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# A Musical Approach to the Teaching and Performance of Percussion

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# A MUSICAL APPROACH TO THE TEACHING AND PERFORMANCE OF PERCUSSION

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A Thesis

Presented to

the Graduate Faculty

Central Washington State College

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In Partial Fulfillment

of the Requirements for the Degree

Master of Education

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by

John Frederick Moawad

August 1963

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# CHAPTER I

## I. THE PROBLEM

Statement of the problem. It is a commonly known fact that a problem exists in selecting and teaching the percussion instruments. Until now no one, to this writer's knowledge, has provided the instrumental music teacher with a successful format of instruction.

Purpose of the study. It is the purpose of this study (1) to aid the teacher of instrumental music in developing a musical approach to the teaching of snare drum using a recommended "like-grip" for holding all sticks and mallets; (2) to provide the teacher of instrumental music with selected published methods and materials for developing musicianship; (3) to provide the instrumental music teacher with teaching techniques covering selected and most commonly used percussion instruments.

Scope of the study. The study presents teaching techniques developed by the writer and provides the instrumental music teacher with (1) a natural "like-grip" for holding all sticks and mallets; (2) the values and applications of Rudimental and Concert snare drumming; (3) selected methods of instruction for attaining musical results; (4) teaching and performance techniques covering the snare drum,

bass drum, timpani, melodic mallet instruments and the traps-accessories; (5) ways of improving the percussion ensemble, the concert-percussion section, and the marching-percussion section.

## CHAPTER II

## TEACHING THE "LIKE-GRIP"

Justification for the traditional grip. The grip which has been a tradition in Rudimental drumming seems to stem from early military drumming where the drum was held by a drum sling causing the drum to slant to the right. Naturally the left hand stick needed to be held differently in order to strike the field drum properly. This is the only basic reason for the unnatural left hand grip.

One of the problems encountered in teaching the snare drum to the beginning student is developing strength and muscular control in the unnatural left hand grip. Too much time is wasted on constantly correcting the left hand and its bad habits. The more natural "like-grip" method, that this writer advocates, will move much faster, allowing more time for other needed technical and musical aspects of playing.

Justification for the "like-grip." The "like-grip" is a natural way of holding out the hand and picking up a pencil or a stick. The "like-grip" is just that elementary. The snare drum should be taught with both hands using the "like-grip." This will make uniform the grip used for tim-

pani, timbales, marimba, xylophone, vibraphone, and the snare drum. All sticks and mallets would basically be held the same for all of the percussion instruments. This effects a natural transfer not possible with the traditional grip.

Sameness of sound is more easily achieved when both sticks or mallets are dampened and gripped in the same manner. The muscle actions in the left and right hands, wrists and arms will be alike. From this sameness in grip, angle, and muscle action emanates what this writer thinks is a far more uniform musical sound.

The problem that may exist of producing primarily snare drummers, should be eliminated in part by the "like-grip" approach. The percussion student can learn and perform simultaneously on all instruments of the percussion family rather than spending as many as five years learning an unnatural grip for the snare drum. This is a comprehensive answer to the teaching of percussion instruments to the student and its need is apparent.

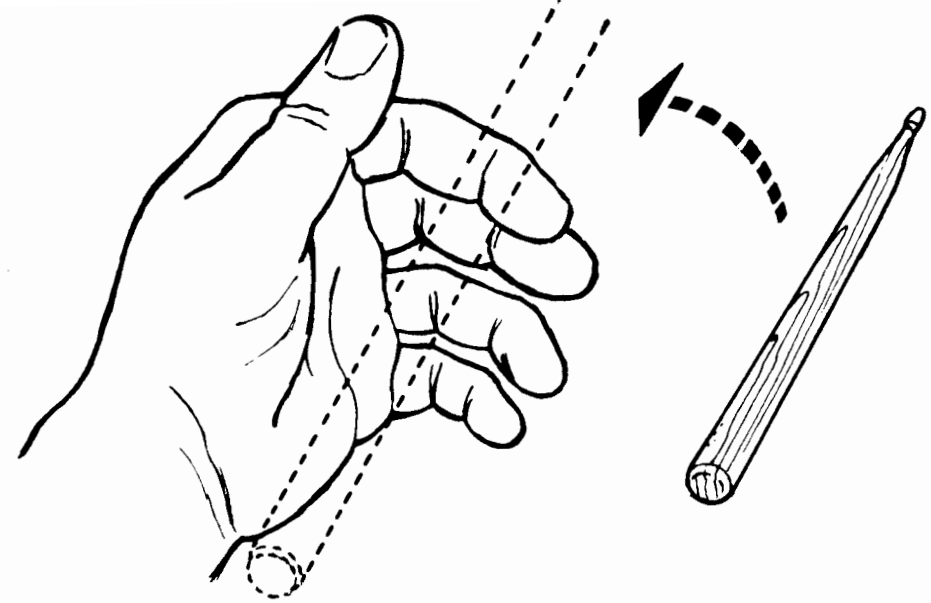
Applying to the drums. The concert snare drum should be located waist high, held by a floor stand, in a horizontal position. It may be easier if the drum is slightly tilted away from the player to compensate for the normal body angle. If marching, the drum can be used with special

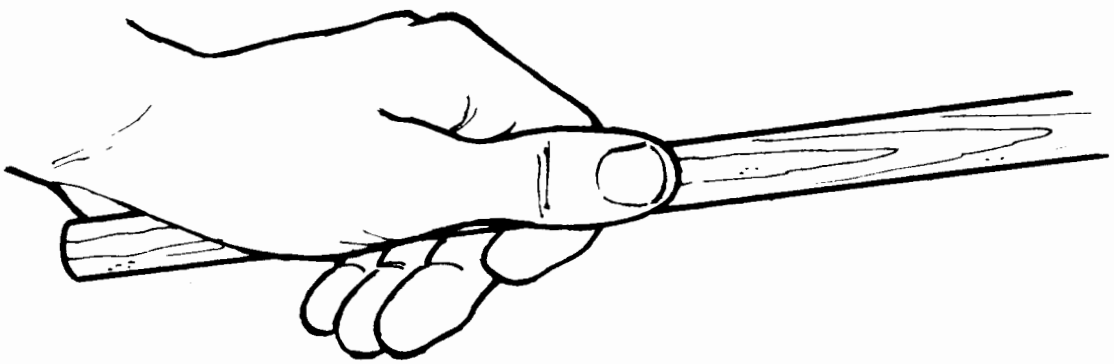
equipment which will place the drum in a horizontal position. A slight tilting inwards is recommended while marching and playing. In stage band drumming it will be found that moving from one drum to the other is considerably easier with the "like-grip." Reaching a drum to the left when the left stick is pointing to the right and other similar placement problems are completely gone. This improved versatility is a real benefit.

Achieving the grip. The grip is accomplished by holding both sticks as in the traditional right hand grip. Be certain the stick is resting firmly in the joint of the first finger. The thumb must be parallel with the stick, and the stick must pivot between the thumb and first finger. The other fingers then close loosely around the stick permitting it to pivot on the first finger. See illustrations for correct left and right positions, Figures 1 and 2.

The position of both sticks on the snare drum should form a 30 to 35 degree angle instead of the 90 degree angle used with the traditional grip. See illustration for correct position of the sticks on the snare drum, Figure 3, page 8.

Summary of the "like-grip." When teaching the "like-grip" remember (1) the drum should be mounted so the playing surface is horizontal to the player; (2) the hands grip the sticks or mallets alike, with the covering and position of





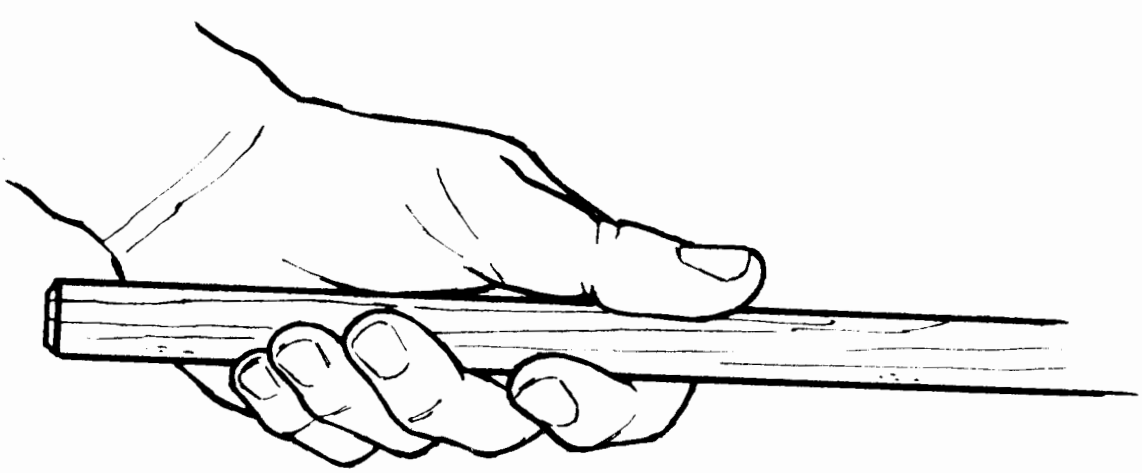


Figure 1. Left Position.

