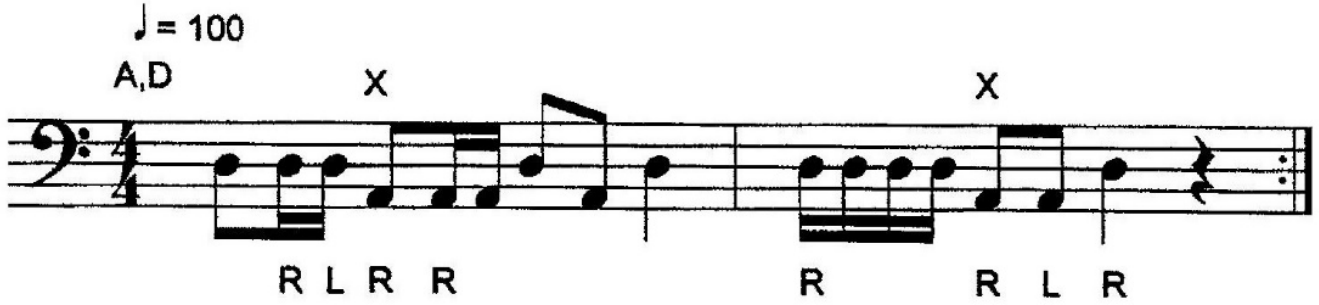


Timpani Performance Technique 8

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



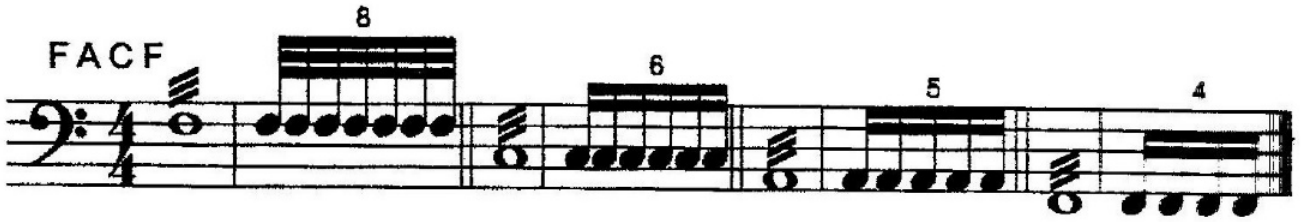
CROSS STICKING
FAST RHYTHMS
Try to avoid double sticking on one Drum to avoid pounding or over playing.



Timpani Performance Technique 9

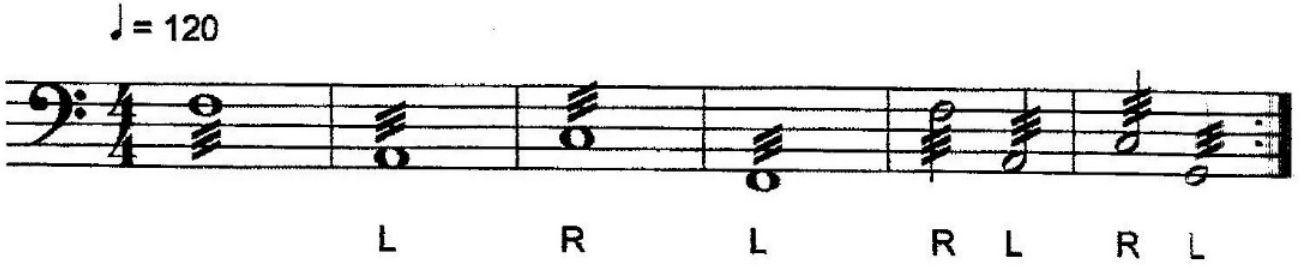
ROLL SPEEDS FOR DIFFERENT PITCHES (HEAD TENSIONS)

