PART II.

APPARATUS.

CALISTHENIC, or, more properly, gymnastic apparatus, include everything used for that purpose. This work being intended for children, it is necessary to describe only the following:

Dumb-Bells.

That dumb-bells are so popular, is due to the fact that they give the most exercise with the size of the apparatus reduced to exceeding small proportions. A pair of dumb-bells can be used anywhere at any time; they take up very little room, whether in use or not, and, in fact, constitute a whole gymnasium, provided the person using them knows how to do so thoroughly.

The best dumb-bell for the use of children and ladies is made of wood (Fig. 20); properly made, as they are when



Fig. 20.

(21)

purchased, they can be held either by the handle or by the ball, the latter hold being called the ball-grasp. Dumb-bells for children should be about 8½ inches in length.

Wands.

With a wand (Fig. 21) the pupil can exercise thoroughly every muscle, the power, strength, and flexibility of the muscles and joints being tested more or less as the exercises are done, with the hands grasping the wand close together or far apart.

The wand should be made of a straight piece of wood—preferably ash—three-fourths of an inch thick for children; and when held by the side, with one end on the floor, should be of sufficient length to bring the top level with the mouth of the person using it. This length is necessary, because it would be impossible to perform many of the best movements with a shorter one.

Indian Clubs.

Indian clubs (Fig. 22) afford an opportunity for the display of great strength and skill, but unless in the simplest way, are scarcely suitable for Fig. 21, the use of children.

The best way to find the size of club suitable for any individual, is to lay the club along the arm, holding it at the same time by the handle. The club should be

of the same length as the arm. The weight of the club varies not with the size, but depends upon the material of which it is made, some woods being much heavier than others.

Various articles of common use, such as brooms, wooden curtain-rings of proper size, and fans, are used effectively; the latter article, however, is useful only as an adjunct to graceful movements not necessarily requiring the exercise of strength.

There is also a long list of articles invented for use in calisthenic or gymnastic exercises; as they are not pertinent to this work a description of them is omitted, the apparatus mentioned being



Fig. 22.

deemed the most suitable for children and girls.

PART III.

DUMB-BELL EXERCISES.

Chest Exercises.

THE teacher will form the class as directed for the broom-drill (p. 72); the distance apart of the pupils may be less, however, but should be sufficient to prevent striking—about six feet will do.

Or the pupils may be arranged in two rows facing each other, with girls on one side and boys on the other. When the pupils are arranged in this manner the CHARGE is very effective.

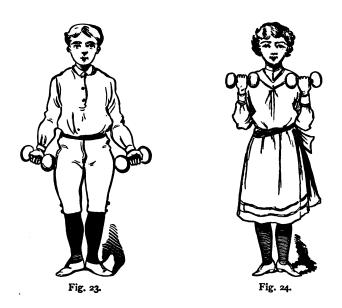
The charge is performed by advancing the right foot well to the front, at the same time extending upward and outward the right arm, the left arm being extended to the rear.

The action must be spirited to produce the best results; the body being kept erect, but well forward, the extended foot and knee being in a perpendicular position.

FIRST POSITION. At the command—ATTENTION! the pupils will assume that position with the dumbbells, held in the hands sideways (Fig. 23), the backs of the hands being to the rear, and the fingers to the front.

(24)

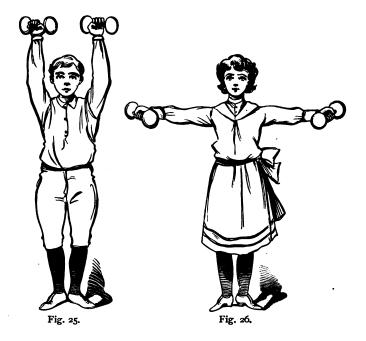
SECOND POSITION. At the command—SECOND POSITION! the pupils will raise the bells to the shoulders (Fig. 24), keeping them in a horizontal position; the arms from the shoulder to the elbow must be rigidly held against the side. It is well to execute the move-



ment both in slow and fast time. Always practice first with slow time, so that the weight of the dumbbells is under perfect control, otherwise the energy of the movement by an inexperienced manipulator is apt to throw the bells against the body with too much force.