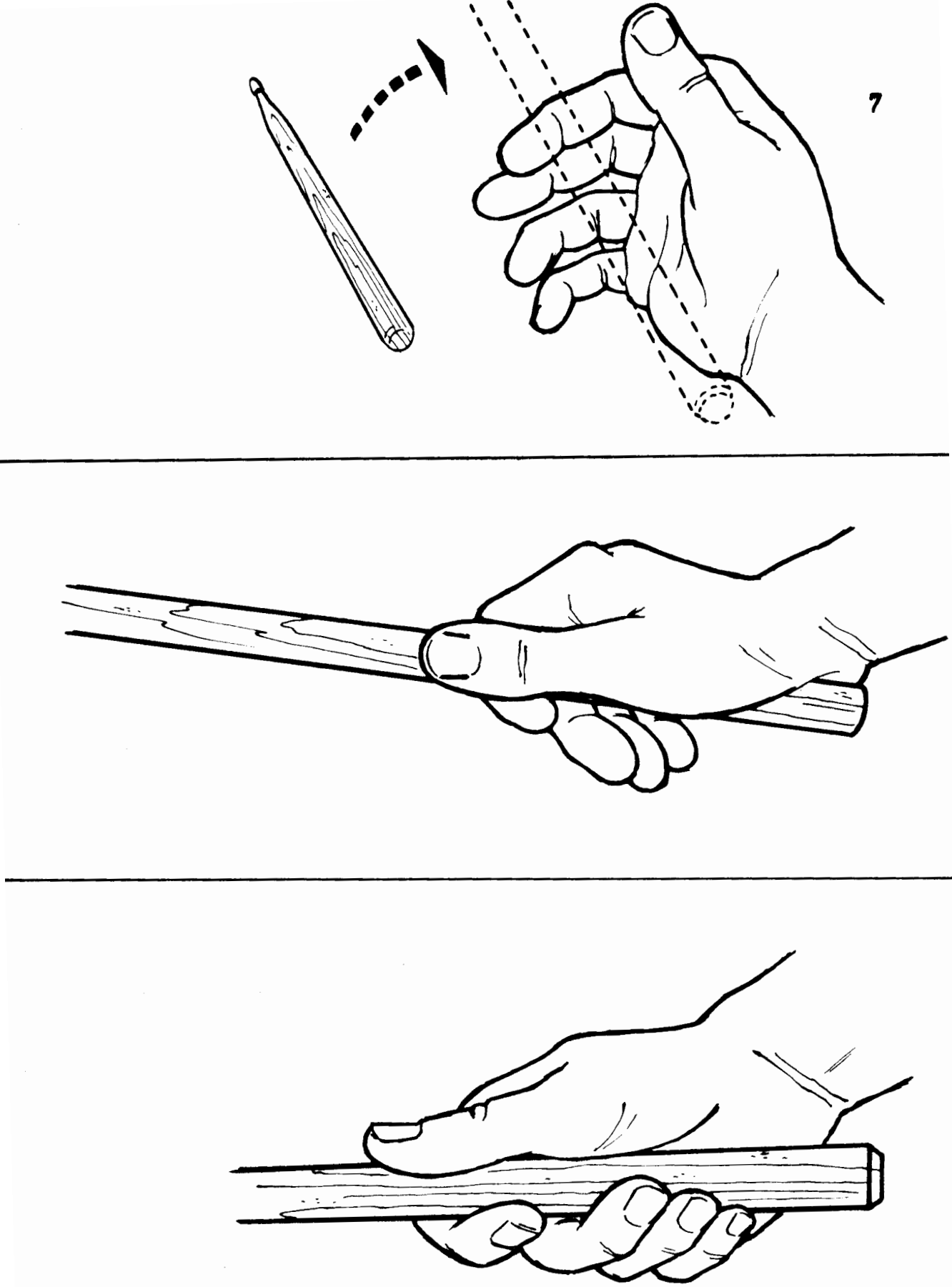


Figure 2. Right Position.

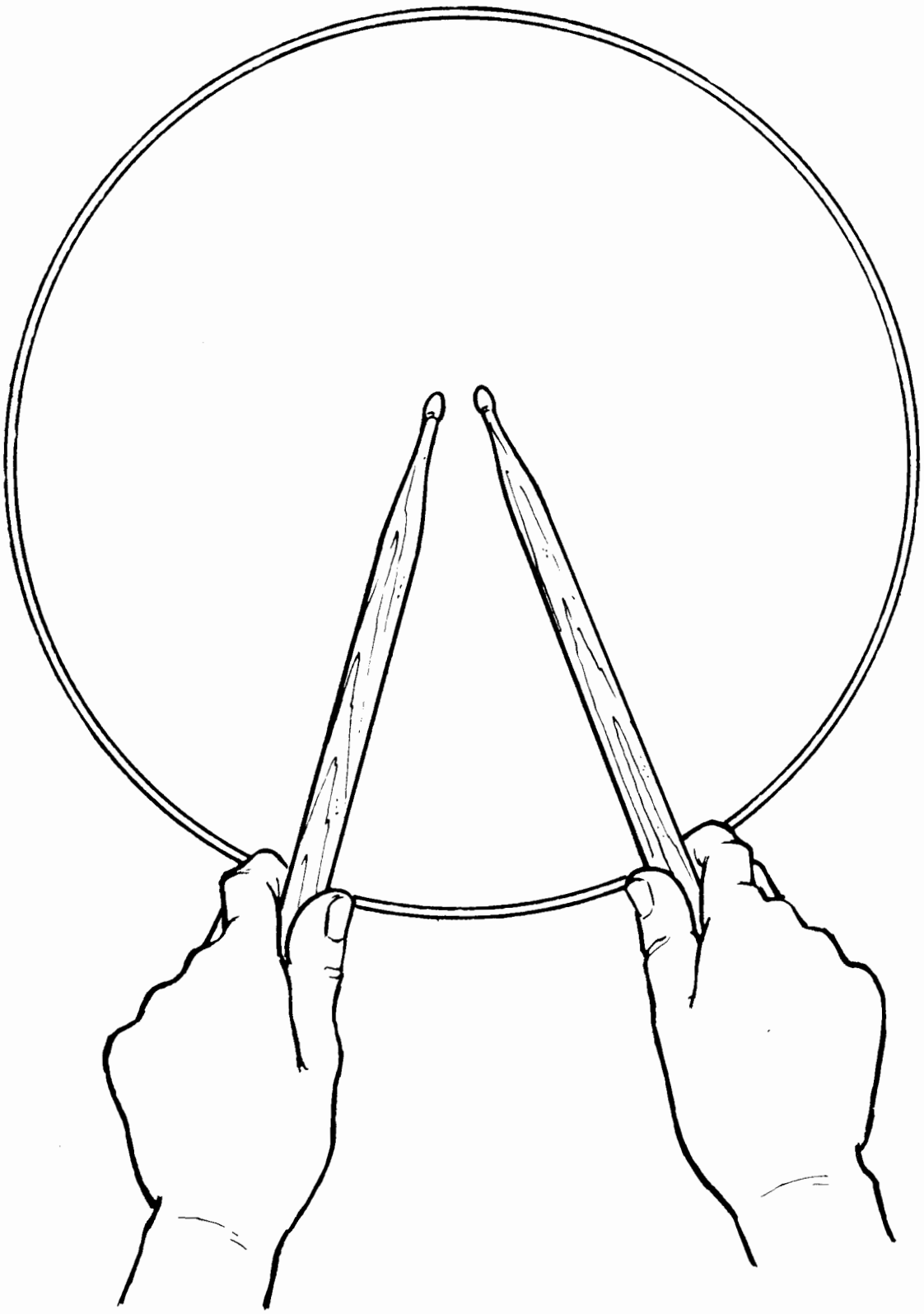


Figure 3. Position of both sticks on the snare drum.

the sticks being exactly matched; (3) the muscular action of both hands-wrists-arms must be the same; (4) practice both hands first on bounce-rebound-roll and alternating single stroke rolls as well; (5) practice always for unification of sound.

# CHAPTER III

## THE SNARE DRUM RUDIMENTS

The basic snare drum rudiments are the result of a project by the United States Army. Around the year 1869 the army sent out a call for material to be used in a training manual for field music. Gardiner A. Strube was assigned the task of preparing in modern notation the "jiggles" and "hen tracks" submitted by the army drummers of that day. Thus, Strube earned for himself a sort of immortality with his twenty-six basic military snare drum rudiments.

Rudiments are basic to drumming. The twenty-six snare drum rudiments, or first principles of snare drumming, are now a tradition. They are an important part of a percussionist's training, and to neglect them would be a grave error. Rudiments are to the percussionist what scales are to the instrumentalist. Rudiments are used extensively in martial music but must be used with great discretion in concert-band or orchestra music. There is no substitute for rudimental study in developing the flexibility and coordination that an excellent percussionist needs.

The problem of reading. The method of training from snare drum rudiments alone is not as musically effective as

it might be. Many times drummers can play the rudiments quite well. However once they are asked to play the written music set before them, it is quite amazing how little they can read in relationship to the technique that they have developed in their hands. Rudiments should be taught as a means to an end. The rudiments are good only to the extent that they teach the drummer how to execute the music. The percussionist must learn to read music. The student who does not read music will find no place in the band or orchestra.

# CHAPTER IV

## THE RUDIMENTAL SYSTEM AND THE EDWARD B. STRAIGHT SYSTEM DISCUSSED

Most of the snare drum methods are based primarily upon the mastery of the thirteen or twenty-six standard snare drum rudiments. An opposite approach is to be found in the Straight System of drumming. His system is based upon these basic disciplines: (1) Begin every measure with the right hand. (2) Use the right hand on counts one and two in every measure. (3) Flam with the right hand. (4) Commence rolls with the right hand. (5) Play the same rhythm the same way each time it occurs. The significant point of difference in the two systems is that Straight maintains that the same rhythm must always be played in the same way, while the Rudimental System primarily states to alternate.

A closer look at the Rudimental System. The Rudimental System finds its foundation upon the Thirteen Essential Rudiments as codified by the National Association of Rudimental Drummers. Twenty-six rudiments are listed but the N.A.R.D. requires only the execution of the first thirteen played open-close-open for membership. These rudiments

are the equivalent of scales for the melodic instruments. They form rhythmic-technical solutions for application in the execution of the printed music. Students of rudiments are able to apply pre-learned rhythmic patterns to music, and they read by grouping rather than by individual notes. This is called hand to hand drumming and places a very high premium on ambidexterity. The basic philosophy of rudimental drumming would be: Learn the rudiments; learn to read music patterns; apply the rudiments to the musical score; alternate and play hand to hand.

A closer look at the Straight System. The Straight System emphasizes the use of the right or preferred hand. All rolls are executed beginning and ending with the right or preferred hand. Each measure begins with the right hand. Most flams are executed with the right hand. All repeated figures are always played with the same sticking pattern. Ambidexterity is not basic to this system. Only three rudiments are used: flam, roll, and drag. The unity or sameness of sound is the predominant feature of this snare-drumming system. The Straight System considers only the alternating strokes, while the Rudimental System accounts for each note. The Straight System provides the percussionist with a more intensive musical background by approaching percussion learning through logically developed reading material.

Several pages are devoted to a very plausible philosophy of professional ethics. Each exercise is preceded by one page of commentary explaining the problem and then suggesting a solution. The following chart may be helpful for clarification of roll designation:

| Straight | (=) | Rudimental |
|---|---|---|
| 3 stroke roll | | 5 stroke roll |
| 5 stroke roll | | 9 stroke roll |
| 7 stroke roll | | 13 stroke roll |
| 9 stroke roll | | 17 stroke roll |

This writer highly recommends The Lesson File, and Analysis Of 6/8 Time by Mr. Straight. In most teaching situations these books would not be good material for the beginning student. However, for the advanced student of snare drumming they constitute first-rate books of instruction. The late Mr. Straight's dedication, "Yours for better drumming," certainly is true, for these two books offer the second or third year student many enjoyable hours of snare drum study. At the same time, they help to make the student most musically competent.

# CHAPTER V

## A RECOMMENDED APPROACH TO TEACHING SNARE DRUM USING THE "LIKE-GRIP"

It is recommended that the concert-snare drum be the first instrument of the percussion family to be studied. Two schools of snare drumming exist which only too often are not compatible with each other. This writer believes it necessary that the student be taught both rudimental and concert-orchestral techniques, since both schools do have great value and will contribute to each other. However, the concert style of snare drumming is preferred in band and orchestra. This style of drumming best matches and blends with the sound of an ensemble.