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

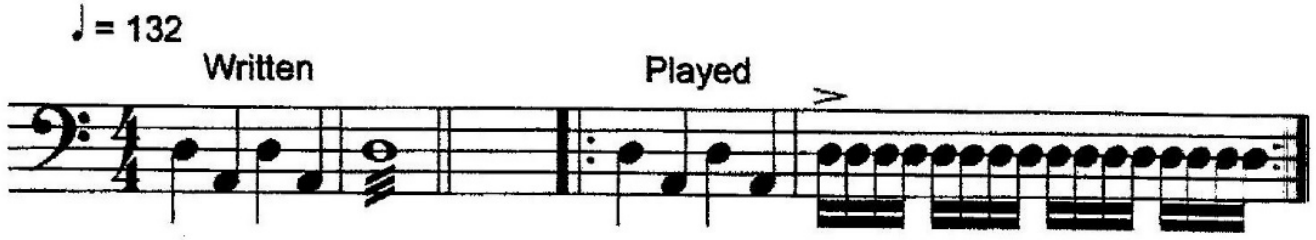
Lead down with the left hand.
Lead up with the right hand.
Use an odd number of strokes to turn your hands around.



Timpani Performance Technique 10

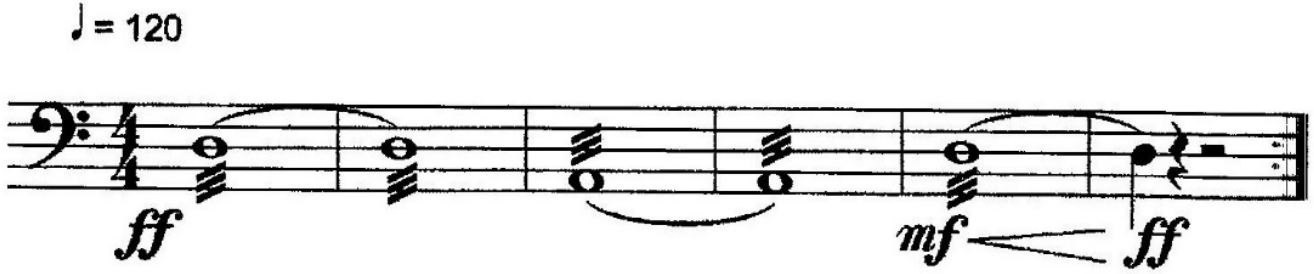
MEASURING LONG TIMPANI ROLLS

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



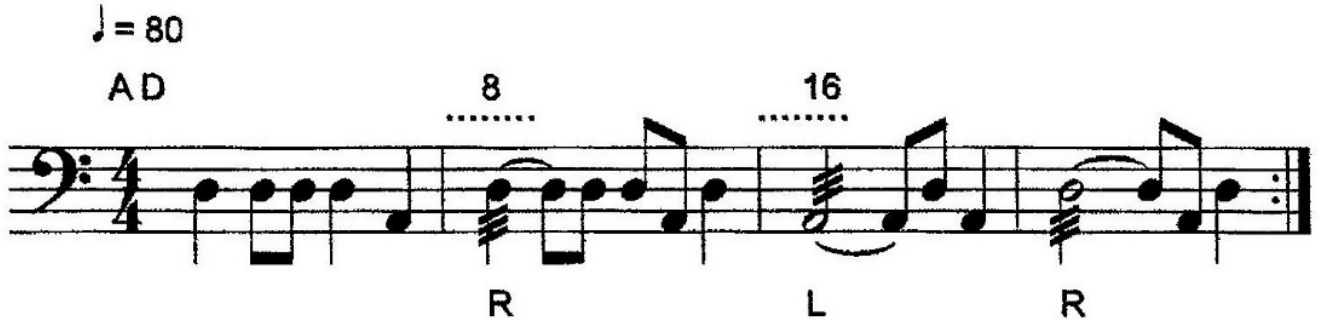
LOUD ROLLS WITHOUT EDGE

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