THIRD POSITION. At the command—THIRD POSITION! (Fig. 25), the pupils will raise the bells upward

the full length of the arm, at the same time turning the dumb-bells around so that the palms of the hands face to the front. The movement may be executed in the same manner, but changing the direction of the turn so that the backs of the hands are to the front—



or it may be performed without a turn. All these slight variations in a movement are of importance, though they do not appear so at first sight. The main portion of the movement exercises an entirely different set of muscles to those exercised by the turn of the arm or wrist.

FOURTH POSITION. The pupils will move the outstretched arms outward and downward until both bells are on a line and even with the shoulders (Fig. 26).

The usual fault in this—and, in fact, in nearly all exercises, consists in doing them too quickly; the arms must be brought down slowly to the position in the

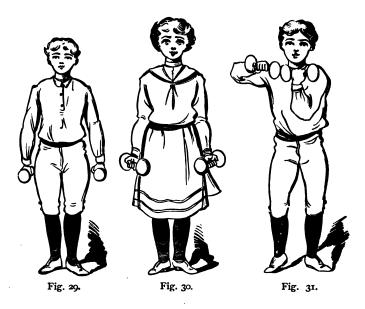




figure, and not be allowed to go beyond it, or the effect with a number of pupils will be entirely destroyed.

The last four movements may be performed by a class in unison, and excellent effects produced by varying the order of the exercises. For example, suppose the teacher has twenty pupils arranged facing each other in two rows of ten pupils each. Begin by num-

bering all the pupils from one to twenty, each pupil to remember whether his or her number is odd or even. Then instruct them that while all the even numbers are performing the second movement (Fig. 24), the odd numbers are to take at the same time the position indicated in Fig. 26, by raising the arms outward and



upward to a level with the shoulders. The odd numbers may then be ordered to the third position (Fig. 25), while the even numbers take the second or fourth position. In this manner the exercises are varied and the interest kept up.

FIFTH POSITION. The pupils will place the elbows against the waist, holding the bells vertically (Fig. 27).

The teacher may now count—ONE, Two! ONE, Two! etc., the pupils at the same time moving the elbows backward at ONE, and forward at Two.

In executing this movement the pupils will have a tendency to let their elbows point outward when performing the backward motion. This should not be allowed, as the elbows must move backward in a straight line if the best results are to be gained.

SIXTH POSITION. The pupils taking the ball-grasp, will place the bells behind them (Fig. 28).

A number of exercises may be performed with the ball-grasp. As they consist almost entirely of a repetition of the previous exercises, a description of them is omitted.

The movement in the figure is to be performed from position of attention, by allowing the bells to slide forward in the hands until they are held by the ball instead of the handle; place them behind the back, and from that position swing them around to the front level with the shoulders, or swing them upward over the head; in fact, any movement previously learned can be executed with the ball-grasp.

SEVENTH POSITION. The teacher will frequently permit the pupils to rest. At the command—REST! the bells will be brought down to the side, with the balls in front and rear (Fig. 29), which shows the pupil with his feet in position of attention. This movement may be varied by the pupil allowing the weight of the body to rest upon one foot, slightly extending the other.

EIGHTH POSITION. The pupils will turn the elbows inward, at the same time turning the palms of the hands outward, the position assumed being plainly shown in the figure (Fig. 30).

To do this properly the bells must be held as in Fig.







Fig. 33.

29, but clear of the body, then as the teacher commands—Eighth position: One! Two! One! Two! the pupils will turn the elbows in and out, at the same time turning the dumb-bells.

NINTH POSITION. At this command the pupil will take the position indicated in the drawing (Fig. 31), in which the bell in the left hand is held horizontally against the breast, the bell in the right hand a little higher than the shoulder, and touching the bell in the left hand. The teacher will now say—ONE! the pupil moving the right arm downward and backward until as far behind the back of the hips as possible, and resume the position in the figure. Two! the pupil will extend the right hand and arm outward and level with the shoulder, resuming position as before. THREE! the pupil will raise the right arm upward, stretching it to its full height (Fig. 32).

At the command—RIGHT! the pupil will place the right hand upon the breast, same as before with the left, and execute the same movements with the left hand. The teacher using the same commands, indicating the hand to be used at the beginning of the exercise by the command—RIGHT (or LEFT)!

Shoulder Exercises.