Teaching the difficult roll. The most difficult of all executions on the snare drum is the even long or closed roll. The student must be taught both the rudimental and the concert rolls. The rudimental roll consists of two beats for each stick. This is made up of a stroke (wrist) and a tap (bounce). No matter what the tempo, the two beats should always be audible. It is incorrect to add more beats or bounces when the roll is closed. The concert-orchestral roll will give the aural illusion of sustained sound, because (it is an illusion) the ear cannot hear as fast as the sticks

bounce. This roll differs completely from the rudimental roll in that there are more bounces of the stick, and the individual beats are not controlled so much. The concert roll will contain, for the most part, about three bounces in each stick. Since the primary beat is the strongest, the remaining two beats are considerably weaker because they are all bounce. Rolling the sticks toward the center after the primary beat will produce strength in the sticks and should compensate the bounces. It is necessary to keep the spaces between bounces as large as possible because the spaces between, rather than the points themselves are most important.

The speed of the roll. The speed of the roll is determined by the tempo and the style of the music being played. The basic factor in determining the proper roll is tempo. All rolls can be played basically in some form of groups of three or four pulses per beat. In other words, all rolls are derived from the basic duple or triple pulsation. If a soft sound is desired a slow speed should be used; for intense sound a fast speed is used. The more strokes, the more intensity of sound; the fewer strokes, the less intensity achieved. On occasion, when an added "push" is desired the roll should be started with both sticks at the same time.

The beginning student. The student is to be taught

the "like-grip" approach of holding the sticks. The student will need (1) one pair of drum sticks, 2S for average student and 2B if the student has small hands; (2) a concert snare drum and stand or some practice surface that is horizontal (not slanted to the left or right).

The student is introduced to the sticks and their use in producing the single blow, tap, and stroke as used in the single stroke roll and hand to hand playing. The student will first study from Slingerland Drum Method Book Number 1 by Haskell Harr. This book will give the student a concept of alternating the drum sticks, and at the same time the student will learn to read note values. The beginning stages of snare drumming must be slow and thorough if the student is to learn the proper concept of drumming.

After the student has learned the single stroke material in Book No. 1, it is imperative that Slingerland Drum Method Book Number 2 by Haskell Harr be introduced. From this book the basic snare drum rudiments are studied. The student should complete this drum method in the order in which the rudiments and exercises are presented.

The student should be able to complete the Harr methods in one school year with intense study and practice. In this beginning stage the student has developed a technique of playing and reading the traditional drum rudiments.

The "like-grip" has been substituted for traditional grip. Otherwise the sound and style of the student is truly rudimental.

Follow-up for musical development. The student will study from Benjamin Podemski's Standard Snare Drum Method which will achieve a good foundation in correct concert band or orchestra snare drum playing. This method will direct the player towards a truly artistic musical style of playing the snare drum. In this stage of development the student is to learn a set of rules contrary to the rudimental discipline. These rules are necessary for likeness of sound and musical results in concert snare drumming.

GENERAL RULES FOR CONCERT DRUMMING IN BAND AND ORCHESTRA:

I. There are only three musically essential drum rudiments: the closed roll, the single stroke roll, and the flam.

II. Always play the downbeat of every measure with the right or leading hand. Continue alternating RLRL etc., and omit the hand for which a rest has been substituted.

III. Always play the same rhythms with the same sticking. Remember, it is always best to analyze the sticking and try it several ways for the desired musical sound and best effect. The important discipline in correct concert drumming is to attain the best musical sound regardless of the sticking employed.

IV. Always play flams together, that is bring down both sticks at the same time. Remember, the real purpose of a flam in concert drumming is to provide a broad, legato effect. A single

> stroke on the snare drum will provide a staccato effect. Playing flams with an open anticipated grace note is incorrect except in Rudimental contest playing.

When applying these four rules to concert drumming, the student must be able to hear and learn to match the sounds of the ensemble. Teaching from the recommended follow-up methods will establish a solid foundation in the reading and execution of duple and triple meter with a clean cut and musically correct concert technique.

The following suggestions are offered for teaching the follow-up methods to the student: (1) Cover all material slowly and thoroughly. (2) Introduce the Podemski book to the student and review note values, musical terms, and expressions beginning on page 6, making certain the student has a clear understanding of them and their use in music. (3) Begin lessons starting on page 12 and carefully practice the material from pages 12 - 21 through to page 21. (4) Continue working from the Podemski book starting with exercise No. 1 on page 22. When the student completes exercise No. 12 in this section of the book, then also start teaching from Edward B. Straight's Book No. 1, The Lesson File. The student needs continued work in duple meter. Work through The Lesson File to its end with much careful attention to the instructions which precede each new lesson. (5) When the student progresses to the end of exercise

No. 21 in Podemski's book, Edward B. Straight's Book No. 2, Analysis of 6/8 Time should be introduced. This book is needed because Podemski's book does not provide ternary sticking. Apply Straight's sticking to the Podemski book in ternary meter. Be certain that the exercises in all of the books are properly sticked according to the right hand rule and the Straight System. (6) Individual students will progress at different rates, depending on their mental ability and muscular dexterity. However, as in the study of any other instrument, it requires a lot of perspiration and perseverance if the student is to learn properly. The student should complete exercise No. 47 in the Podemski book midway through the second year of lessons. At this time, Edward B. Straight's Book No. 3, Syncopated Rhythms should be introduced. Keep working from all four books and complete them only after the student has mastered each and every lesson. (8) This course of study will take about three years of intense study. Assuming the student started private lessons in the sixth grade of school, the course would be completed sometime during the ninth grade of school. With this background and musical discipline in playing the snare drum, the student can now musically begin the study of the timpani or melodic mallet instruments.

When to begin the percussion instruments. A very

practical percussion course of study that is recommended by this writer consists of three years of private lessons on the snare drum. At the same time the student is also a member of beginning and intermediate bands. In beginning and intermediate band classes the student learns basic bass drum and cymbal techniques. The ninth grade year is spent on the melodic mallet instruments such as bells, vibraphone, xylophone or marimba. During the tenth grade the student is taught timpani. All of the traps-accessories are taught the student as they are called for in the music.

The completion of this course of study insures each student a rudimental style and concert style, a knowledge of snare drumming, and a working knowledge of the melodic mallet instruments and timpani. Any percussion student may continue with private lessons on any of these instruments. It will be found that one student will want to study timpani, another mallets, and another snare drum. Advanced studies can be offered these students, and they can be permitted to really specialize.

By using this recommended approach, all students have developed a working musical knowledge of the instruments by having completed a comprehensive course of instruction. With the same care and consideration which is lavished on other sections of the band and the orchestra, the percussion

section can be changed from an often sadly neglected section to the firm foundation upon which fine musical organizations are built.

For the advanced snare drummer, supplementary and advanced reading material is here listed:

1. Christian, Bobby. Modern Drum Studies For Sight Reading. New York: Creative Music.

2. Stone, George L. Accents And Rebounds. Boston: George B. Stone and Sons, Inc., 1935.

3. Stone, George L. Stick Control. Boston: George B. Stone and Sons, Inc., 1935.

# CHAPTER VI

## PRACTICAL INFORMATION ABOUT THE MOST COMMONLY USED PERCUSSION INSTRUMENTS

What is percussion tone? The modern piano is probably the finest percussive instrument. The hammer action of the piano is the clue to the proper production of percussion tone of any "struck" instrument. Regardless of the speed and intensity with which one strikes the piano key, the hammer strikes the metal string and "gets away." This is the basic answer to the concept of percussion tone. When this is applied to the other percussion instruments the action of the wrist and its motion are most important. The arm and the fingers have their place in the handling of a stick or mallet, but the wrist controls the lightness and speed of all strokes of the stick or mallet.

Always strive for musical sounds. The percussion instruments are naturally obtrusive. This obtrusive sound can be overcome by correct placement of the sticks or mallets on the vibrating surface. The rate of speed with which the stick-mallet leaves the vibrating surface is a determining factor for good percussive sound. If a very staccato sound is desired then a quick motion is made. If the motion is slower, a more legato sound will be obtained. The angle

at which an instrument is struck will produce different sounds. The glancing circular blow will produce a smoother tone than one which is perpendicular. The end result is a more musical sound.

The concert snare drum. The most practical size of snare drum is the 6½" x 14" drum. A drum of this size is ideal for all concert use because it has a good sound and adequate volume with crisp tone. This writer prefers a well-constructed, metal-shelled drum over the wooden-shelled drum. The brass drum produces a more responsive sound. The brass shell is available plated with nickel or chrome, but is made of brass and not of steel.

Drum heads are made from calfskin or plastic. There are advantages to both of these heads. With calfskin heads more minute and subtle adjustment of head tension can be attained, resulting in more percussive color. The greatest advantage of plastic heads is that they are not affected by weather conditions. This writer believes that a combination of the two with a calfskin professional batter head and a plastic professional snare head on a good brass drum shell will produce best overall sound and projection. With the addition of 16 coiled wire snares and a parallel strainer this drum will have the desired crisp and responsive sound.

Uneven tension on the drum heads will result in poor

sound and sluggish stick response. It takes just a little more time to procure even head tension, but it can be done systematically and is well worth the trouble. The batter head should have the same sound throughout the outer edge of the head near the rim. It is not possible to tighten the snare head for the same results because the two snare "beds" place a greater tension at those points than at others. Most drummers agree that the batter head should have more tension than the snare head. They further contend that the snare head should not have as much tension applied as the batter head, for it must assist the snares in vibrating. This writer thinks the opposite is more nearly true. Always tighten the snare head as much as possible without breaking it, and then adjust the snares and batter head for a good response. A loose or even semi-loose snare head does not give a crisp, sensitive response, so it becomes necessary to have the snare head very tight for good snare drum tone. The final difference between the two heads and their tension is determined by the style of playing and the weight of the sticks.

The concert bass drum. The player of the bass drum should have a musical background with a finely developed sense of timing, for he is the backbone of the ensemble. A snare drum background is essential. The bass drum should

sound "bass", but the sound should have a "boom", not a roar or rumble. The size this writer recommends would be between 14" x 32" and 16" x 36" for a satisfactory boom. If money is available, the pearl finishes add much to the appearance and will last longer. Separate tension should be specified with calfskin heads. The bass drum stand should be of sturdy construction either of wood or steel. The drum must not be allowed to slide around when struck a hard "blow." The stand must place the drum at a height which requires the player to reach up slightly.

The mallets at the players disposal should consist of two double-end beaters made of lamb's wool. One beater should be a little heavier for heavy symphonic selections. The lighter beater should be used with marches and lighter numbers. The player should also have a pair of large timpani mallets to execute long single stroke rolls on the drum. The double-end beater is preferable because quite often the bass drummer is required to play a roll without time to reach for the timpani mallets. All mallets and beaters should be made to meet the specification of the performer and the size of the bass drum.

The bass drum must be tuned to produce a boom of indefinite pitch. Many percussionists prefer a dead non-obtrusive sound from the bass drum. Varied sounds can be

achieved by adding strips of paper or feathers from a pillow to the inside of the drum. A very exciting effect can be attained by this "dead" sound especially for martial music. The bass drum has many theories concerning the actual tuning of a bass drum, such as tuning the heads in perfect fourths or fifths. There is no specific pitch or true pitch for the bass drum. The pitch should be determined by the particular ensemble in which the drum is used. It should sound neither too high nor too low, but such that it will blend with the ensemble and not create an obvious sound, revealing its presence. As the timpanist, a sensitive bass drummer changes the pitch of the drum to the register in which the ensemble happens to be playing throughout a performance.

