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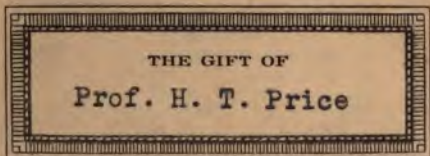
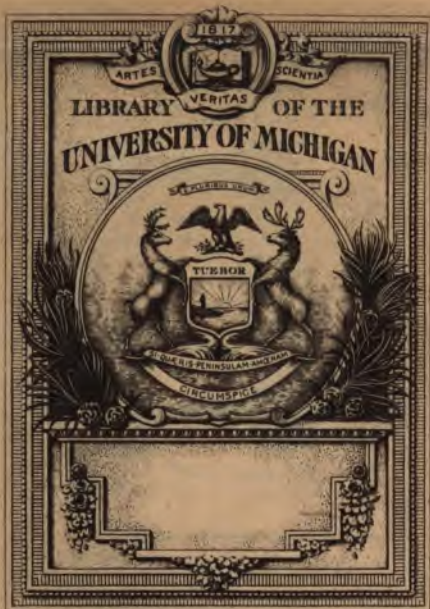
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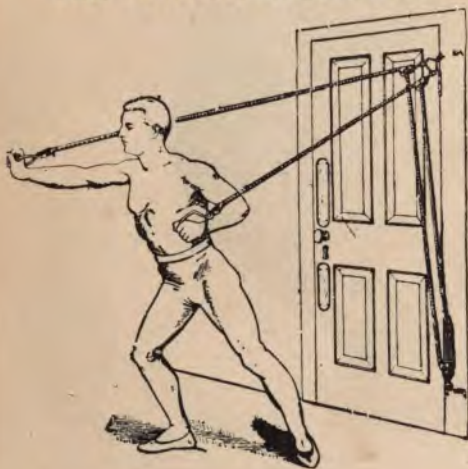


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PREFACE.

WE have endeavoured in the following pages to give as complete an account of exercises with Indian Clubs as our knowledge of the subject would allow.

We have arranged our subject systematically, bringing together under one head all movements of similar character, without regard to their relative difficulty; the portions of the book dealing with the more difficult exercises are, however, printed in small type, so that beginners may easily see what to read and what to omit. In dealing with the more advanced exercises, we have employed a system of short notation, the invention, in its main features, of Mr. J. H. Jones, of the Orion Gymnastic Club; without the aid of this system it would have been impossible for us to accomplish our object within reasonable limits. In order to guard against typographical errors in the use of this system, we have each of us, since the book was in type, independently done all the exercises in the description of which it is employed; we believe, therefore, that very few errors of the kind will be found.

A certain number of the illustrations are reproductions of photographs taken by Mr. George Mitchell, of Lewisham. The remaining illustrations are by Mr. B. M. Jenkin, of the German Gymnastic Society, to whom, with Mr. Jones and other friends who have helped us, our thanks are due.

We regret that we have found it necessary to depart from the nomenclature employed by Mr. E. F. Lemaire in his book on clubs; for the help of such of our readers as may be familiar with that work, we give a table showing the differences between the terms employed by us and by that author.

G. T. B. COBBETT.

A. F. JENKIN.

August, 1892.

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INDIAN CLUBS.

CHAPTER I.

INTRODUCTORY.

§ 1. *Introductory.*—In the present chapter we shall state our views as to the proper weight and shape of clubs, give a general explanation of the nomenclature employed in subsequent chapters, and offer some hints as to the style in which exercises with clubs should be performed.

We wish, at the outset, to insist upon the great importance of careful and constant attention to style, not only for the sake of appearance, but also in order that the utmost physical benefit may be derived from the exercise. If you swing clubs without regard to style, you will naturally contrive to cast almost all the labour upon your strongest muscles, so that the exercise, instead of searching out and strengthening your weak points, will merely tend to increase the muscles which are already disproportionately developed; whereas, if you attend carefully to style, you will be compelled to bring a great variety of muscles into play, so that your weakest muscles will be at first most severely taxed, and will gradually become developed in proportion to those which are naturally strong.

It is hardly necessary to say that the explanations as to

nomenclature contained in §§ 3-9 are essential to the proper understanding of the subsequent parts of the book.