The teacher will command—FIRST POSITION! The pupil will take position as in the figure (Fig. 33), with the upper arms extended horizontally, the elbows bent, the forearms turned inward toward the body, the wrist also bent, and the palms of the hands turned upward, with the bells well under the armpits. At the word—ONE! the pupil will extend the arms horizontally, and hold the bells with the backs of the hands upward. At the word—Two! the pupil will bring the arms down

quickly to the side. And at the word—THREE! will again place the bells under the arms, as at first.

SECOND POSITION. The pupil will hold the bells upon the breast vertically (Fig. 34); at—ONE! will extend the arms forward to the front, resume position,



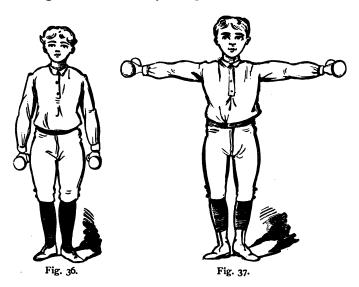
and at—Two! extend both arms outward and sideways to the body. At—THREE! keeping the bells the same height from the floor as the shoulder, the pupil will bend the arms backward as far as possible. At—Position! resume position.

Elbow Exercises.

The teacher will command—POSITION! and the pupil will take position as in Fig. 35, with the backs of

the hands turned toward the face and the elbows well up.

This position is somewhat difficult to maintain, as it strains every muscle of the arms, wrists, and fingers, and is therefore a very good exercise. The three following movements may be performed several times



each, but the pupil should do them thoroughly, and not mind the little aches which will at first result.

The first movement is made toward the rear, inclining downward at an angle of about forty-five degrees, which will bring the right elbow down near the waist, the forearm keeping the same bend.

Second movement. Move the arm directly backward as far as possible

Third movement. Move the arm upward as far as possible.

In these exercises always maintain the bend in the arm, as it is holding the position which exercises the elbows.





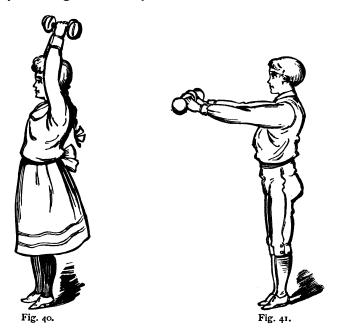
Execute the exercises either with one arm at a time, or both together.

Arm and Hand Exercise.

The pupil will at the command—POSITION! take the position indicated (Fig. 36), thumbs to the front, the bells pointing front and rear.

First movement. Move both arms outward and upward until level with the shoulder (Fig. 37).

Perform the movement slowly, as though the dumbbells were of considerable weight. In all movements of this description the muscles are much more exercised by exerting them slowly.

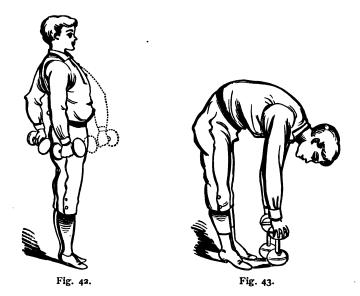


Second movement. Carry the arms outward and upward as far as they will go, keeping the bells always pointing in the same direction (Fig. 38).

This movement will bring the bells well over the head, as in the drawing; some practice will be necessary before it can be well done.

Third movement. Move the arms forward and upward to the level of the shoulders (Fig. 39), keeping the arms well stretched and level, otherwise the line of pupils will present an uneven appearance.

Fourth movement. Continue former movement until the arms are well above the head (Fig. 40).



Fifth movement. Carry the arms from their position in front of and level with the shoulders, outward and backward as far as possible.

Sixth movement (Fig. 41). Hold the bells in front and horizontally; swing the arms around behind the back.

Seventh movement. Stand as in the first position;

hold the right arm in its place, and swing the left arm outward and upward, bending the body sideways at the same time (Fig. 42). Do this exercise alternately with both arms.

Eighth movement. Hold the bells with the ball-grasp

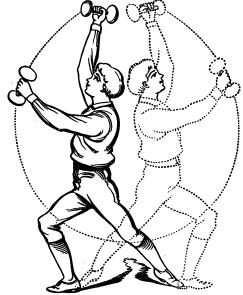


Fig. 44.

directly in front and touching each other (Fig. 43); bend the body until the bells touch the floor.