Controlling the pitch of the bass drum is accomplished by placing the left hand on the left drum head, and then by changing the pressure exerted on the head the tone or pitch can be controlled. The right knee placed on the head which is being played can be used in the same manner. The opposite technique of playing would be true of the left-handed bass drummer. With practice and experience the player will discover techniques of controlling pitch by the amount of pressure applied to the drumheads with the hand and knee. Various pitches and tone qualities are inherent

in the bass drum, and with the proper position of the beater and the striking technique employed to the head along with the pressure exerted the bass drum becomes a very musical instrument.

Only a certain degree of tension can be applied to the large heads of a bass drum; for this reason the drum is subject to sudden changes in pitch, particularly in damp weather. Temperature and humidity changes create difficulty in maintaining and holding a good tone. The calfskin heads are more sensitive and produce the best musical results; however the plastic drumheads will not be affected by the changes in weather. The plastic head will produce some difference in tone; therefore the player will need to adjust and compensate when applying pressure with the hand and knee technique.

The bass drummer should memorize the music for a concert. With the music memorized, he can concentrate on how he plays and will be able to listen to the rest of the ensemble while watching the director. By listening to the musical colors and phrase patterns of the ensemble, the bass drummer will learn how to make the bass drum blend musically with the rest of the ensemble. It is a requisite of bass drumming that the player understand the inherent sluggishness of the drum. He must learn to stay on top of the beat. On

occasion, when acoustics require it, the player should play ahead or anticipate the beat slightly in order to keep the tempo from dragging.

In maintaining a steady beat, the head of the drum should be struck in an upward circular motion as if plucking a harp and drawing the tone from within the drum. Remember that tone and pitch are controlled with the use of the hand and the knee. A rule to remember is that if the bass line of a composition ascends in pitch so should the bass drum, and if it descends so should the bass drum.

The bass drum should be struck on the upper third of the head. The center is used for specific effects, such as a loud "bomb" or "thud", and is struck in a downward or parallel motion. For music in the dance style, play in the dead center of the head and muffle the opposite head with the left palm.

The player should be familiar with such terms as legato or staccato. Musical terms should be applied to the drums as they are to the brass and woodwind instruments. It is in the soft, legato sections that the heavy wool beater is used. The reason is that less effort is required in obtaining a big tone because of the weight of the beater. The staccato passages requiring speed should be performed with the lighter of the two wool beaters because it requires

less effort in maintaining speed. For a crack or shot effect, a hard felt or wooden beater should be used striking dead center. For a "roar" strike hard near the edge with the large wool beater.

The accent should be played with the intensity which produces this effect. Most bass drummers have a tendency to overdo the accent by striking a hard blow to the center of the drumhead. Instead, the player should continue to play on the upper third of the head and apply a little more pressure to the upward stroke, thus creating the accent.

To produce a roll, whether using timpani mallets or a double-ended bass drum beater, play close to the rim of the drum. Here the heavier tension causes the beater or mallets to bounce. Tilting the bass drum will change the tone. However with timpani mallets the drum is easier to play in the tilted position.

Suggestions for maintaining the bass drum: (1) After every rehearsal the rods should be loosened so that all tension is released from the heads. This will prevent the wooden hoops from warping. (2) The drum should be taken apart and cleaned at least once a year. Dust accumulates between the hoops and heads, causing much difficulty when trying to distribute even head tension. Using a damp cloth will remove dust and particles. (3) The rods should be removed

and oiled at least six times a year, a safeguard against rusting. (4) Applying a damp cloth to calfskin drumheads at least three or four times a year will keep them "alive."

By using varied beaters, mallets, different striking spots, and tilting to various angles, other effects can be obtained from the bass drum. Achieving the proper musical effect at the right time will rest on the musical discretion of the performer and his director.

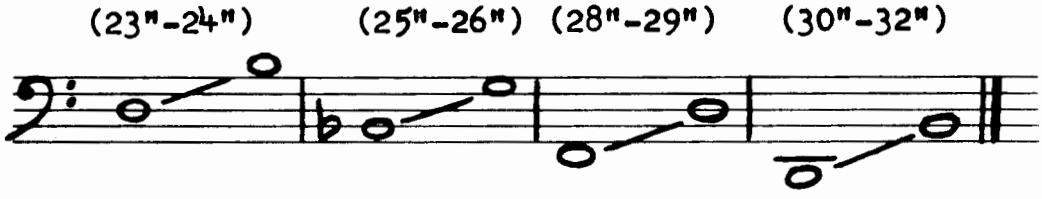
The timpani. One of the most important members of band and orchestra is the timpanist. Considering the demands placed on his abilities, it is essential that a solid foundation be laid for his full development.

Perhaps too often the student timpanist in the school band or orchestra is left to shift for himself after a brief introduction to the instrument by his director. What the student learns is usually from his director who has little or no knowledge of the timpani himself. The following information is designed to broaden the knowledge of timpani for both the teacher and the student.

The standard sizes of timpani are 23", 25", 28" and 30". This writer personally prefers the larger sizes of timpani because they will provide improved tone quality and an expanded range for the timpanist. The sizes preferred are the 24", 26", 29", and 32". The low tones will be great-

ly improved with the increased diameter of the head. Four sizes of timpani are ideal for meeting the requirements of most compositions. However, if only three timpani can be purchased, the 26", 29", and 32" are recommended; if only two timpani can be purchased, the 26" and 29" sizes are recommended.

The basic tuning note and musical range for each timpani size is illustrated by the following chart.




The basic tuning note for each size timpani is the lowest note of the range on the chart. Each timpani should be placed in playing range by tuning to the basic note at the start of each concert and rehearsal. If calf heads are used, check constantly to see that the range is maintained through changes in humidity. Since the range of each timpani overlaps the next larger size, try to avoid using the basic note because generally poor tone quality exists on the extreme low or basic note of each timpani.

It is preferable that all timpani be pedal tuned. If money is limited, the 26" and 29" ought to be pedal tuned and the others may be machine tuned timpani. The models

without tuning handles obstructing mallet technique and with a mechanical locking clutch pedal mechanism are highly recommended as pedal timpani.

Plastic heads produce good sound, and this writer recommends their use. Plastic heads offer many advantages over the calfskin head: (1) easier tuning; (2) little wear and tear; (3) lower cost; (4) not bothered by changes in weather. It cannot be disputed that the musical tone of an "ideal" calf head is superior. The teacher never has the opportunity to purchase or at least finds it extremely difficult to get that "ideal" calfskin head. The tone, resonance, and response of the plastic head is very satisfactory.

Even tension must exist on the timpani heads if clear and resonant tone is to be achieved. If the timpani is the type with tuning handles, be certain that they are even. Even to the eye will usually be even to the sound. After the handles are set in this fashion, they can be turned evenly in either direction and the head will go up or down in pitch, evenly and clearly. This is the only answer to good clear tone in tuning. Only after the head is evenly tuned can the pedal tuning technique be effective.

Unless the player has a good ear, uneven intonation will result. The student-player must work for good pitch. The timpanist must be able to hear and recognize the inter-

vals in bass clef. A chromatic pitch pipe can be used in the developing of the inner ear to help the student, but the pitch pipe must not be allowed to be a "crutch."

In tuning of the timpani, it is always best to approach the note wanted from below. For example, think the note desired, release the pedal or handle to the fundamental or basic note then tune to the desired note. This will eliminate any chance of the head sticking and will produce cleaner intonation. When tuning more than one drum to new pitches it is best to tune the lowest note first, then think up by interval to the pitch of the other drums.

Testing the pitch of the timpani head is best achieved by either striking the head softly with the mallet or by flipping the head with the second finger. The mallet method will give a more accurate tone. One word of caution: do not strike the head too often when tuning the drum as this may tax the ear, and after a short period of time the ear may not know what to listen for. Notice that the pitch sounds one way with the ear right over the timpani head and another way a little distance away from the head. Learn to adjust for this difference in the dispensation of the overtones from the timpani head.

The most difficult technique of tuning timpani is to be able to adjust the heads to new tones while the ensemble

is still playing in the old key. Complete concentration must exist or there will be pitch trouble.

This writer has timpani students sit on a drummer's throne while performing on the timpani. The throne must have a swivel top or seat which will enable the player to turn to each respective timpani. This sitting position proves highly effective when using all pedal timpani on fast moving passages such as a bass line of a march.

The quality of tone produced is determined by the musical ability of the player and his choice of mallets. Much care should be taken in the choice of mallets. The felt covered ball which is sewn evenly and firmly around the core with no overlap is the best overall mallet. This will produce a full round tone and is a good all-purpose mallet. The large lamb's wool mallets are fine for bass drum rolls but are inarticulate when used on the timpani. Hard, felt mallets are used when a clean, crisp tone is desired from the timpani. Hard felt or wood mallets produce a louder tone, but the player must be careful the tone quality does not become distorted and the pitch obviated.

In performance the fine timpanist uses several pairs of mallets in <u>each</u> composition. The player must learn to judge the proper mallet sound required as the music warrants it. Since no definite signs in the music tell the student-

player to change mallets, such changes are usually left to the discretion of the director and the student.

The striking spot on the timpani is approximately three inches from the edge of the drum closest to the player. There is some variance, depending on the size of the drum and the sound desired. The player must remember always to "draw" the tone from within the drum. Play the drum in a continuous circular motion--don't just "hit it."

The timpanist must use good common sense when interpreting the music before him. He must seek out what the composer really intended. The director that insists that every note be played exactly as written is sadly mistaken. The ringing sound of the timpani is very much inherent in this instrument. Generally, the timpanist should play every part with a ringing quality of sound. A rule to follow is always match the sound of the ensemble and never dampen unless a general release occurs. Another rule concerns the dampening technique when passing between two or more timpani. The tone to be struck last in a phrase should be the one to ring; the preceding notes up to this one should be dampened. If all are allowed to ring, a highly unmusical roar will result.

To achieve the best possible tone from timpani, the roll must be kept under careful control when moving from one size drum to the other. A good timpani roll is not extremely

fast. The speed of the mallets vary slightly on tones of different pitch. Low F and G tones on the larger drum require a roll which is slower than the D taken on the smaller drum.

The lower tones do not need as much force from the mallets. Higher pitches demand a faster roll and more force in order to keep the head in an even, constant vibration. The timpanist must learn to make slight adjustment of speed on almost every tone of different pitch. The only real solution is the ear, together with considerable sensitivity and physical finesse. The difficulties in playing timpani are more musical than technical. A more musical approach should be employed. This writer sincerely believes the preceding comments and suggestions will serve to better achieve that end.

Recommended Timpani Methods:

1. Goodman, Saul. Modern Method For Timpani. New York: Mills Music Inc.
2. Friese, Alfred and Alexander Lepak. The Alfred Friese Timpani Method. New York: Henry Adler, Inc.

