

Introduction

The purpose of this book is to present in a progressive sequence, the materials which are necessary for the training and development of the modern Tympanist.

The book is divided into four sections as follows:

Section 1. The fundamentals of Tympani.

Section 2. Graded exercises for the development of technique on two drums.

Section 3. The technique of three and more drums, and technique with the pedal Tympani.

Section 4. Orchestral studies and solos.

The development of the Tympani has progressed by leaps and bounds during the last twenty years. In addition to the many complex rhythms of modern composers, the tympanist is now confronted with every conceivable type of effect, as a result of the free use of the pedal drums and the demands made on the player by both composer and conductor. It is apparent that the modern tympanist must be a good musician.

The satisfaction of being a proficient Tympanist is without equal, for the Tympanist's position in the orchestra is unique. In fact, he is often called the "Second Conductor," for no other instrument has the range of dynamic power which the proficient Tympanist controls so precisely.

The method of playing no other instrument in the orchestra has caused such controversy as the method of playing the tympani. The methods used in playing it are as many as there are players. Certain similarities do exist, of course, but actually the method used is as individual as the player himself.

Whether or not one agrees with any particular system, the important thing to remember is the results obtained with it. The method used by the author has achieved results of the highest order. In the following pages it will be developed so that the student will have a most complete and orderly conception of the Tympani.

The History Of The Kettle Drums

The first record of the use of the kettledrums goes back to ancient times when it is known that they were used in religious ceremonies by the Hebrews. Whether the kettledrums of this period had any definite pitch is not recorded.

The word tympanum comes from the Greek which means to strike.

In ancient Persia the kettledrums were used to hunt wild birds, the violent striking of the drums causing the birds to fly about enabling the huntsmen to shoot them down.

The glamorous period of kettledrumming existed during the middle ages when kettledrummers formed themselves into a guild, the entry into which called for a long period of apprenticeship. At this time the most honorable privilege of the kettledrummer was to participate at the tournaments of the knights and nobles.

During the seventeenth century kettledrums received their first musical distinction by being used with the trumpets to punctuate the tonic and dominant of the key and to give rythmical support to the music.

Beethoven was the first composer to radically change the tuning of the drums by startling the musical world with the tuning of the drums in octaves in the eighth and ninth symphonies.

Hector Berlioz realized the further possibilities of the instruments by tuning them in thirds and fifths thus creating an entire chord with the drums. In the Symphony Fantastique, four kettledrums differently tuned are used to create the effect of distant thunder.