Ninth movement. From the position in Fig. 43 advance the dumb bells along the floor as far as possible, and return the body to an upright position by springing backward. In doing so draw the arms quickly back to the sides so that the bells are near the hips.

Tenth movement. Stand with one foot advanced, raise the arm on the same side as the advanced foot, throw the other arm to the rear. Change the position quickly by stepping backward with the advanced foot and placing it in the rear, at the same time changing

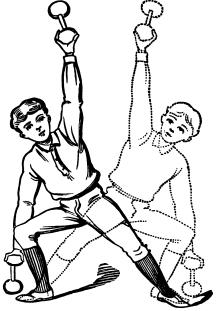


Fig. 45.

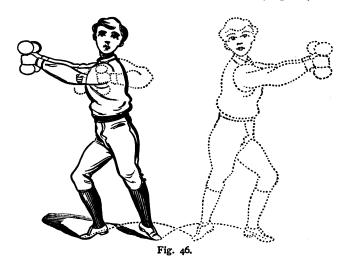
the positions of the arms. Repeat the exercise with the other foot advanced.

Knee Exercise.

FIRST POSITION. Place the feet well apart, one in front and one in the rear. Turn the body well around,

bending the knee at the same time until in the position in the figure (Fig. 44); then swing back into the position represented by the dotted line.

SECOND POSITION. Place the feet apart sideways; bend downward, taking position with one arm well extended upward and straight, the other arm straight, the hand on the bell which rests on the floor (Fig. 45).

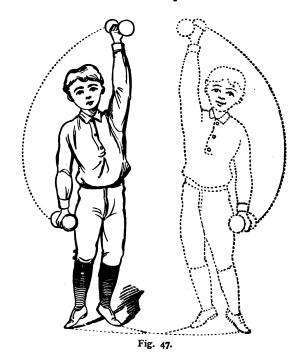


The right knee is now bent, the left leg being straight. Exercise by reversing the position. In doing so swing the left arm over until the bell touches the floor, at the same time swinging the right arm upward. The movement of the arms must be made while the body is changing its position.

THIRD POSITION. From the position of attention, drop the body quickly to a sitting posture, at the same

time raising the heels and allowing the bells to touch the floor. In rising to position of attention do so as slowly as possible.

These exercises should be repeated several times.



Exercises of the Leg and Foot.

The first movement is executed by leaping from right to left, as in the drawing. In making the movement draw the arms quickly back, placing the bells against the breast. In jumping turn the body half around, and again extend the arms fully (Fig. 46). A reference to

the figure will render the movement easy to understand.

The second movement (Fig. 47) consists of a swinging movement from side to side, and is most effective when executed by a number of pupils in unison. Raise on the right foot, the left arm up, right arm down; swing over to the left, at the same time dropping the left arm to the side, and raising the right arm. As soon as the left foot reaches the floor, swing back again with the right foot, precisely as was done with the left, and reverse the position of the arms.

PART IV.

WAND EXERCISES.

The wand exercises are to a large extent exactly similar to those described in the article on the Broom Drill (p. 71). Wands, however, afford a larger variety



Fig. 48.

of exercises, for the reason that they are alike at both ends; whereas the broom interferes with many movements which can be executed with the wand.

In the following series of exercises, those which are (42)

similar to the broom drill exercises are placed in their order, and the reader is referred to the paragraph describing the same exercise in the broom drill.

The pupil will execute the movement commanded as the last word of the command is delivered by the



teacher, and not before; this will insure unity of action, and is the invariable rule.

Suppose the command ORDER ARMS is given, the pupils will execute the movement commanded only at the word ARMS. The word ORDER *indicates* the position to be taken; the second word, ARMS, is the command to take it.

FIRST POSITION. Is the same as Order Arms (p. 73);

the end of the wand rests upon the floor. From this position the following movements may be made.

First movement. Grasp the wand with both hands held apart as in the drawing (Fig. 48).

For the sake of effect in giving an exhibition of these exercises the teacher may order the pupils to raise the



right arm upward and lower the left by commanding RIGHT! which will throw the wand into an oblique instead of a horizontal position. The command LEFT! will indicate that the left arm is to be raised and the right lowered. The pupils must not bend the elbows during this exercise.