(The books recommended for timpani will give the student good basic reading and tuning exercises together with ear training and technique study.)

The chimes. Chimes are a very colorful mallet percussion instrument. Although chimes have frequently been used with sacred music, they should not be limited strictly to

this type of literature. Chime parts are written in treble clef. The normal range of tubular concert chimes is one and one-half octaves, C-F, chromatic, with double rows. The chimes are built with the natural tones in front and the sharps raised in the back row to facilitate playing.

Concert chimes are constructed in three different diameters, 1", 1¼", and 1½", the most frequently used size being the 1¼" chimes. The 1¼" diameter chimes produce satisfactory tonal depth, resonance, and carrying power for most bands and orchestras.

The register of a regulation set of eighteen concert chimes is from C in the third space of the treble clef to F above the staff. Chimes have an overtone series which is different from the overtone pattern of other instruments. Generally speaking, other instruments have true harmonics, being usually spaced in fifths, fourths, thirds, etc., above the fundamental tone and are hardly perceptible. In chimes the written pitch is the fourth overtone of the series, which is the dominant tone. Instead of being heard with true harmonics as in most other instruments, it has three lower overtones and any number above the fundamental with none of the overtones in any true harmonic relationship. This is a natural characteristic of the special brass alloy used in the construction of the chime tubes.

The lowest played note for chimes is written $C_4$ (middle C on the piano keyboard) the overtone structure causes the note to sound one octave higher. When playing or writing for chimes this overtone structure must be taken into consideration. Another fact about chimes which should help to explain why they are rather difficult to understand is the fact that A in the second space treble clef on a set of concert chimes sounds the A on the first line above the staff. When listening to this sound, it does not seem possible because of the prominence of the three lower overtones or partials, which are very strong and sound more than two octaves lower. This is especially bothersome to the player with an exceptional ear when he stands close to the instrument.

A full, resonant tone is produced when the chime is struck sharply on the striking cap with a rawhide mallet. The chime tube itself is never struck. The damper pedal can be used to dampen all chimes, or the pedal can be held open which allows each chime to be hand dampened. To dampen a chime, the hand should dampen the tone at the same point at the cap where the chime was struck. One effective technique: when chimes are equipped with a damper pedal, passing tones of a chord are silenced with the hand and the damper pedal is depressed when chord changes are made.

To produce the best tone, use only the rawhide mallets the manufacturer recommends for the chimes. These will produce good forte sounds from the chimes. For pianissimo effects, padding the mallet with leather or cloth, or maybe a handkerchief, will cut down the metallic sound of the chime. Single mallet or two-mallet technique can be used in playing the chimes. One mallet technique is most common as the very nature of the chime tone restricts rapid execution.

If the hangers of a chime should break (cord holding chime to suspension rack) do not improvise a hanger. Send to the manufacturer for the proper hanger for the chime.

Chimes can be used (1) to emphasize unison opening statements with the brass, (2) to take the place of a cymbal crash in a march, (3) to enhance and give color to the trombones or counter-melody instruments in a concert march, (4) to give more sonority to unison clarinet passages, and (5) to be substituted for or played along with bell passages.

The xylophone, marimba, and vibraphone. On occasion, the xylophone, marimba, and vibraphone are three musical instruments that are mistaken for one another. The basic similarity being that all three have keyboards that are played with mallets.

The xylophone, named from two Greek words meaning

"wood sound," is similar to the glockenspiel, except that the sound bars are made of resonant wood called British Honduras Rosewood. Both the xylophone and the marimba have wooden keyboards. The vibraphone has metal keys and belongs to the classification known as metallaphones.

The marimba and the xylophone do have a marked difrerence, even though the keyboards are alike. Directly under each key on the marimba there is a hollow chamber, usually a metal tube, that sustains and amplifies the tone once the key has been struck with a mallet. The function of the chamber is that of a resonator. When the key is struck the air inside the resonator is set in motion sympathetically. The marimba is struck with soft yarn mallets. The wooden keyboard of the xylophone is struck with hard rubber or plastic mallets. It may have very short tubes under some of the keys. The main difference between the xylophone and the marimba is that each marimba key has its own resonator and the two instruments employ different types of mallets.

Although the vibraphone is similar to other mallet instruments in design, there is a marked difference in the sound. The bars or keys are made of a special aluminum alloy instead of the British Honduras Rosewood used for the marimba and xylophone keys. Vibraphones are equipped with a damper pedal which controls the sustained sound of the

instrument. The roll technique used on the woodbar instruments produces the sustained effect. The characteristic sound of the vibraphone is produced by electric-motor driven pulsators turning above the resonators, and beneath the keys, to produce the vibrating sound. When using the vibraphone with the motor off, the pulsators should be in a vertical position leaving the resonators open to produce a full sound.

The system used to identify the playing range of the melodic instruments refers to the modern piano keyboard. It begins with A1 bass clef (being the first note of the keyboard) and ascends chromatically up the keyboard and the Grand Staff. For example, the octave above A1 is called A2. Middle C on the piano keyboard in this system would be called and referred to as C4 because it is the fourth C above A1 etc.,.

To compare the written score with the actual sound range of the melodic instruments correctly, the following information may prove helpful. The glockenspiel or cased bells have thirty metal keys. The playing range is from G3 to C6. They have no resonators and are housed in a case. They sound two octaves higher than written. Use plastic or brass tip mallets for best tone. The marching bell lyra has twenty-five metal keys. Its playing range is from A3 to A5. It has no resonators. It is constructed on a metal

lyre-shaped frame for marching with a leather strap. It sounds two octaves higher than written. Use hard rubber, plastic, or brass tip mallets for best tone. A recommended model of the marimba is the four octave model which has forty-nine rosewood keys. The playing range is from C 3 to C7. All marimbas sound the actual written note. Use the soft yarn-wound mallets for best blend and tone on the marimba. A recommended model of the vibraphone is the three octave model which has thirty-seven metal keys. The playing range is from F3 to F6. All vibraphones sound the actual written note. For soft legato passages the soft wound-yarn mallet is recommended. If a harder or more staccato tone is needed, the cord-wound or leather mallets are recommended. A recommended model of the xylophone is the three-and-a-half octave model which has forty-four rosewood keys. Its playing range is from F4 to C8. All xylophones sound as written. Hard rubber or plastic tip mallets are recommended for best sound.

A guide for the melodic mallet instruments. (1) The percussionist should possess a working knowledge of the piano keyboard. Scales, chords, and tonalities have more meaning to the student with a piano experience. (2) The student having studied piano and snare drum should be introduced to the mallet instruments. The marimba is recommended

as the beginning instrument, but the xylophone, bells, or vibraphone may be substituted. (3) The student should be taught the scales and arpeggios. At this time, a "feel" for the instrument can be acquired along with melodic patterns which will aid in training the ear. (4) Single stroke sticking patterns must be mastered; imperfect control must not exist. (5) The student should be encouraged to pick out familiar tunes by ear and to improve his ear and tonality memory, as this will provide the needed skills to play jazz on the vibraphone in stage band. (6) Correct hand position should always be the rule. The mallets must be relaxed but controlled. The student must play in the center of the keys, not on the edge, except when doing more than two-mallet work. (7) Three and four-mallet work should not begin until the student has mastered the two-mallet technique. (8) In addition to solo literature available for mallet instruments, solo literature for flute, oboe, and violin contain excellent material which can be played on the mallet instruments. (9) This writer believes that no student can deserve the title of percussionist in the field of percussion without being able to show a certain amount of facility with mallet instruments. The instrumental music teacher must encourage and guide his percussion students to put in an hour a day with the mallets, at least an equiva-

lent time with the snare drum and with the timpani, and to continue piano study.

Recommended Mallet Methods:

1. Devens, George. Lesson Play For Mallet Instruments. New York: Henry Adler Inc.
2. Kraus, Phil. Modern Mallet Method, Vol. 1, 2, 3 New York: Henry Adler Inc.
3. Kraus, Phil. Vibes For Beginners. New York: Henry Adler Inc.
4. Rae, Johnny. Jazz Phrasing For Mallets. New York: Henry Adler Inc.
5. Wechter, Julias. Play Vibes - Modern Technique For Musicians. New York: Henry Adler Inc.

The crash cymbals. In a pair of matched crash cymbals one cymbal is slightly lower in ring than the other, so that when struck a diffused crash results. The crash cymbals are struck together and should produce a ringing quality. Cymbals can be the most intriguing instrument of the percussion family. The various colors achieved by these plates of hammered brass is spectacular, and for this reason the smart director is very particular about selecting matched concert crash cymbals.

The ideal percussionist needs at least three pairs of cymbals: light, medium, and heavy, all of different diameters. If only one pair of cymbals can be owned, the 18-inch medium or medium-thin is recommended. Usually a thin cymbal will be lower in pitch than a thick one of the same diameter.

Since the cymbals to be used must satisfy the mood and character of the composition, the same cymbals should not be used to play every single piece of music. The cymbal player must produce color and shadings that will enhance the music. Because the music rarely states what size-weight cymbals to use, this choice is left to the discretion of the player and the director.

Crash cymbals often are shipped from the factory or dealer with wooden handles fastened with a metal bolt assembly. If the wooden handles are used, the tone of the cymbals becomes distorted and the discs may become cracked. However if leather handles or straps are used, the cymbals will be less apt to crack and the discs will vibrate freely, producing a much improved tone.

Cymbals can best be effective by keeping one cymbal relatively stationary, while the other disc is the active striker. Both cymbals <u>never</u> collide into one another for any reason.

The following information should help define good crash cymbal technique: (1) Always use leather or lamb's wool straps rather than wooden handles on crash cymbals. (2) Grasp the straps in the same manner as the "like-grip," hold firmly and stay close to the hole to maintain control over the cymbal. (3) Hold the cymbals together and hold

them chest high in a tilted position so that the striking cymbal will be on the top. (4) The stroke should be one continuous motion. In other words the motion of preparation is the separation of the discs, which should not stop after the separation and start again for the stroke. When the cymbals play repeated strokes, they are never placed together each time; they must be played with the sensation of drawing away the tone when contact is made. If pianissimo playing is needed, play with just the outer edge of the cymbals. (5) Be careful that the cymbals are never crashed with the edges exactly corresponding. This will capture the air and cause a suction which cups the cymbals. To avoid this, lower the far edge of one cymbal slightly. (6) After the cymbals have struck, the two symbals should be waved gracefully in the air above the player's head to allow the waves to project for greater effectiveness. (7) To produce a glissando on the crash cymbals, slide the edge of one cymbal against the other, with the edge of one cymbal sliding perpendicularly to the ridge of the other.

The suspended cymbal. The suspended cymbal is usually 16 to 20 inches in diameter and relatively heavy in weight. It is suspended from a floor holder and played with hard felt timpani mallets or soft yarn-wound marimba mallets. The effects attained with this instrument are limited only

by the players imagination.

