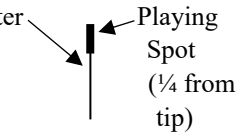
Triangle

- Sound Quality
  - the desired "shimmering" quality comes from a plethora of overtones
  - important to avoid individual/specific pitch (perhaps not compatible with ensemble's key center)
  - quality instruments with many overtones will cut through ensemble, even without volume
  - size of instrument can affect projection/volume

- Manufacturers
  - Grover*, Abel*, Black Swamp*, Sabian*, Matt Nolan (expensive/special), Living Sound [others – Pearl, LP, Danmar] – *recommended

- Sizes
  - common: 4" – 6" – 7" – 8" – 9"
  - recommend: 6" or 7" for general playing

- Beaters
  - Black Swamp, Dragonfly, Grover, Pearl, Sabian, Stoessel, Weiss-loop end
  - never use bolt, nail, drum stick (unless indicated), knitting needle, etc.
  - most often, use a heavier beater, even for soft playing



- Clips/Suspension
  - avoid purchasing music store "hardware" clips (spring is too strong; opening/angle is too large)
  - narrow-angle wooden clips (see Weiss), with a light spring, are good
  - use monofilament (fishing line) to suspend instrument – between 12- and 20-pound test
  - tie/attach line with very short-length drop (low-hanging loops allow the triangle to sway and rotate, making it difficult to control)
  - never use yarn, rope, shoelace, etc., to suspend instrument (too dampened; lack of control)
  - for right-handed players, the closed end of the bottom tine should be to the player's right (reverse for left-hand players)

- Grip of Clips (angled clips)
  - forefinger on top (security)
  - thumb and middle finger below the clip, in the shape of the letter "C" as a resting platform
  - ring and little fingers remain loose/free (available for muffling/tapering), hanging below the clip

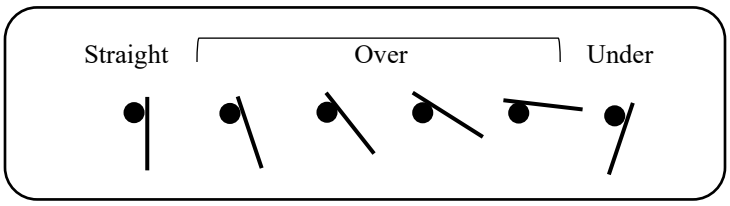
- Retrieval of Instrument
  - first, place/set holding hand on clip (see grip)
  - with playing hand, engage spring clamp; remove instrument from stand with holding hand
  - then, pick up selected triangle beater
  - returning: put beater down first, then clip to stand using playing hand – if still ringing, slowly return the triangle to the stand to avoid a Doppler or "phase-shifting" effect

- Holding Height and Sightline
  - hold triangle at chin/neck height
  - ensure "3-point sightline" – 1) instrument → 2) music (stand) → 3) conductor
  - avoid looking through the instrument or over the holding arm to view music

- Finding the Playing Spot
  - most often, play the bottom tine
  - most often, play near the closed end for most overtones; however, the "sweet spot" can be between center and the closed corner

- tone is affected by three angles/locations (strength/abundance of overtone response)
    1) choose along the bottom tine (horizontal; left-to-right)
    2) the point along curvature of tine (straight-in, upper portion [raised wrist], lower portion [dropped wrist])
    3) angle of beater-to-tine (straight, from left, from right)

- stay exactly consistent for repeated notes (even a 16th inch deviation can be noticeable)



Side-Cut View of Bottom Tine
Beater Contact: Point on Curvature

- Interior (of triangle) Rhythms (single-hand)
    - play rhythm left-to-right, or reverse, in upper closed-corner angle
    - in same location, practice flams, drags, ruffs (ala snare drum) – single-hand
    - volume: softer = play closer to closed corner / louder = play further away from corner
    - if complex rhythms require two hands, single- or double-clip triangle to triangle stand

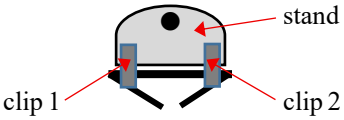
- Rolls
  Not too fast (don't over-play speed of reiterations) – good quality sound (overtones) will "fill in" the sound
    - a) upper closed corner – turn palm up, using fingers for quick strokes / approach tines with 45° upward angle of beater for best overtone response
    - b) lower closed corner – practice even sounds (matching upward & downward volumes – challenge of playing "with" and "against" gravity); try a variety of angles (both holding/wrist angles and beater-to-instrument angles)

- Muffling and Tapering
    - take care with nuanced muffling – not too quick, to avoid "anvil" sound (don't play short notes with too short of a physical gesture – allow for some resonance/decay/release)
    - use ring and little finger for general muffling (a portion of the palm also could be used for heavier muffling; occasionally clamping thumb into tine, as well)
    - tapering (shaping end-of-note releases/resonance; decrescendo) – with padded tip of ring finger, gently touch a single tine (or "flutter" touch the tine); "design" the taper desired

- Vibrato (4 methods) – possible for "solo" notes
    1) slight pulsing from the elbow (gentle shake) – very effective
    2) gentle rocking from a repeating wrist turn or arm rotation (fast vibrato)
    3) two fingers (forefinger and middle) of playing hand, pulsing laterally inside the triangle space
    4) vertical palm waving/pulsing toward and away from triangle, on the audience side

- Triangle Stand (often custom made top, to fit into cymbal stand base)
    - most often, perform triangle holding by the clip (not leaving it on the stand)
    - but, do use a triangle stand (looks like a hoe) to station the instrument; avoid clipping to a music stand (difficult to turn pages; potential stand noise; poor projection from here)
    - however, when there is no time to retrieve the instrument or when the rhythms are overly complex (requiring use of two triangle beaters), use a triangle stand to perform, elevating the instrument to a chin/neck height (using one clip, or two clips suspended from the two closed corners)

Bird's Eye View:
Triangle stand with
double-clipped
triangle



- Selected Repertoire/Listening
  a) Liszt: *Piano Concerto No. 1 in E♭*
  b) Dvorák: *Carneval Overture*
  c) Brahms: *Symphony No. 4*
  d) Rimsky-Korsakov: *Capriccio Espagñol*
  e) Berlioz: *Roman Carnival Overture*
  f) Tchaikovsky: *The Nutcracker Suite – Valse des Fleurs*

- Resources
  a) Cook, *Teaching Percussion*
  b) Payson, *Techniques of Playing Bass Drum, Cymbals, and Accessories*
  c) Cirone/Grover/Whaley, *The Art of Playing Percussion*
  d) Cirone/Sinai, *The Logic of It All*

Examples of Triangle Clips

Common Triangles