Second movement. Raise the arms upward and outward (Fig. 49), hold the wand level with the shoulders.

Third movement. Draw the hands in toward the body, at the same time elevating the elbows (Fig. 50).

As in the previous exercise this movement may be varied by lowering the right or left arm as commanded. Fourth movement. Lower the wand to the waist, turn



the body around to the right without moving the feet, keep the head straight, and throw the left arm around behind the back, the right arm crossing the front of the body (Fig. 51), as the teacher commands right or left. Reverse the movement, being careful to maintain the same height from the floor with both ends of the wand.

Fifth movement. Bring the wand to the front of the

waist again and elevate it above the head (Fig. 52). The teacher will now command—RIGHT DOWN! the pupil will drop the right elbow to the waist, the left arm at the same time bending toward and over the head. At the command—UP! the pupil will raise the

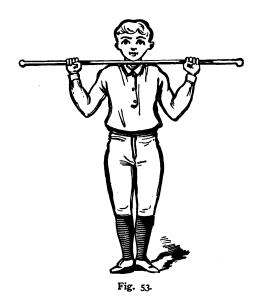


Fig. 52.

wand again, and at the command—LEFT DOWN! will drop the left elbow same as was done with the right, the right arm being this time bent over the head.

Sixth movement. Hold the wand level with the chin, the elbows down (Fig. 53). At RIGHT, extend the right arm out sideways as far as possible and elevate the left

elbow so that the wand rests on the arm (Fig. 54). If the hands are not just the right distance apart the movement will show it at once, because when the right arm is well extended the left hand should rest against the breast. At LEFT, reverse the movement by resum-

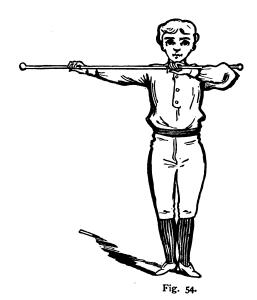


ing position in Fig. 53; hold the position for a moment and then by extending the left arm and bending the right, the opposite position is gained, the wand meanwhile being kept in a horizontal position.

Seventh movement. Grasp the wand with the hands farther apart (Fig. 55). At RIGHT, swing upward with

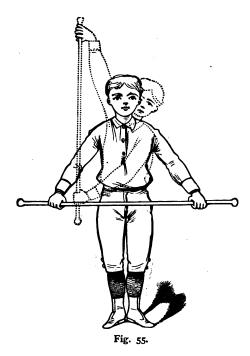
the right hand as in the dotted lines of same figure. At LEFT, throw the left arm up.

Eighth movement. At RIGHT, raise the right arm and throw the wand behind the head, always maintaining the hold with the left hand (Fig. 56). At LEFT, reverse



the movement. Or, at RIGHT throw the right arm up as before, but after throwing the arm over the head continue the movement until the wand is down behind the back and in a horizontal position. Bring the wand back over the head by raising the left arm instead of the right, and again drop it to the front as in solid part of figure.

Ninth movement. Extend the left arm to the front and the right arm to the rear (Fig. 57); let the wand rest against the hip. At UP, raise the right arm so that



the wand points downward to the front at an angle of 45 degrees.

Tenth movement. This movement requires some skill, and is difficult to do while keeping the arms straight. Practice of the preliminary exercises with the arms is very necessary before any attempt is made to execute this

movement. By the practice of the elementary exercises is meant the practice of those exercises in the first part of this book which are performed without apparatus. In fact, the preliminary exercises are of the utmost im-

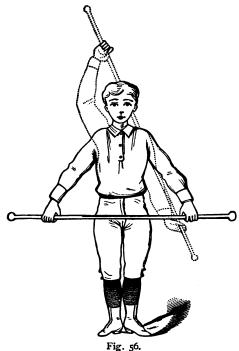


Fig. 50.

portance, it being as necessary to have the foundation of calisthenic exercises before the more difficult movements are attempted, as it is to have a foundation before building a house. In executing the movement, hold the wand in front, elevate the arms, pass the wand over the head and drop t in the rear (Fig. 58).