§ 2. *Weight and Shape of Clubs.*—For ordinary use, we recommend clubs weighing between 2 and 3 lbs. each; difficult exercises done in correct style with clubs of that weight afford plenty of muscular exertion, even to a strong man. When you have become fairly proficient in the use of clubs of this weight, it is certainly well to use, occasionally, clubs of greater weight. We would urge upon you, however, when trying to use clubs of more than 2 or 3 lbs., rather to attempt difficult exercises with clubs of, say, 5 lbs. each, than easy exercises with clubs of 15 or 20 lbs. or more.

There is, of course, no reason why a practised athlete should not swing clubs of 20 lbs. or more, but the use of such clubs by men who are not of considerable muscular development is injurious and even dangerous.

In fig. 1 are shown clubs of various sizes drawn to scale. *a* shows a club suitable for ordinary use; such a club may be made of willow or some similar wood, and should weigh about $2\frac{1}{4}$ lbs. *b*, *c* and *d* show larger clubs; made of elm, such clubs weigh about 5 lbs., 10 lbs. and 15 lbs. respectively. For young boys or ladies we should recommend a club similar in shape to that shown in *a*, but only about 22 inches in length and proportionately reduced in thickness; such a club made of willow weighs about $1\frac{1}{2}$ lbs. In fig. 1 the figures down the centre of each club give the diameters of the club at the points indicated by the dimensions in the margin.

The shape of a club is a matter of more importance than might be supposed; an ill-shaped club is as unsatisfactory as an ill-balanced foil. Clubs made according to the drawings in fig. 1 will be found thoroughly satisfactory; we

should not, however, like to say that other equally satisfactory designs for clubs might not be found.

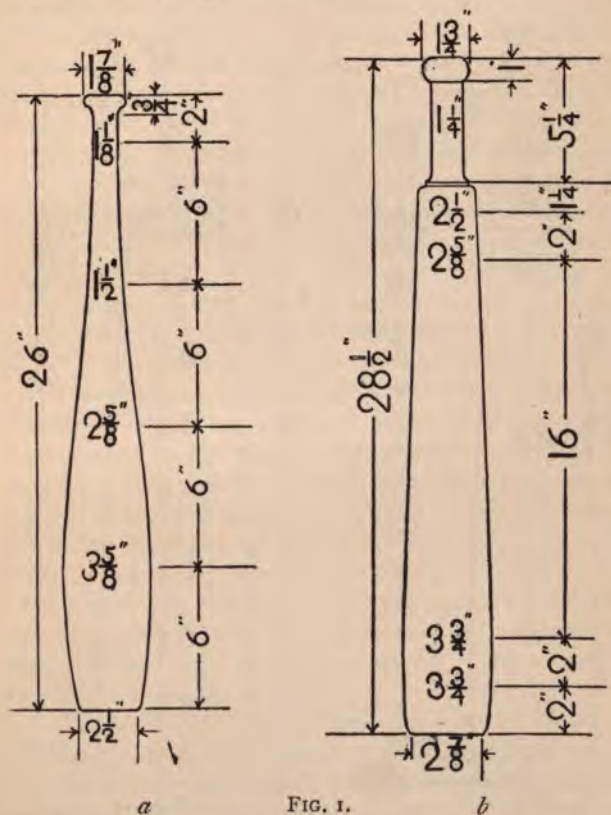


FIG. 1.

An ingenious, and by no means unsatisfactory, club of adjustable weight has been invented by Mr. H. Adler, of 198, Mile End Road, London.

§ 3. Meaning of "Principal Plane"; "Shoulders Square";
 "Shoulders Half or Full Right or Left."—For almost all