A suspended cymbal can also be struck by a wooden stick to produce an entirely different sound. When struck with a wooden stick the attack should be made on its extreme edge with a glancing blow of the stick. Many interesting effects can be realized by playing the cymbal with the tip of the snare drum stick near or on the center or cup. A snare drum roll played on the cup is an entirely different effect from a timpani roll with mallets near the outer edge.

Usually the suspended cymbal roll called for in music is produced by the hard felt timpani mallets, playing the single stroke timpani roll on the outer edges of the cymbal. The best roll technique is to place the mallets on opposite sides of the cymbal. If this is not done, the cymbal could tilt and even fall on the floor during a performance. By balancing the weight of the strokes on opposite sides of the cymbal surface, this should never happen.

For more colors and effects on suspended cymbal try (1) cymbal rolls played with nails or yarn mallets.for brilliance; (2) coins or keys taped to the outer edge for a sizzling effect; (3) placing a snare drum stick lightly beneath the cymbal for a non-metallic sizzling effect; (4) scraping the cymbal with a coin for excellent "ppp" dynamics; (5) brushes on the cymbal; (6) choked cymbal.

The hi-hat cymbals. The hi-hat cymbals should be 14-inch cymbals. The bottom cymbal should be medium heavy, and the top one medium thin for best results.

To attain a good "chick" sound from the cymbals one of the felt washers may be shaved to an angle with a razor blade or coarse sand paper. This will cause the cymbal to tilt slightly so that the top and bottom cymbals will always "chick" together. It is recommended that the cymbals always be kept slightly loose so that their open tones will "sing" after being struck.

The gong or tam-tam. The gong should be of definite pitch, and as deep in color as possible. The 28-inch gong usually proves most satisfactory. Although there is no ideal size, an important fact to remember is that the gong must be checked for best tone by striking it with the heavily padded lamb's wool beater before a concert or rehearsal. The spot where the tone is most resonant is where the gong is to be struck. The gong should be "warmed-up" before being struck. This is accomplished by starting it vibrating very slowly and softly by striking it lightly with the beater.

The gong should be suspended by a metal hanger and allowed to swing freely. The cord which holds the gong to the metal hanger should be a string bass G gut string.

Never use "cutty-hunk" or heavy twine, since this will only muffle the deep ringing sound. The gong is dampened by the player's free hand and arm when necessary.

Mallets are the source of varying tone color. The roll is made on the gong by playing the timpani roll on the surface with heavy wool timpani mallets. Once again it should be pointed out that the gong must be warmed up or set in motion by the player, so that it is vibrating when the first tone is heard. When the gong is struck without this measure of precaution, it must set itself into vibration with its first blow and the tone is consequently "cold." At the same time, to prevent the gong from "splitting" this gentle warming up of the instrument by touching it lightly should make the gong outlast the director.

The Korean temple-blocks. The temple blocks are of Oriental origin and come in various sizes and sounds. They are made of resonant wood that has been hollowed out to take the shape of an upturned mouth. They should be mounted on a floor-stand, side by side according to size, left to right, large to small, five of these blocks making up the conventional set.

The temple-blocks are struck with two matched hard rubber mallets. They should produce a "woody" sound which resembles definite pitch. Temple-blocks are used to sound

and denote such things as horse hoofs, a closing door, or the ticking of a clock.

The tambourine. Known as the Tambour de Basque in French and as Tambourino in Italian, the tambourine is a very musically effective percussion instrument when played correctly. Good tambourines are relatively inexpensive and every school should own at least one small, one medium, and one large size. Tambourines should not be so thick as to cramp the hand in which it is held. To perform with tambourines requires practice, good timing, and a measureable amount of touch control.

The jingles are the most important sound of the tambourine. The best jingles available would be those of German silver. Jingles are high pitched, medium pitched, and low pitched. The diameter of the instrument is a contributing factor to the musical tone. Some tambourines have double rows of jingles, but only the large tambourine should be double rowed in construction.

The instrument is played primarily by tapping the fingers or hand on the rim of the tambourine. The instrument is held in the left hand between the thumb and the fingertips. The hand grasps it at the point where the little hole is to be found. The player needs only to play the outside rim for very soft passages. If the head itself is

tapped softly, a tom-tom effect rather than the sound of the jingles will be heard. For very loud passages, the player may close the hand in a fist and strike the head with the knuckles near the rim. It should be pointed out once again that a jingle-like quality should emanate from the instrument at all times. If a composer has indicated in the score a quality much like a shot, the tambourine should be struck with the fist right in the center of the head.

For extremely loud passages with a rather fast rhythm the use of the knee may be necessary. Place one foot on a chair and rest the tambourine on the leg while playing with both hands. Such technique should be followed for all passages which are too difficult for one hand technique. The leg is placed on a chair and the tambourine is struck against the knee for the first note and the fist for the next note, continuing alternately. Actually, the left hand is almost stationary while the right hand moves the tambourine back and forth between the left hand and the knee.

There are no musical terms widely used to indicate how the player is to execute the various rhythms found in a composition. The tambourine can be played with the fingers, upside down, against the knee, with the fist, on the snare drum, and with snare drum sticks. The actual method is left entirely to the performer and the director.

Two types of rolls are used for the tambourine. The wrist roll, is made by turning the arm rapidly in a twisting motion in the air. This will produce two dynamic ranges, loud and very loud. A crescendo and diminuendo may be attained by twisting the tambourine very rapidly, first putting it behind your back and then bringing it forward to your front and then returning it to the same point of origin. The effect is that of crescendo and diminuendo because of the positions behind and in front of the body. The other type of roll is executed by rubbing the right thumb on the head, near the rim, around the edge of the diameter. Crescendos are made by added pressure of the thumb against the head and by moving the thumb faster as the pressure is increased. One trick is to glue a strip of sandpaper to the rim of the instrument on its head. Perfect results occur every time when rubbing the thumb over the sandpaper. A guide to the use of the two rolls is that loud rolls usually are played by twisting the tambourine, and soft rolls are produced with the thumb.

To avoid "broadcasting" the entrance of the tambourine before one commences playing, the instrument should rest with the head down on a soft cloth. This will also provide a cushion effect for the player when returning it to the percussion table after its use.

The castanets. The technique of playing castanets is more easily attained. With a minimum of practice the student should become proficient in their use. The single pair of castanets attached to a handle are the most practical. However, the double pair may be needed on occasion, especially for greater power.

The handle of the castanet is held by the thumb and the fingers of the right hand with the castanets pointing toward the floor. The single castanets are played against the palm of the left hand with the fingers closing around them to stop them at the end of the rolls and on the rests. Another technique of playing is to use two pairs of castanets, closely matched in pitch, with the bottom clapper of each pair taped shut, and played against the legs. This is recommended for fast tempos and difficult rhythms. In very soft passages it may be that by tapping the clapper with a triangle mallet the desired effect may be produced if the tempo is not too fast. Practice and experiment for the desired effects.

The triangle. The triangle is a very easy instrument to play but not everyone can make satisfactory musical sounds on it. The triangle is metal shaped in the form of its geometrical name with one corner open. If there is no open corner, the metal will not produce its characteristic

ringing sound.

A triangle holder is a clamp attached to the music stand. It has two holes in a projecting prong, and should be used by the player for best results. A gut string, preferably a violin "A" string five inches long, is placed through the two holes making a loop. After a segment of the string is put through the one hole and then through the other producing a loop, the ends remaining above the clamp are then to be burned with a flame until they swell enough to make their own knot above each hole. Place the triangle on the loop with the open end to the left of the player. The triangle is placed within this loop and allowed to hang and resound freely.

The player should have a minimum of five mallets of different sizes and weights and one pair of matched mallets. Mallets can be purchased at any hardware store simply by buying various steel nails or bolts. Many colors can be achieved by changing mallets. Mallets may be arrayed in order from nails and bolts or thick bits of pipe to thin strands of a metal hair pin.

Good triangles are not expensive; every school should have at least three of them in different sizes. One five-inch, one seven-inch, and one nine-inch would prove most satisfactory. A triangle producing a definite musical

sound or pitch is a poor instrument. If a definite pitch is desired, the composer should write for bells or chimes; but when an ambiguous sound is called for, with a bell-like quality, the triangle is used exclusively.

In playing the triangle, the fingers are not to touch it except to dampen or stop it from ringing. The triangle should be struck on the bottom, with the opening being to the left. Matched nails should be used when parts become too technical to be played with one beater. The roll or trill is played in the top corner with a single beater.

Latin-American instruments. There is an ever increasing demand made upon the percussion section in the band or ensemble to play the Latin-American rhythms with authentic instruments. The instruments are enjoyable to play and exciting to score for and hear. That which differentiates Latin-American music from North-American music is the rhythm and not necessarily the melody or the harmony. The intensity and drive of Latin-American rhythms can only be learned by practicing and developing a working knowledge of those rhythm instruments that are uniquely Latin-American.

Ten basic Latin-American instruments exist. (1) The Maracas are a pair of medium sized dried gourds mounted on a handle and contain dried seeds or shot. They are played by alternately shaking each hand gracefully at the level of

the chin. (2) The Quijada De Burro (Jaw-Bone) is constructed from the jaw-bone of an ass, with the teeth fitted so loosely that they rattle when struck. The Jaw-bone is held in the left hand and struck with fist of the right hand. Only simple rhythms are used, allowing the teeth to rattle freely. This instrument is most effective when accentuating the conga rhythm. (3) The Guiro (The Gourd) is a dried squash shaped like a cucumber, having seeds removed, and with ridges on the upper surface. It is played by holding it in the left hand and scraping the notched surface with a stick. (4) The Cencerro (Cow-Bell) is just an everday cow-bell with the striker removed. Hold the cow - bell in the palm of the left hand and strike with a drum stick. Two basic sounds are characteristic of this instrument. Striking the flat side produces a "tick" and striking the open edge produces a resonant "ping." (5) La Cabaca (Beaded Gourd) is a large round gourd or coco-nut covered with beads. It is used in the Samba. The instrument is held in the right hand and shook while being struck with the left hand. (6) The Tumbadora (Conga-Drum) is a large round hollow tom-tom producing a very deep sound. It can be used over the shoulder or resting on the floor, being played with the palms and fingers near the rim. It is used with Rhumbas and Congas. (7) Bongos are two high pitched drums of differ-

ent sizes. They can be played between the knees while seated or played with a floor stand while standing. They are played with the finger tips. The small drum is to the players left and the large to his right. (8) Timbales are larger than bongos and played with sticks. They are mounted on a floor stand with the large drum to the players left and the small drum to his right. (9) The Canza' is a long metal tube with beads inside. It is used on Sambas. It is held by each end and shaken like Maracas. (10) The Claves are a pair of rosewood sticks quite short in length. They are played by holding the deeper sounding of the two on the partially closed knuckles of the left hand and striking quickly with the right hand. Most Latin-American rhythms conform to this important instrument and its rhythm.

If additional information is needed about some phase of these instruments and their use, the following books should help answer any question the reader may have about a particular instrument.