Eleventh movement. While the wand is behind the back as at the end of the foregoing exercise, extend the

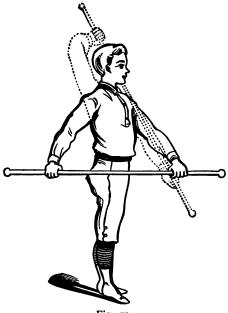
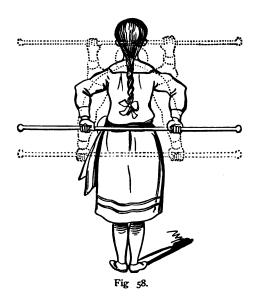


Fig. 57.

hands along the wand to the ends, at the same time turning the wrists so that when the hands are on the ends of the wand the thumbs are in front. The pupils must move both hands simultaneously and also execute the movement quickly. This movement will bring the wand up to the back of the neck and on the shoulders (Fig. 59).

From the last position (Fig. 59) many movements may be executed by bending the body in various directions. The position of the arms will make the exercise



of turning the body more efficacious in its result upon the muscles of the body.

The teacher may now command—BEND FORWARD! the pupils bending forward until their heads and shoulders are well down in front as in the drawing (Fig. 60).

At Position! the pupils will resume position with wand on the shoulders.

BEND RIGHT! At this command the pupils will bend the body over to the right as far as possible, but always keeping the arms and wand in the same relative position to the body.

BEND LEFT! The pupils will execute this movement

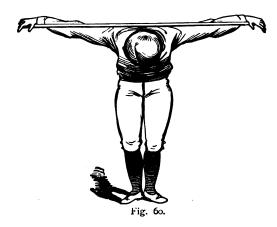


in the same manner as BEND RIGHT. It differs only in the direction.

Again resuming POSITION, the pupils will be ready for the command—RIGHT UP! In executing this movement, hold the body as erect and immovable as possible, and raise the right arm, at the same time lowering the left arm.

At LEFT UP! the pupils will execute the same move-

ment as in RIGHT UP, by elevating the left arm and lowering the right. A pretty variation may be made by teaching the pupils to advance one foot or to step out sideways with either foot while executing RIGHT UP or LEFT UP. These variations, however, will naturally suggest themselves to the teacher, who will also find that various movements (two or more) may be combined and an original exercise be performed.



Twelfth movement. Hold the wand in front, the hands well apart as in the figure (Fig. 61). At ONE, step to the right from A to B, at the same time swinging the wand upward with the right hand as in the dotted line. At Two, step back to A, the arms regaining original position, and continue the step onward to the left to C, the left arm at the same time swinging upward. This is a very pretty movement executed in unison and in time with music.

Combined Exercises.

These movements are executed by the pupils in pairs, each couple using either one or two wands, according to the nature of the exercise. The teacher

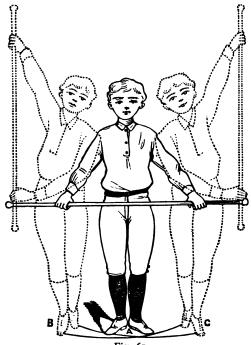


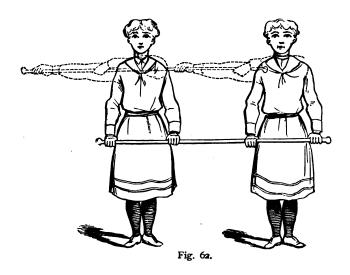
Fig. 61.

should command — COMBINED EXERCISES! At this command, the pupils will arrange themselves in couples, leaving about six feet space between each couple.

FIRST POSITION. At this command the pupils will

hold the wand as in Fig. 62; the wand should be held so that it is divided into three parts; one part between the pupils, the other two parts between the hands of each.

First movement. RIGHT—Raise the wand sideways and upward until level with the shoulders. LEFT—



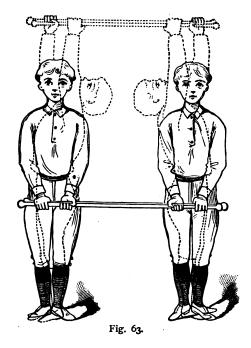
Drop the wand to position and raise sideways and upward to the level of the shoulders again.