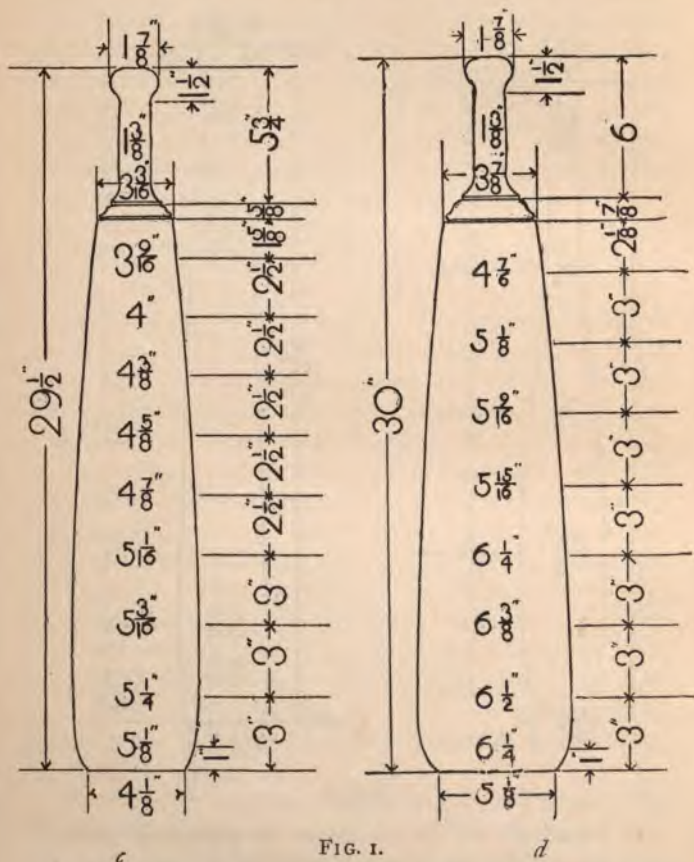


FIG. 1.

exercises with clubs you should stand with the feet some

distance apart. The length of the stride should be in proportion to your height ; for a man of six feet, 18 inches is about the proper clear distance between the heels. Unless the contrary appears, you should stand thus for all the exercises described in the book. As will appear more fully later, in all the more characteristic exercises the point of each club moves in a course lying in, or nearly in, a vertical plane passing through the heels ; the course pursued by the point of the club is usually parallel to that plane, but is sometimes actually in it and sometimes slightly inclined to it. We shall call this vertical plane through the heels the "principal plane."

For many exercises the shoulders should be kept square to the front, so that both shoulders lie in the principal plane ; when you stand in this position, the shoulders are said to be "square." For other exercises it is necessary to turn the shoulders more or less to the right or left. If the shoulders are turned through half a right angle, reckoning from the position with the shoulders square, the shoulders are said to be "half right" or "half left," as the case may be ; if the shoulders are turned through a complete right angle, the shoulders are said to be "full right" or "full left," as the case may be. Fig. 2, p. 7, shows a man with the shoulders square, fig. 13, p. 27, a man with the shoulders half left, and fig. 7, p. 20, a man with the shoulders full right.

§ 4. *Meaning of "Right" and "Left" ; "Front" and "Rear" ; "In Front of" and "Behind" ; "Forwards" and "Backwards."*—If you stand with the shoulders square, the meaning of the expressions above mentioned presents no difficulty ; if you are told to move one hand to the right or left, you will naturally move it in a direction parallel to the principal plane ; or, if you are told to move the hand

forwards, you will naturally move it in a direction at right angles to the principal plane.

It is convenient in all cases to use these expressions with reference to the original position with the shoulders square ; so that a movement to the right or left is always in a direction parallel to the principal plane, and a movement forwards or backwards is always in a direction at right angles to the principal plane. The expressions "front" and "rear," "in front of" and "behind," are used in the same way ; so that, for example, when the shoulders are full right, the left shoulder is said to be directly in front of the right shoulder.

§ 5. *Meaning of turning the wrist "In" or "Out," and of bending the wrist "Up" or "Over."*—There are two movements, or rather two pairs of movements, of the arm and hand, of such constant occurrence in exercises with clubs that they must be given convenient names.

First, you may turn the forearm on its own axis without moving the upper arm. If you turn the right forearm in this manner to the right, or the left forearm to the left, you are said to turn the wrist "out." If you turn the right forearm to the left, or the left forearm to the right, in this manner, you are said to turn the wrist "in." In medical language, turning the wrist "in" is known as "pronating" the forearm, turning the wrist "out" as "supinating" the forearm. In putting a common corkscrew into a cork with the right hand, you turn the wrist out ; if you were to put the corkscrew in with the left hand, you would turn the wrist in.

Secondly, you may, without moving the forearm, bend the wrist, either so as to cause the palm of the hand to approach the front of the forearm, in which case you are *said to bend* the wrist "up," or so that the back of the

hand approaches the back of the forearm, in which case you are said to bend the wrist "over."