Recommended Latin-American Books:

1. Deutch, and Dr. Charles Colin. How To Arrange Latin Instruments. New York: New Sounds In Modern Music.

2. Deutch, and Dr. Charles Colin. How To Play Bongo-Timbales-Congo Drum and Maracas. New York: New Sounds In Modern Music.

3. Rale, Phil. Latin-American Rhythms For The Drummer. New York: Remick Music Corp.

4. Reed, Ted. Latin Rhythms. New York: Ted Reed.

Stage-band drums. Many schools offer an ensemble called stage-band. The following information should help the director or student understand some common aspects of stage technique. The bass drum is used to keep time (playing in four) or for punctuation and playing background rhythmic patterns. The latter is commonly found in modern jazz drumming. The player should be capable of using the bass drum in both ways.

There is a certain way of striking the drums to get a true drum sound. The feeling should be one of drawing the sound out of the drum instead of forcing it into the drum. The stroke must be resilient, not dull.

By listening carefully to what the ensemble is playing, the player can achieve the proper blend of drums with the ensemble. It is amazing how few drummers give any attention to the combined sounds of percussion and ensemble.

The primary task is to swing the band and reinforce accents and dynamic contrast. Again the drummer must listen carefully. What the stage band drummer plays must fit musically with what the band plays. The efforts must be unified.

Because there are so many new developments in music, the drummer must constantly listen to and observe other

drummers and bands at every opportunity. The student must be patient and willing to work hard to achieve his goals.

Backing a soloist: Soloists differ as to the kind of accompaniment they prefer. Some like a busy dance style, one which supplements the basic meter structure with many rhythmic figures; others want "straight time" drumming, the basic rhythm with very little, if any, additional rhythmic embellishments. If the soloist plays softly, do the same! If the soloist swings hard and loud, open up! Always attempt to simulate the rhythmic and tonal mode of the soloist.

A practical drum set would be: bass drum, 22" x 14"; snare drum, 5½" x 14"; small tom-tom, 9" x 13"; large floor tom-tom, 16" x 16"; hi-hat cymbals, 14", the bottom one medium heavy, the top one medium thin; floor cymbals, consisting of one 19" heavy weight ride cymbal and one 20" sizzle cymbal with twelve sizzles.

Before beginning a basic study of stage drumming, the percussion student should have good control of the rudiments and must be able to read. The student must learn to improvise on the drums. The student will really develop ambidexterity and quadridexterity on the dance drums.

Best Methods:

1. Chapin, Jim. Advanced Techniques For The Modern Drummer. New York: Jim Chapin, 1948.

2. Krupa, Gene. The Science Of Drumming Books One And Two. New York: Robbins Music Corp., 1946.

3. Ludwig, William F. Jr. Swing Drumming. Chicago: W.F.L. Drum Company, 1948.

4. Wettling, George and Brad Spinney. Professional Drum Studies. New York: Jim Chapin, 1948.

# CHAPTER VII

## THE MARCHING-PERCUSSION SECTION

A percussion section in the marching band that is well-coordinated and trained as a team is a beautiful thing to hear and see. However a percussion section that lacks precision and vitality can do more to damage the sound of a marching band than any other section in the organization.

Too many percussion sections on the march play poorly, unrhythmically, and without precision simply because they are trying to play too loud. A section which plays with rhythmic precision and uses like sticking will always carry farther and sound bigger than a section playing ffff but not playing with precision. Volume is never a substitute for precision and accuracy.

Band directors are usually extremely critical of poor intonation in their brass and woodwind sections, and they will go to any extreme to correct these sections. The same must always apply to the percussion section. Drums that are not tuned alike have a sound that is just as objectionable as the sound produced when other instruments are out of tune. Therefore it is imperative that careful attention be given to matching the sound of each of the various types of drums.

The tension on the snare and batter heads of all the parade snare drums must be the same. The tension on the snares and the pressure of the internal tone controls must also be alike. It is easier to match the sound of the parade snare drums with the snares off, then again with the snares on. The same care with regard to tensioning, sizes of drums, types of heads, and sizes of mallets and beaters applies to the Scotch bass and tenor drums. A percussion section which is composed of drums with a variety of depths and diameters and with a variety of heads is going to fight a losing battle with regards to matched tuning. Remember also that cymbals of matched size, sound and weight are of great musical importance.

A uniform sound is always defeated where a variety of weights of drum sticks is used, or where all the sticks are of the same weight, but are too light for the drum. A size no lighter than 1S is recommended for the marching parade snare drummer. One drum company offers a superior line of metal shaft Scotch bass and tenor drum beaters. The balance is superior to the wood shaft models and their longer life will cut down replacement costs.

The use of the "Verti-Holder" and the "High-Stepper" adds color and flash to the drum section on the march. The "Verti-Holder" places the tenor drum in a vertical position, while the "High-Stepper" places the parade snare drum in a

horizontal position. With this equipment, the "like-grip" method of holding sticks and mallets is most effective on the march.

The use of plastic heads on all of the marching drums is recommended for best tone quality, carrying power, and resistance to changes caused by weather. The advantage of plastic heads in obtaining a matched tuning with separate tension drums is far superior.

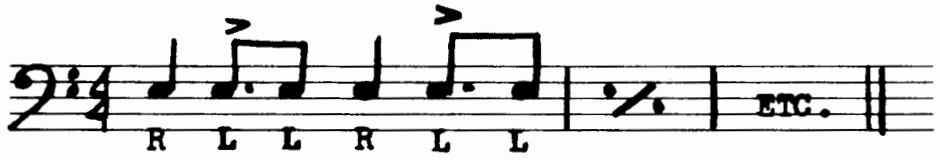
The fast marching cadence. With the increased marching tempo and complexity of marching routines, there are some problems for the percussion section, especially for the snare drummer. The snare drummer is likely to find that some of the standard drum rudiments, designed for a military cadence of 120 beats per minute, are extremely difficult to execute at 160 or 180 beats per minute.

If the fast cadence is used in the marching band, to avoid unprecise drumming, it is recommended that single stroke playing be employed most of the time. Keep the right hand on the strong beat with the left foot and the left hand on the weak beat with the right foot. This method of sticking will maintain the natural body equilibrium that is present when one swings his arms as he walks. Scotch and tenor drummers would also play with the right hand striking the drum as the left foot touches the ground. Drumming left

with left and right with right has a tendency to cause a "waddly" manner as the drummers march.

The execution of the music. With the percussion equipment carefully selected and tuned and the sticking method adopted, the next phase is playing the music. Many of the percussion parts to marches and commercial football shows do not lend themselves well to the faster tempos of marching and playing. It becomes necessary to edit or re-write the parts to make them more musical, more playable, and more practical.

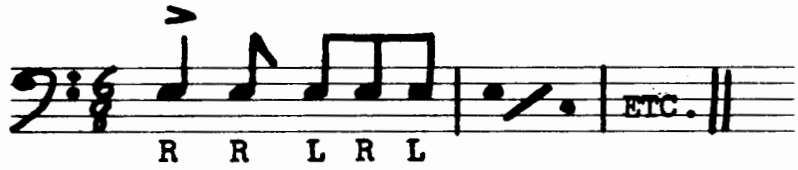
The recommended answer is to establish certain basic rhythm patterns to be played with specific time signatures and specific tempo. For example, in 4/4 time with a tempo of 168 beats per minute, the snare drum might play



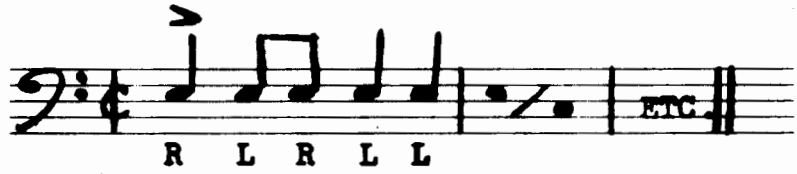

each measure, altering this rhythm, of course, at the beginnings and endings of phrases, and at special accents or syncopation. In the matter of syncopation, it is best to "punch" the syncopated beat which will lift the selection and give life to the overall sound of the band. In most instances the syncopated beat will have even more vitality if all the percussion instruments will omit the beat immedi-

ately preceding the note which is syncopated.

A similar sticking rhythm for 6/8 meter could be:




And for 2/2 time, it might be:



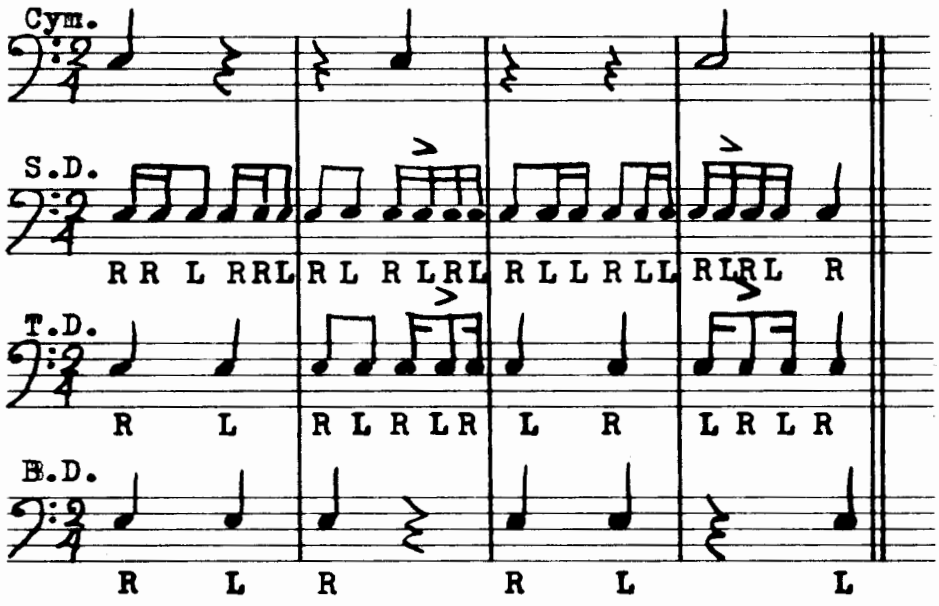

Notice that in each example the right hand would fall with the left foot, and the left hand with the right foot.

Cymbals in the marching band. The use of cymbals should be with musical discretion. The sound of cymbals played continually on the beat becomes monotonous. In 4/4 selections, a sound similar to that of hi-hat cymbals can be made by simply placing the nearest edges of the cymbals together against the chest and choking the outer edges together on the afterbeats. A 20" ride cymbal played with a snare drum stick in a 4/4 number will add even more to a swing tune. To carry this cymbal, use a standard bell-lyre sling and the top shank of a cymbal floor stand with a tilter, the end being placed into the cup of the sling. The left hand is free to hold the shank while the right hand does the playing. Playing this cymbal on the "bell" adds to latin rhythms and drum cadences.