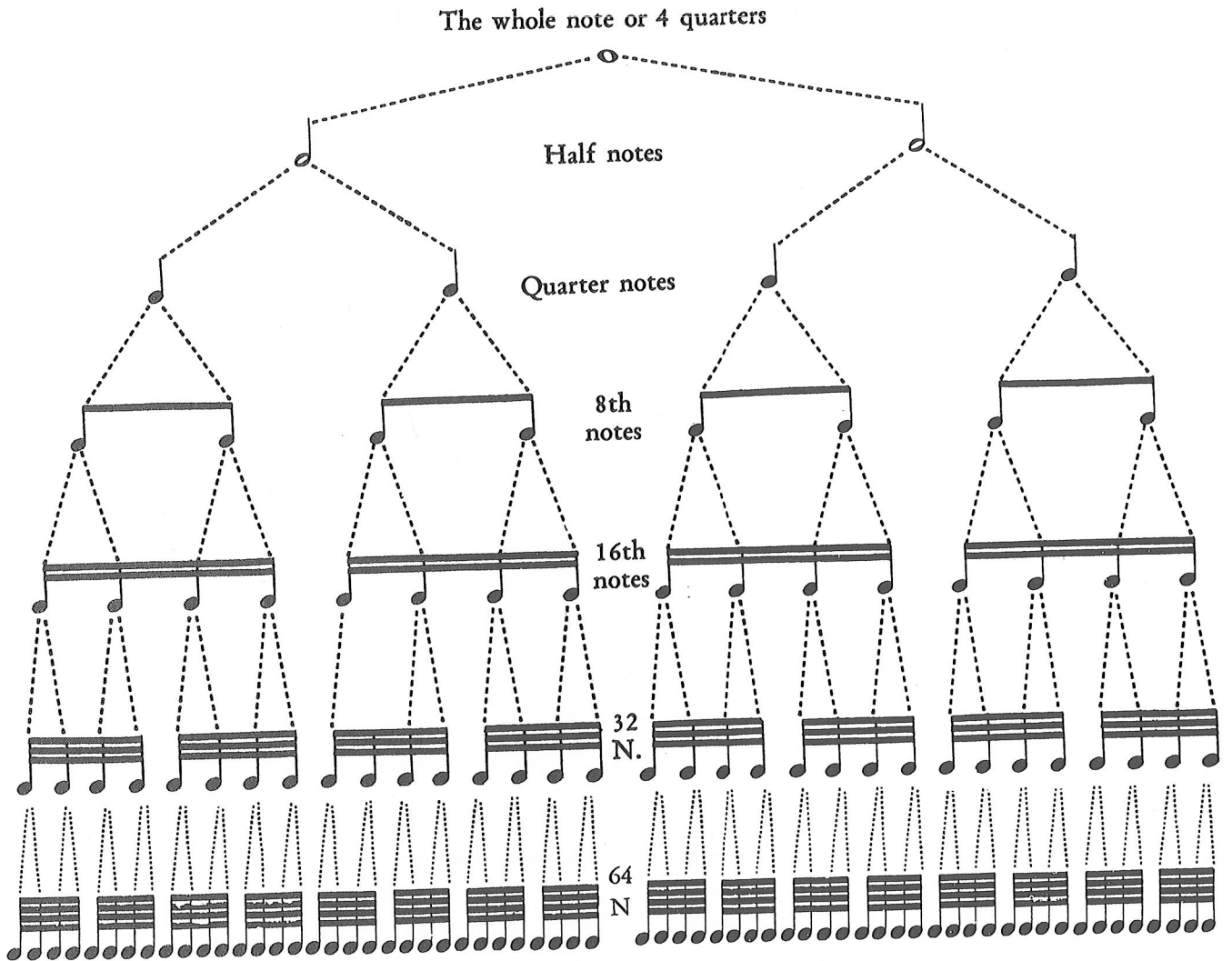
Most composers of this period realized the harmonic value of the drums but due to the mechanical limitations of the instruments then in use, often neglected to indicate changes of intonation and as a result the Tympani were used often as a percussive effect without any harmonic value whatsoever.

Richard Wagner saw the tremendous dramatic effects obtainable with the kettledrums. In several of the Ring operas two players are used with many important parts assigned to them.

With the advent of the pedal Tympani composers have run rampant with the drums and today the drums not only have rythmical and harmonic value, but are often called upon to play actual melodies with the most startling effects thus obtained.

Valuation Of Notes And Rests

Here is given a diagram showing the proper way of dividing a whole note.



This is how 8th, 16th, 32nd and 64th notes appear when written separately (not in group form.)



8th notes



16th notes

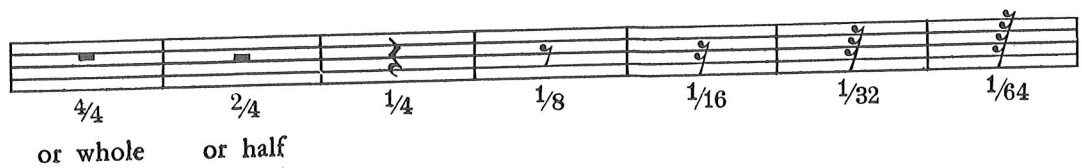


32nd notes



64th notes

RESTS



A dot placed after a note or rest increases its value by one-half

Written

Equals

These notes are equivalent to these rests

Written

Equals

Two dots after a note or rest increases its value by three-fourths

Written

Equals

Written

Equals

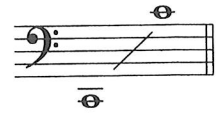
Artificial groups of notes which are played in other than their original form

The Triplet		played in the value of		notes.
The Sextuplet		played in the value of		notes.
Group of five		played in the value of		notes.
Group of seven		played in the value of		notes.
Group of four		played in the value of		notes.
Group of two		played in the value of		notes.
Group of three quarters		played in the value of		notes.
Group of three halves		played in the value of		notes.

Range Of The Tympani

The tympani sound as written. They are non-transposing instruments.

The complete range of the modern tympani is from low C to high C.



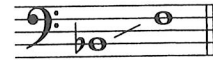
The correct size drum should be used whenever possible in order to get a good quality sound for each note.

The most popular size drums are the 28" and the 25".