SECOND POSITION. From the previous position take that of Fig. 50, the only difference being that there are two pupils instead of one holding the wand. The movement is also the same.

THIRD POSITION. This is the same as in Fig. 49. FOURTH POSITION. RIGHT—The pupils will extend

their right arms and elevate their left elbows. LEFT—Reverse the movement. Fig. 54 is the same.

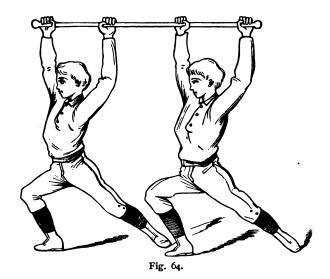
The foregoing exercises are all executed with the hands in the same relative position as in Fig. 62. All



of these movements can also be executed in connection with marching.

FIFTH POSITION. The students will take the position indicated in the dotted lines (Fig. 63), in which they stand back to back, holding the wand directly over their heads. At the word of command—FRONT!

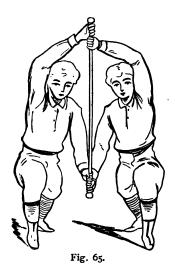
the pupils will turn on their heels and face to the front, dropping the wand the full length of the arms, as in the solid part of the figure. At the command—POSITION! they will again take the position with the wand over their heads, and at the word REAR, they will face to the rear, bringing the wand down same as in front.



SIXTH POSITION. Is the same as in Fig. 62. At the command—RIGHT! CHARGE! the pupils will elevate their arms into a vertical position and charge toward the right (Fig. 64). At the command—LEFT! CHARGE! they will do the same toward the left.

SEVENTH POSITION. The pupils face each other, and both hold the wand with the hands far apart as in Fig. 61.

First movement. RIGHT! At this command the partners simultaneously step from point A (Fig. 61) to point C, carrying the wand out to the right as in the dotted lines, to a vertical position; they then step in the opposite direction to B, again elevate the wand to a vertical position. This swinging motion is to be



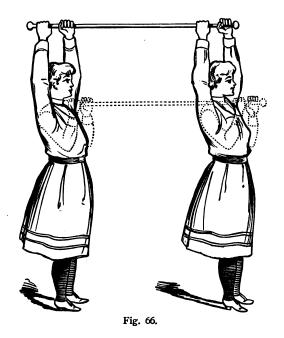
kept up at the command—RIGHT! LEFT! until HALT is called, when the pupils will rest in the position they began with.

Second movement. CHARGE! the pupils will charge, assuming position in Fig. 65, or they can drop on one knee at the command of the teacher.

EIGHTH POSITION. The pupils will take the posi-

tion portrayed in Fig. 66, in which they face in the same direction, and hold the wand over the head; the right hands behind the left.

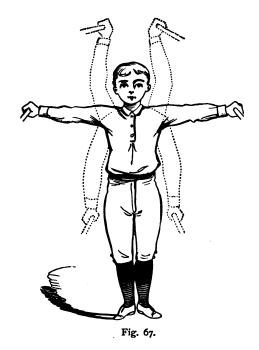
At the command—RIGHT! the wand is brought



down on the right shoulder as in the dotted lines. At LEFT! the wand is brought down on left shoulder in the same manner.

NINTH POSITION. At this command the pupils will take one wand each instead of one wand to each pair,

as before, and will take position as in Fig. 67; the pupils face each other, standing a wand's length apart, and holding the end of a wand in each hand with the arms extended.



First movement. Both pupils will bring their arms down to their sides.

Second movement. Both pupils will raise the arms outward and upward until directly over the head, as shown in the dotted lines.

Third movement. Each pupil will raise the right

arm and lower the left, then raise the left and lower the right; continue the alternating movements until HALT is called.

TENTH POSITION. The pupils will hold the wands to their sides, and will face each other as in Fig. 68.

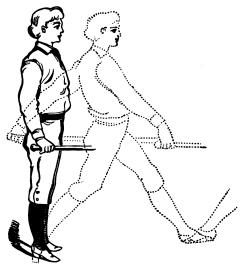


Fig. 68.

First movement. Both pupils will step forward with the left foot, at the same time throwing their right hands forward and their left hands backward, as in the dotted lines of the figure. The right foot of each pupil will now be exactly midway between them. Change the movement by returning the extended feet to their position as in solid part of the figure, and then advance

the right foot, throwing the left hand to the front and the right hand to the rear.