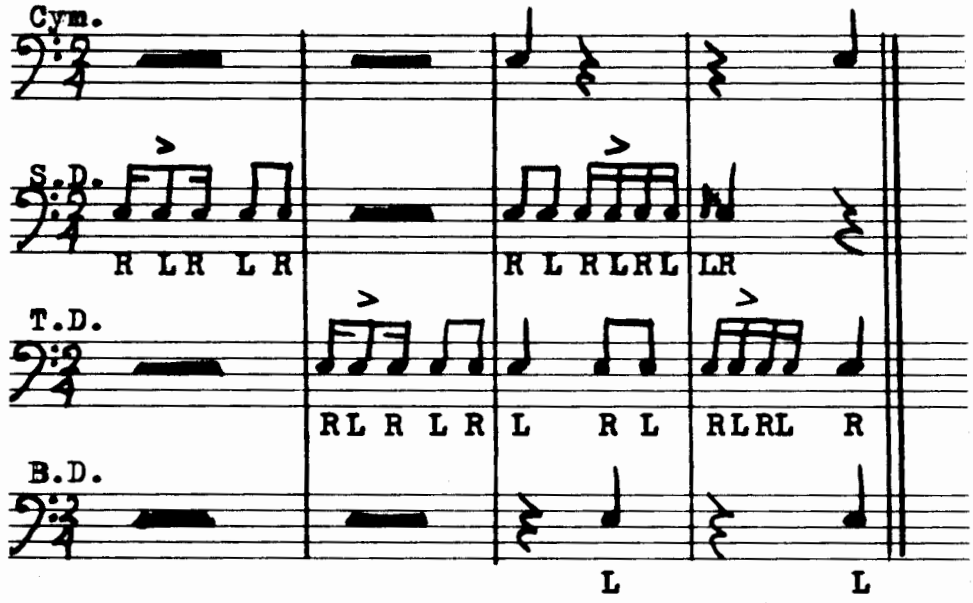
Understanding the tenor drum. Too often the proper use of the tenor drum in the marching band is misunderstood. The tenor drum is a sound between the snare and the bass drum. The tenor drum is an effective and colorful addition to the marching-percussion section when used to best advantage. It should not be used as a "prop" to give the player an excuse to twirl the mallets, which always looks fine but adds nothing to the musical sound of the percussion section.

The following examples show the correct use of the tenor drum.

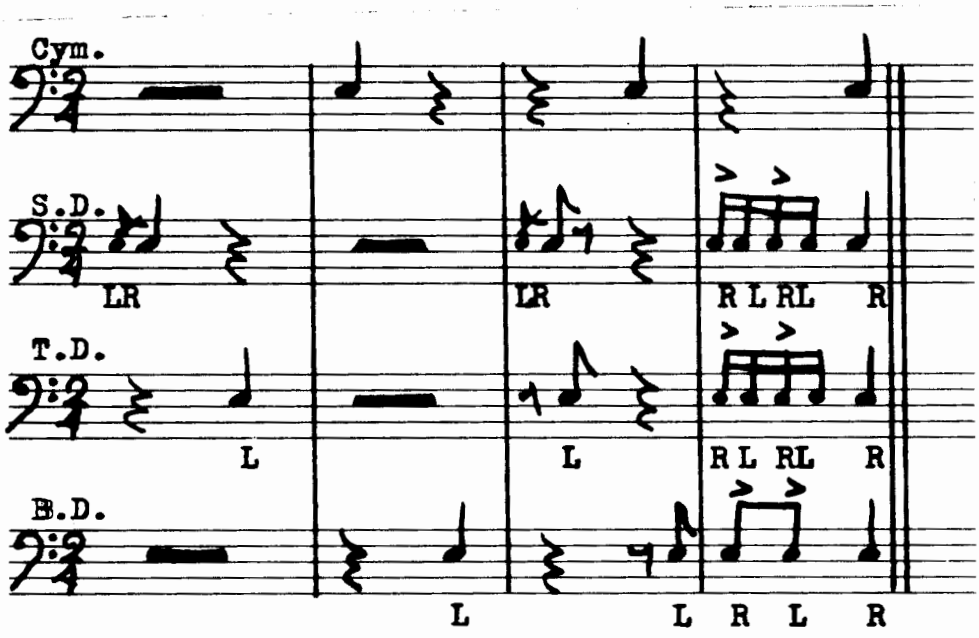
Example 1. Playing simplified snare drum parts and reinforcing the accents, while at the same time embellishing the bass drum part.



Example 2. Echoing between the snare and bass parts.




Example 3. Independent imitation exploiting cymbals, snare, tenor and bass drums.



The percussion instruments offer special possibilities for enlivening the sounds of the marching band. A little imagination, careful tuning, care of equipment, and purposeful rehearsal will make the ordinary percussion section into a spectacular combination of rhythm and motion.

Recommended drums for marching. All drums should be separate tension and mounted with plastic heads. The "like-grip" is used on all of the drums in the marching band. If the traditional grip is still being employed, recommended drums and equipment for its use are also listed.

Recommended Drums For Marching: (Using "Like-Grip")

Parade Drum 10"x14" in pearl finish with "Hi-Stepper"
Tenor Drum 10"x15" in pearl finish with "Verti-Holder"
Scotch Drum 10"x28" in pearl finish

Recommended Drums For Marching: (Using "Traditional")

Parade Drum 12"x15" in pearl finish with sling and leg-rest
Tenor Drum 12"x17" in pearl finish with sling and leg-rest
Scotch Drum 10"x30" in pearl finish

Recommended Drum Cadences: (Parade Drum-Scotch Drum-Cymbals)

1. Schinstine. Swingin Drum Cadences. San Antonio: Southern Music Co.

2. Schinstine-Hoey. Drum Cadences For All Occasions. San Antonio: Southern Music Co.

3. Wilcoxon, Charley. 50 Street Beats. New York: Wilcoxon.

Recommended Cadences: (Parade-Tenor-Scotch Drums-Cymbals)

1. Hoey, Fred. Tenor Drums Front. San Antonio: Southern Music Co.

2. Pratt, John S. 128 Rudimental Street Beats. Long Island: Belwin Inc.

3. Schory, Dick. Modern Marching Cadences. Chicago: Ludwig Drum Co.

# CHAPTER VIII

## THE CONCERT-PERCUSSION SECTION

The purpose of this chapter is to present ideas on increasing the efficiency of the concert-percussion section rather than to offer performance techniques already discussed in connection with the instruments.

The location of the percussion section within the ensemble is very important. This writer believes that the best location is to the director's left with the bass drum next to the bass instruments. With the bass drum in this location, the tone of the bass drum blends into the bass section and helps steady the rhythm of the ensemble. Timpani should be located at the other end of the bass section to the right for best balance. Both the bass drum and the timpani are bass quality instruments.

Music stands must be of proper height in a direct line with the director for best visual results. The timpani, bass drum and snare drum must have separate music stands. Cymbals can read off the bass drum stand. The bass drummer must be certain that the stand and music are in a direct line with the director's hands and face. For even better vision, a march-sized selection should be fastened at the top of the music stand with a clothespin if the music is not memorized.

To be certain of getting the tempo, the percussion players should get in "ready" position at a cue from the director. When the director raises his arms they get set. This is accomplished by placing the tips of the drum sticks silently against the drum head at the striking spot, by pressing the cymbals silently together, and by placing the ball of the mallets on the keys or bars. As the director makes the preliminary upbeat, percussion players move sticks and mallets away from the ready positions in rhythm with the director's baton motion and back again to strike their instruments as he makes the first downbeat. This procedure helps the percussionists feel the rhythm of the attack and better insures precision. Ready positions should be formed for all entrances after measures of rest within a composition.

In rehearsals it is often effective to have the percussion players study their parts without playing as the rest of the ensemble plays. In this way they get the "sound" of the composition and a much better musical idea of how to make their parts blend.

The percussion section must be taught to be musically alert and quick to sense ways in which it can be most helpful to the ensemble. Good percussion is extremely important to the band and orchestra.

# CHAPTER IX

## THE PERCUSSION ENSEMBLE

The percussion ensemble has as its purpose the performance of music written for percussion instruments. Percussion ensemble students have the opportunity to acquire playing experience in small groups such as duets, trios, and quartets as well as in larger combinations, and to become acquainted with percussion instruments and literature.

School contest materials have been noticeably influenced by percussion ensemble music. Such works have been written in an attempt to break away from the usual "military" type ensemble comprising bass drum, snare drum, and cymbals. Ensembles including timpani, marimba, xylophone, temple blocks, tambourine, claves, bells, timbales, tom-toms, and others, in addition to the usual "military" percussion offer players an opportunity to become acquainted with a variety of percussion instruments.

Practical substitution of instruments will often enable the ensemble to perform composition calling for the instruments which are not ordinarily at its disposal. For instance, in a composition written for xylophone and marimba, when only a marimba is available, both parts can be played

by two players, the player with the xylophone part using harder mallets than the player with the marimba part.

As the concept of percussion usage has changed, the performance of the percussion "part" has become a more difficult and involved art. The student-player is frequently called upon to play several different instruments during one composition. Ensemble training has tremendous "transfer" power in this area. Many ensemble numbers demand that the player play two, three, or as many as seven or eight different instruments. The experience received from this type of performance is directly applicable to band and orchestra playing. Of equal value is the experience of playing the different instruments called for in the various compositions. That is, the same performer should not play the snare drum, or the timpani, or the melodic mallet instruments on <u>all</u> compositions, but must be encouraged to try a different instrument on a new composition.

Through ensemble participation the student learns to depend on his own musical ability to a much greater degree than when playing as a member of a section. The student is always playing a "solo" part, and he is equally as important as any other member of the ensemble. The student will realize that only by playing the part correctly, as the composer intended, can the over-all musical effect be achieved. After

playing the more demanding literature of the percussion ensemble, the band and orchestra repertory should present fewer musical and technical difficulties to the student.

# CHAPTER X

# A MUSICAL APPROACH TO THE TEACHING AND PERFORMANCE OF PERCUSSION

## THE SUMMARY

### The Purpose

The purpose of this study was (1) to aid the teacher of instrumental music in developing a musical approach to the teaching of snare drum using a recommended "like-grip" for holding the snare drum sticks; (2) to provide the teacher of instrumental music with selected published methods of instruction which develop musicianship; (3) to provide the instrumental music teacher with teaching techniques developed by this writer covering selected and most commonly used percussion instruments.

### The Scope

The study considered the following topics in the field of percussion teaching: (1) a natural "like-grip" for holding all sticks and mallets; (2) the values and applications of Rudimental and Concert snare drumming; (3) selected methods of instruction which best attain musical results; (4) teaching and performance techniques covering the snare drum, bass drum, timpani, melodic mallet instruments and the

traps-accessories; (5) ways of improving the percussion ensemble, the concert-percussion section, and the marching-percussion section.

Recommendations

In the final analysis it is up to the instrumental music teacher to guide the percussion student through those areas of percussion knowledge and technique that will permit the student to meet the demands made upon him by the music encountered.

It is recommended that the instrumental music teacher be aware of his responsibilities to the percussion students and to see to it that "drum lessons" eventually include study in the four primary areas of percussion study: snare drum, xylophone or marimba, timpani, and traps-accessories, and, of course, musical styles.

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