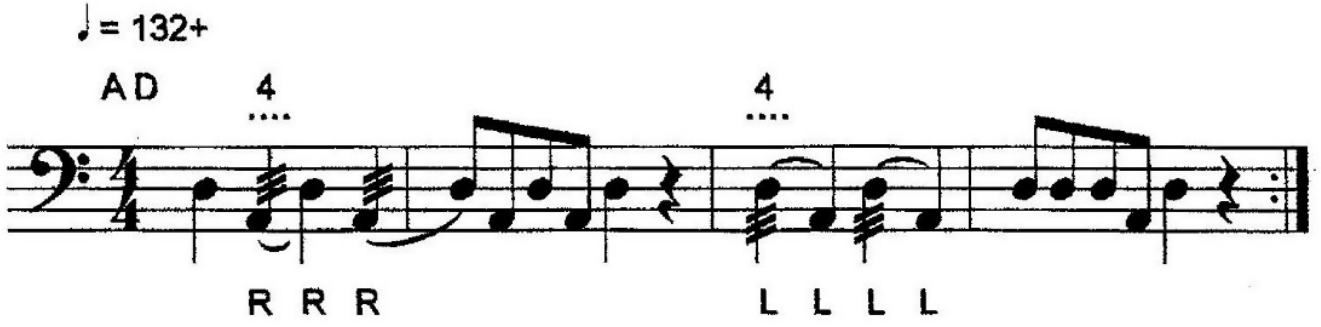


Timpani Performance Technique 11

MEASURED ROLLS
Plan sticking and roll speed according to tempo.



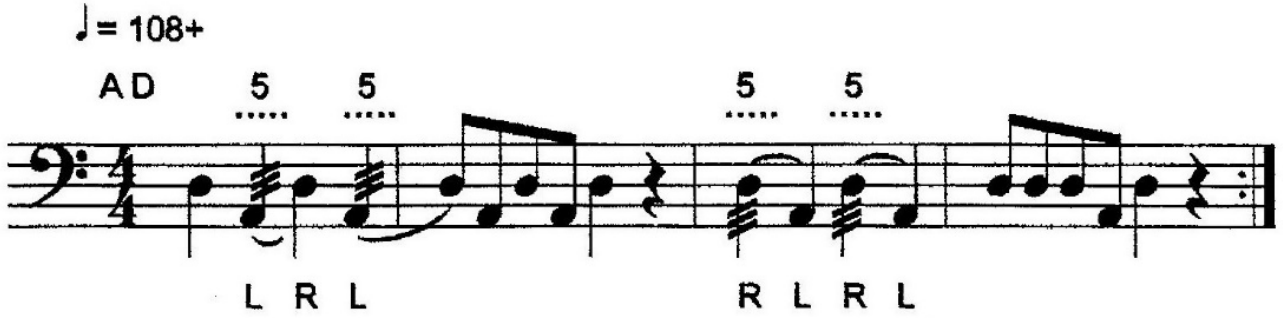
FAST TEMPO ROLLS
Articulate the first note of the roll and relax the rest.

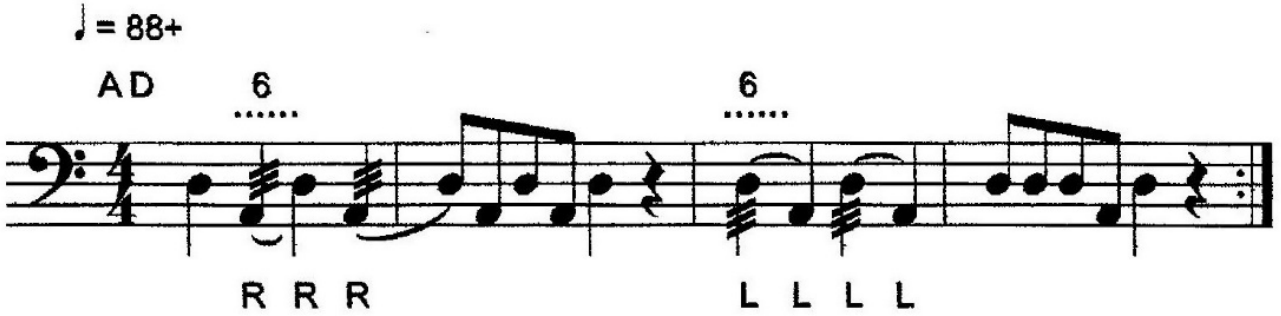


Timpani Performance Technique 12

MEASURED ROLLS AT FAST TEMPOS

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



ROLLS AT MODERATE TEMPO

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