Second movement. The pupils will raise the wands

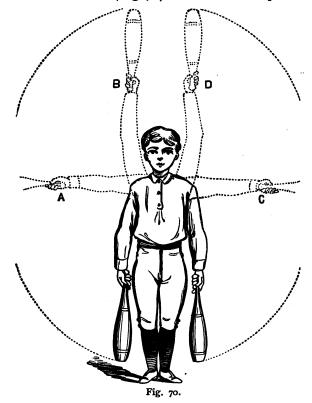


from A and B outward and upward until level with the shoulder, as at C and D, and then by bending the elbows and wrists bring them under the armpits (Fig. 69).

PART V.

INDIAN CLUB EXERCISES.

As in all exercises the first command of the teacher will be ATTENTION (Fig. 70). The heels are placed to-



gether, and the arms stretched downward at the sides, the thumbs outward. The clubs should hang without touching the legs.

(64)

The SECOND POSITION is indicated by dotted lines. The clubs being raised outward and upward to A and C until level with the shoulders, as in the figure.

THIRD POSITION. Continue the upward movement of the arms to B and D until the clubs are held vertically with the arms stretched upward fully, and as close to the head as possible.



FOURTH POSITION (Fig. 71). The pupil will hold the clubs vertically with the hands directly in front of and level with the shoulders, as in the solid portion of the figure.

FIFTH POSITION. Swing the arms outward and backward until in line with the shoulders, as in the dotted portion of figure.

SIXTH POSITION. Continue the last movement until the arms are as far backward as they can go, still maintaining the clubs in an upright position.

SEVENTH POSITION (Fig. 72). The pupil will hold the clubs vertically in front with the elbows at the sides. At the command—SWING! RIGHT! straighten



the right arm outward to the front, at the same time allowing the club to fall outward; swing the club from front to rear downward and from rear to front upward. At the command—SWING! LEFT! resume position with the right arm and hand, and perform the same movement with the left arm as was previously executed with the right. At the command—SWING! BOTH!

swing the club in right hand with and in the same direction as the club in the left. At the command—REVERSE! RIGHT! reverse the swing of club in right hand; the clubs will now be swinging in opposite directions. SWING BOTH, and reverse the left, is the same



movement in the opposite direction. It is well to execute these movements in every way.

EIGHTH POSITION. Stretch the arms outward level with the shoulder, holding the clubs upright (Fig. 73).

NINTH POSITION. Drop both clubs toward the head and allow them to rest upon the arms (Fig. 74). This movement is for the purpose of exercising the wrists.

It is performed by slowly dropping the clubs upon the arms and again slowly raising them to an upright position.

TENTH POSITION. Raise both clubs again into an upright position and let them fall outward until in line

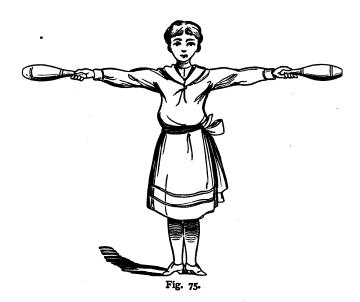


with the arms (Fig. 75). As in the previous movement, this exercise should be performed slowly, and done several times in succession.

ELEVENTH POSITION. Hold the clubs again upright as in Figure 73, turn the wrists so that the clubs fall outward and downward (Fig. 76); again raise them to an upright position.

In these exercises the arm is not moved, the purpose being to exercise the wrists and hands. All the movements made in taking the positions should be executed at least four times in succession.

There are an unlimited number of Indian-club exercises performed by professional club swingers. These



exercises consist principally of various complicated swinging movements, which require a great deal of skill, but which have no effect upon the muscles other than that produced by the exercises given in this work. These exercises constitute about all that are necessary to develop the muscles of the arms, shoulders, and body. The effect upon the muscles of the legs pro-

duced by club swinging is very small, unless the movements are executed while the feet are in motion. For instance: the swing commanded on page 66, seventh movement, may be executed at the same time as a step



is taken backward or forward, or as several steps are taken in one direction. Such exercises as these are rather violent, and scarcely suitable for children, unless with very light clubs.