The large 28" drum has a range from low F to C.



The smaller 25" drum has a range from B \flat to F.

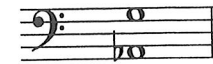


It is possible, and sometimes practical, to go above or below the given range for these drums. These notes are not recommended for the given sizes and should only be used when necessary.

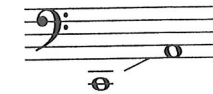
The large drum (28") can produce the low E and high D.



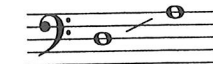
The small drum (25") can produce the low A \flat and the high G.



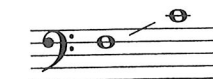
The 30" or 32" drum will give good quality from low C to A.
The low C will need a drum of 32" or larger to obtain a high quality sound.






The 23" drum will give good quality from high D to A.



The piccolo drum of 22" or smaller, will give a good quality from the high F to the C above.



Several of the modern composers have used the extreme ranges of the tympani very effectively. Janacěk used the high B \flat ,  and Stravinsky used the high B \sharp , . The celebrated conductor, Stokowski, in his orchestral transcriptions of Bach, used the low C .

Arrangement Of The Tympani

The Tympani should be placed so that the small drum is on the right and the large drum on the left. The drums should be horizontal not tilted.

1. The drums should be about eight inches below the players waist.
2. The player should be in a standing position so that the mid line of the body coincides with the spot where one drum adjoins the other.
3. The feet should be not too far apart or too close together. The feet should be as in a normal standing position. The player should have the feeling of complete freedom of motion.
4. The movement from one drum to another is from the waist.



NOTE

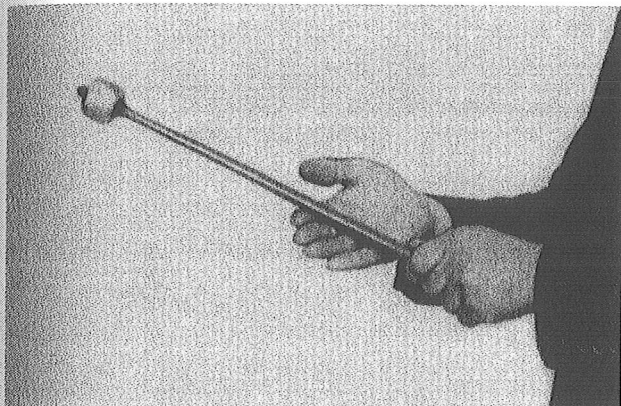
Although it is possible to play the tympani in a sitting position, playing the instrument in this manner does not make for freedom of motion which is most important for proper execution. The player should, at all times, avoid a sitting position. It should be noted, however, that in playing the Pedal Tympani, it is essential, in order to execute the difficult changes of intonation, for the player to rest his body against a stool.

Holding The Sticks

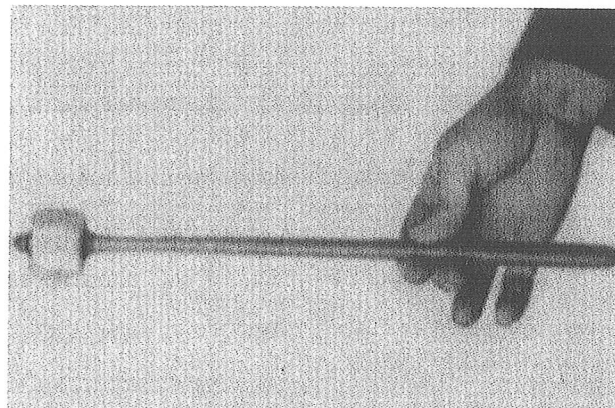
Before beginning the preliminary exercises, it is absolutely essential that the student understand and master the correct method of holding the sticks. Only then will he/she be able to go on and master the principles of setting the hands in motion to execute the fundamental single stroke.

The author's entire technique is based upon this method of holding the sticks. The student must, therefore, make every effort to acquire, as soon as possible, the habit of holding the tympani sticks in this way.