In fig. 6, p. 18, the right wrist is turned somewhat out. In fig. 10, p. 24, and fig. 16, p. 42, the right wrist is bent up. In fig. 25 (2), p. 96, the right wrist is bent considerably over.

§ 6. *The "Carry."*—The most convenient position for holding the club before beginning an exercise is shown in fig. 2; it is called "the carry."

§ 7. *"Circles," "Swings," and "Twists."*—In the more characteristic exercises, the point of each club moves in an approximately circular or spiral course. Every movement of the club, in which, starting from a vertical or nearly vertical position with the point upwards, the club completes a single revolution, again reaching a vertical or nearly vertical position, and in the course of which the point pursues an approximately circular or spiral course, is known as a "circle."

The sketches (fig. 3) show roughly the nature of the movements known as circles; each sketch shows the path of the point of the club, and also the club itself in various positions occupied by it as the "circle" is performed. We ought to mention that we shall sometimes be obliged to use the word "circle" in its ordinary geometrical sense.



FIG. 2.

Circles are divided into "swings" and "twists." Circles

in which the club and forearm are kept in a straight line throughout the greater part of the movement are called "swings." Circles in which the club is, during the greater part of the movement, swung from the wrist so that the point of the club moves approximately in a circle about the hand as a centre, are called "twists." A few circles lie, as it were, on the border-line between swings and twists. These intermediate circles might be described by one man as swings, and by another as twists ; but, as a rule, there is

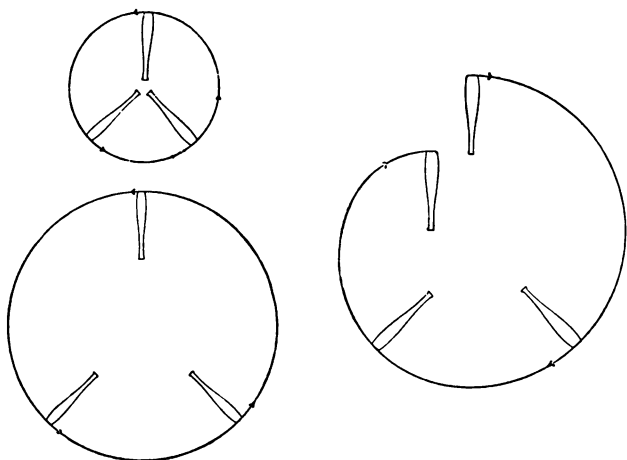


FIG. 3.

not much doubt whether any particular movement partakes more of the character of a swing or of a twist.

§ 8. *Outward and Inward Circles.*—In the circles usually done, the point of the club moves, as has been said, in, or nearly in, the principal plane ; the course of the point of the club being usually parallel to that plane, though some-

times actually in it, and sometimes slightly inclined to it. Circles with the right club, in which the point of the club moves in the same direction as the hands of a clock placed facing you (when your shoulders are square), are called "outward" circles. The corresponding circles with the left club, in which the point of the club moves against the hands of a clock so placed, are also called outward circles.

Circles in the opposite direction—namely, circles with the right club in which the point of the club moves against the hands of a clock placed as above mentioned, and circles with the left club in which the point of the club moves with the hands of a clock so placed—are called "inward" circles.

§ 9. *Short Notation.*—For the sake of brevity in the description of the more complicated exercises, we adopt a short system of notation, of which we may here describe the main features. Each of the outward circles usually done is denoted by a capital letter; for example, the circle known as an "outward front swing," which is described in § 12, is denoted by the letter A, and the circle known as an "outward back twist," which is described in § 13, is denoted by the letter B.

As will appear, to every outward circle there is a corresponding inward circle. The latter circles are denoted by the corresponding small letters, so that an "inward front swing" is denoted by the letter "a," and an "inward back twist" by the letter "b."

In exercises in which both clubs are employed, the letters indicating the movement of the right club are placed above those indicating the movement of the left club; thus, $\overset{A}{B}$ means an outward front swing with the right club done in combination with an outward back twist with the left club.