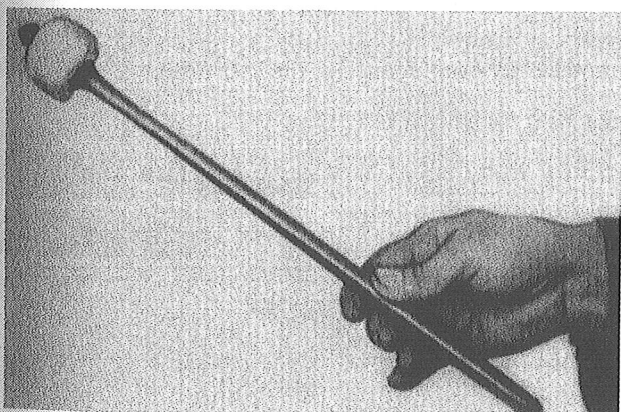
First, study all the photos in this section carefully; then try it by holding the sticks. Getting the position correct from the very start will save a lot of trouble later.



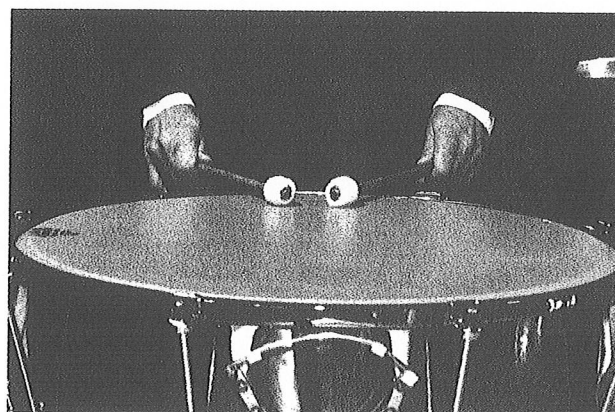
Right hand palm up, fingers extended.
Stick laid across the first joint of the index finger,
about 3 inches from the end of the stick.



Place the thumb on the stick and in line with the stick.



Curl the 2nd and 3rd fingers underneath the stick gently.
The 4th or little finger should not come into contact with
the stick at all.



*Turn the hand over so the thumb is resting on the side of the
stick. Rest the stick on the drum head, 3 to 4 inches from the rim.*

Do the same with the left hand. Make certain that every detail is correct.

When both sticks are held in this fashion, the general position of the body is as in the photo. Notice how the elbows project slightly from the sides of the body and how the sticks form a "V" open at the end.

The beating spot—the place where the head is struck—should be 3 to 4 inches from the rim of the drum.

Striking The Tympani

It is important to remember that the tympani should be struck in the same area of the head each time. If this is not done, a variety of uneven sounds are produced.

The motion used in striking the tympani is that of wrist and fingers. No arm or elbow motion is used at this time. In order to understand this properly, do the following:

1. Rest the stick on the drum head, 3 to 4 inches from the rim.
2. Grip the stick firmly between the thumb and first finger. *Curl the second and third fingers around the stick.*
3. With the wrist only, raise the stick upwards *and strike the drum in a downward motion.*
4. When the stick strikes the drum, *the hand catches it as it rebounds.*

This procedure should be practiced with alternate hands: right, left, right, left.

The Proper Method Of Execution

It is essential that the player equalize the strokes in order to produce an even sound on the instrument.

Make sure that the sticks strike the drum head in the same area with each stroke.

Practice the following exercises first with the right hand alone, then with the left hand alone, and then with both hands alternating.

Let all the notes ring.

Exercise 1

The musical notation for Exercise 1 consists of three staves in bass clef with a 4/4 time signature. The first staff contains 16 eighth notes in a steady eighth-note pattern. The second staff contains 16 eighth notes, with a dotted quarter note at the end of the eighth measure. The third staff contains 16 eighth notes, with a dotted quarter note at the end of the eighth measure and a final quarter rest at the end of the piece.

The Roll

The purpose of the roll is to produce a sustained and even tone. The string player does this by continuing to draw the bow across the strings; the trumpeter does it by continuing to blow into the instrument. The tympanist must do it by rapid succession of strokes on the drum head.

When the proper stick and the proper technique are used, the roll can be executed so that it will sound like one continuous even tone, with none of the separate single beats being heard. The key to securing such a roll is the following (the student should keep this in mind while developing the roll):

1. The first stroke of the stick sets the head in vibration.

2. The object of every stroke after this is to sustain, to prolong the vibrations already set up. *The best quality roll will be obtained by striking two different spots in the same area of the head as in the open "V" picture on page 21.*

A series of strokes, no matter how rapid, will not produce an even and unbroken sound if the new vibrations are set up and destroyed with every stroke. Only a definite effort by the tympanist to keep the head in vibration and to sustain the vibrations already present, will produce a good roll.

The tympani roll is a single stroke roll. It should be practiced *using alternating strokes.*

The Speed Of The Roll

The speed of the roll will depend on two factors:

1. The tension of the head, *that is the pitch.* The higher the pitch, the greater the tension, therefore, the greater speed will be needed to keep the head in vibration. The lower the pitch, the less tension on the head, therefore, the speed of the roll will be less in order to keep the head in vibration.

2. *The dynamics. The louder the dynamics the faster the roll. The softer the dynamics, the slower the roll.*

Practice the exercise illustrating the roll. After the wrists are developed and you feel you have control, tune the drums to every note in the tympani range and take careful note of the different speeds necessary to keep the head in vibration.

Andante **Exercise 10**

R L R L R L R L
 L R L R L R L R

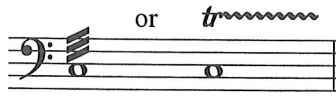
R L R L
 L R L R

R L R L
 L R L R

R L R L
 L R L R

Different Types Of Rolls

1. The sustained roll:

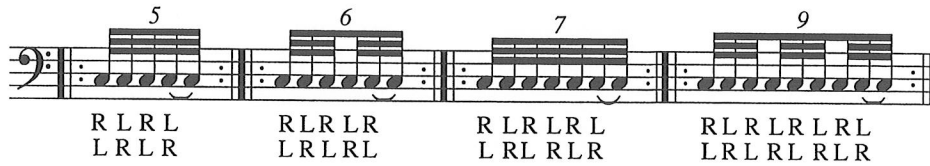


This is a continuous succession of strokes. Do not try to count the number of strokes in making a sustained roll.

2. The separated quarter roll:

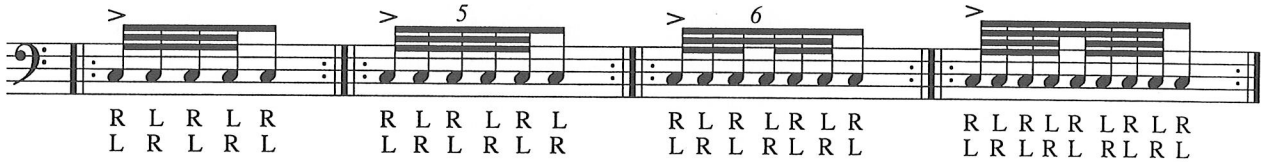


If written out, this roll would look as follows (depending on the tempo), with the final note not audible.

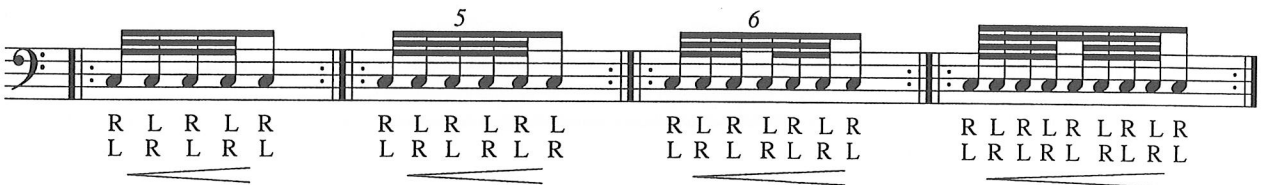


3. Two ways to play measured rolls.

First time, use a natural accent on the downbeat, alternate the pattern.



Second time, crescendo to the last note.

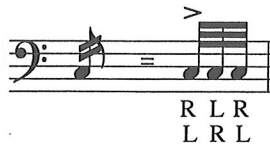


4. The tied eighth roll.



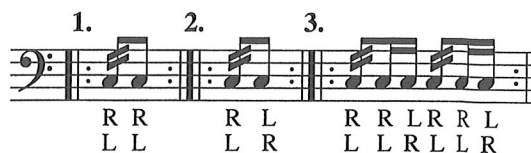
Use all of the above patterns with this exercise.

5. The short eighth roll or twirl.



This roll is always played as fast as possible.

6. The short eighth roll in combination.



The roll should be attacked with the strong hand. In some cases where this is not practical, the other hand may be used. However, the strong hand should attack the roll at all other times. The student should try to make this a habit so that it comes automatically. Do not attack the roll by striking with both sticks at once.

Moving From One Drum To Another

The technique in going from one drum to another is to anticipate the change of direction of the hands, thus when the right stick strikes the small drum and the next beats falls on the large drum with the left hand, the left hand should be on its way over to the large drum as soon as possible. This will help to eliminate dragging the tempo and make execution so much easier.

In playing tympani, the motion should be from hand to hand, preferably right, left, right, left. In many cases, this rule is violated for the convenience of sticking. However, **at all times**, the student should try to play from hand to hand.

Practice the following exercises keeping this principle in mind.

Exercise 5

In A & D

Exercise 5 consists of five staves of music in bass clef with a common time signature. The notation includes rhythmic patterns with 'R' and 'L' markings below the notes to indicate hand placement. The patterns are as follows:

- Staff 1: R L R L R L R R L L R L R L
- Staff 2: R L R L R R L R L R L R R L R R L L R L R
- Staff 3: L R L R R L R R L R L R L L R R L R L R
- Staff 4: R L R L R L R L R L R L R L R L R L R L R L
- Staff 5: R R L R R L R L R L R L R L R L R L R L R L

Exercise 6

In A & D

Exercise 6 consists of four staves of music in bass clef with a common time signature. The notation includes rhythmic patterns with 'R' and 'L' markings below the notes, including triplet markings. The patterns are as follows:

- Staff 1: R R L R L R R L R L R L R L R L R L R L R L
- Staff 2: R R L R R L R L R L R R L R R L R L R R
- Staff 3: L R L R L R L R L R L R L R L R L R L
- Staff 4: R L R R L R L R L R L R L R L R L R L R L

Exercise 7

In G & C

R L R L L R L R L R L R L R L R L R

L R L R L R L R L R L R L R L R L R R L

R R L R L R L R L R L R L R L R L R L

R L R L R L R L R L R L R L R L R

Exercise 8

In A & E

R L R R L R L R L R R L R L R L R R R L

R L R L R L R L R L R R L R L R L R L R L R L R L R L R L R

R L R L R L R L R R L R L R R L R L R L R L R L R L R L

R L R L R L R L R R L R L R R L R L R R L R L R L R L R

Exercise 9

In C & F

R L R L R L R L R R R L R R L R L R L L

R L R R L R L R L R L R R L R L R R R L

R R L R R L R L R L R L R L R R L R L R L R

R L R L R L R L R L R L R L R L R L R L R

Connecting The Roll From One Drum To Another

In rolling from drum to drum, the following procedure should be worked out in order not to break the roll.

1. From the small drum to the large drum.



Keep the right stick moving even as the left stick is about to strike the large drum.

2. From the large drum to the small drum.



Similarly, keep the left stick moving until the right stick is about to strike the small drum. This type of technique will require a great deal of practice to get real perfection. *Play the above using different tempos and dynamics.*

The Tied and Separated Roll

Most composers make no definite distinction between the tied and separated roll. When a roll is followed immediately by a single note, composers will not always connect the roll with the use of a tie or slur. Therefore, it is not always clear whether the roll is meant to be tied over to the beat or stopped slightly before the beat is struck.

From long experience, the author has found that most rolls are meant to be tied over to the beat that immediately follows.

A GOOD RULE TO REMEMBER, THEREFORE, IS TO TIE THE ROLL OVER TO THE BEAT FOLLOWING IT. AN EXCEPTION WOULD BE THE SHORT EIGHTH ROLL, WHICH SHOULD ALWAYS BE PLAYED AS WRITTEN.

For practice purposes, it is well for the students to acquaint themselves with the distinction between the tied and separated roll. Practice the exercises on the next two pages giving special attention to the difference between these two methods of playing the roll.

The tied roll is designated:



Here the roll is played right into the succeeding beat, **WITH THE BEAT ITSELF BEING STRUCK.**

The separated roll is designated:



Here the roll is stopped slightly before the succeeding beat is struck.

The Double-Stop Roll



To execute this type of roll, place the right stick on the small drum and the left stick on the large one and roll as if you were playing on one drum. *As these are half-note rolls, re-attack on the third beat.*

Practice Exercises 11 - 13 first as written, and then tie the rolls to the following note.

In G & C

Exercise 11

♩ = 86

In G & C

Exercise 12

♩ = 92

Muffling The Tympani

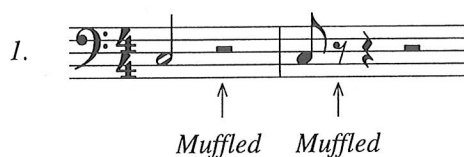
Proper muffling of the drum -- that is, stopping the vibrations of the head completely, is an important technical requirement.

In the first measure, the note is allowed to vibrate for the first two beats. The third beat is muffled, giving the half note it's proper time value. In the second measure, the eighth note is given it's proper time value by muffling on the eighth rest immediately following the beat.

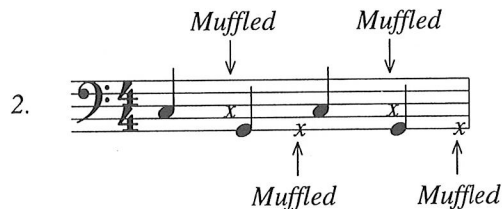
However, when playing with an orchestra, listen to how they are phrasing and muffle accordingly.

There are two reasons for muffling; 1. to prevent the sustained tones of the drum from interfering with the succeeding tones or the succeeding harmonies of other instruments, and 2. to give the notes themselves their proper time values.

For example:

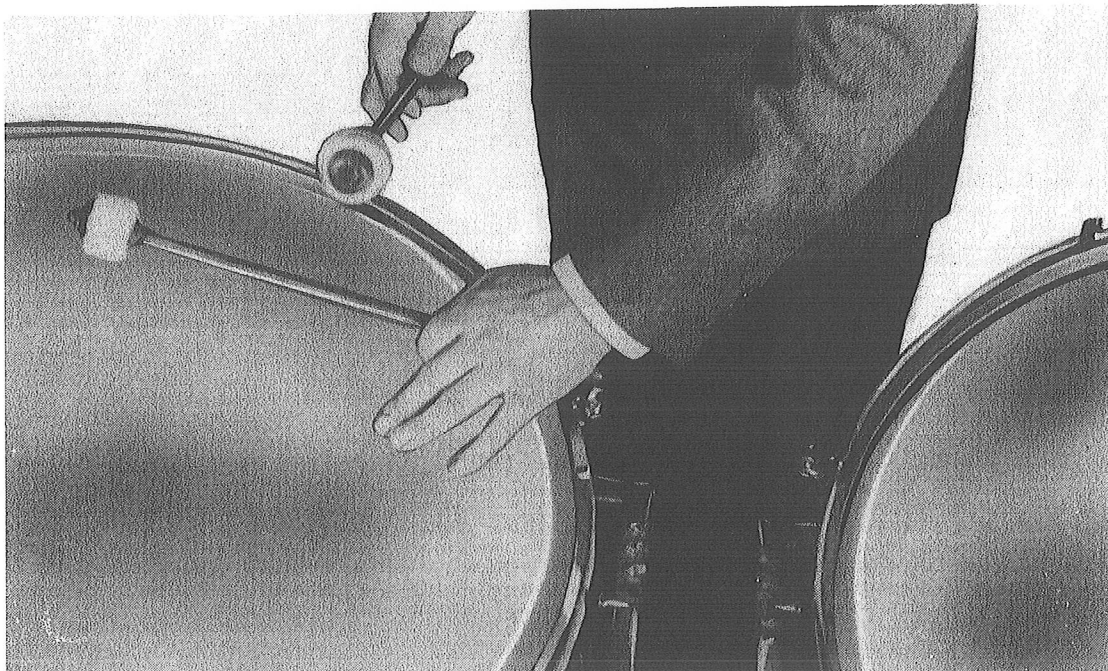


In this second example, each note is muffled precisely as the following note is struck.



Method Of Muffling

Muffling should be done with the last three fingers of the hand, firmly but lightly against the head.



General Rules To Be Followed In Muffling

1. Muffle the exact spot that is struck.
2. When one single note is struck and is to be muffled, it is best to muffle with the hand that remains free.
3. In passages where a great deal of muffling is required, it is best to muffle with the hand that last strikes the drum.

Practice the following measures illustrating muffling from drum to drum.

Try this exercise by tuning the drums to different tones and noticing the amount of muffling needed for these tones.

Muffle

R L R L

Muffle

(L) R L R

R L R L

Muffle on the rest following each note or set of notes.

Exercise 15

In G & C

$\text{♩} = 96$

R R L R L R L R R L R L R

sim.

L R R R L R L R L R R R L

R L R R L R R L R L R L R

L R L R R R L R L R L R L R