Many exercises may be done with the shoulders square, or with the shoulders half or full left or right; to indicate,

where it is necessary, the position of the shoulders, we employ the following symbols, placed over the letters denoting the circles:—

—	meaning	. . .	shoulders square.
/	„	. . .	shoulders half left.
\	„	. . .	shoulders half right.
┌	„	. . .	shoulders full left.
└	„	. . .	shoulders full right.

Thus, $\overline{\text{A}}$
B means an outward front swing with the right club done in combination with an outward back twist with the left club, with the shoulders square.

The remaining features of the system will be more conveniently explained later. In order to familiarise you with the system, we shall introduce it from the first.

§ 10. *Style*.—As has been said, you should, as a rule, stand with the feet apart, the length of stride being about 18 inches, or a little more or less according to your height. For exercises with the shoulders square, or half right or half left, the toes should be turned out at an angle of about 45°. When however you turn the shoulders full right or full left, you should turn on the heels, so that one toe points straight to the front, and the other to the side to which you turn.

The knees should be kept straight and the muscles of the legs well braced, so that you are thoroughly steady on your feet. The hips should be pressed back and the chest thrown forward. There is a strong tendency at first, especially with heavy clubs, to let the knees bend in the course of some movements. There is also a tendency to hollow the back unduly, and to allow the hips to come forward, which has a singularly ungainly effect.

The head should be carried erect and kept steady, but

should turn with the shoulders, so that you always look in a direction at right angles to the line of the shoulders. In order to keep the head in the proper position, you will find it necessary to keep the eyes fixed on some point slightly above their own level in a direction at right angles to the line of the shoulders for the time being. It is almost impossible to keep the head steady if you let the eyes wander.

Some further general remarks as to style, which may be read when you have learnt a certain number of exercises, will be found in § 92.

CHAPTER II.

OUTWARD CIRCLES.

§ 11. *Introductory.*—In the present chapter we describe various outward circles with the right club. Each of these circles may, of course, be done also with the left club. When you have learnt a circle with the right club, however, you will easily see how the same circle should be done with the left club; we have accordingly thought it unnecessary to describe the circles with the left club.

You must bear in mind that, in all exercises consisting of outward circles, the point of the club moves in a course lying in, or nearly in, the principal plane, and that, if the exercises are done with the right club, the point of the club moves with the hands of a clock placed facing you. You must also be careful to remember the explanations we have given of the sense in which the expressions "right" and "left," "forwards" and "backwards," &c., are employed.

We advise beginners to confine their attention to the portions of the book in large type.

§ 12. *The Outward Front Swing (A).*—The most usual form of this circle is the outward front swing with the shoulders square (A). To prepare for this swing from the carry; straighten the arm completely, till the hand is above, and about three inches in front of, the shoulder; at the same time let the point of the club move slightly forward, so that the arm and club may be in a straight line, and turn the wrist slightly in, so as to bring the finger nails to the front. From this preparatory position let the hand and club move to the right, and, keeping the arm straight and the club in a straight line with the arm throughout the movement, cause the point of the club to describe a circle in a plane parallel to the principal plane, and some 18 or 20 inches in front of it, about a point in front of the right shoulder as a centre, returning to the preparatory position described above. The outward front swing with the shoulders square is shown in fig. 4.

It may render the description of the swing more easily intelligible if it is illustrated in the following way:—If you were to stand with a wall about 10 inches in front of you, the point of the club would, in the preparatory position, just touch the wall at the highest point you could reach with the club; and, as you did the swing, the point of the club would always touch the wall, and, if it were chalked, would draw a circle on the wall, of which the radius would be as nearly as possible equal to the length of your arm and the club together.

In order to make the club move easily and smoothly in its course, it is necessary to attend to the management of the wrist. As the club descends, turn the wrist in, till, when the club is horizontal on the right, the back of the hand is uppermost, and when the club reaches its lowest point, the back of the hand is to the left. As the club

ascends, turn the wrist out, till, when the club is horizontal on the left, the back of the hand is to the front ; then turn the wrist in again till you once more reach the preparatory position with the finger nails to the front.

Simple as this circle seems, it is not by any means easy to do really well. Care is necessary to keep the arm straight and the arm and club in a straight line, and also to keep the point of the club in the proper plane. The tendency, at first, is to let the point of the club go too far back when above the head or on the right, and too far forward when the club is pointing downwards or to the left. There is also a tendency to stoop as the club passes in front of the legs.

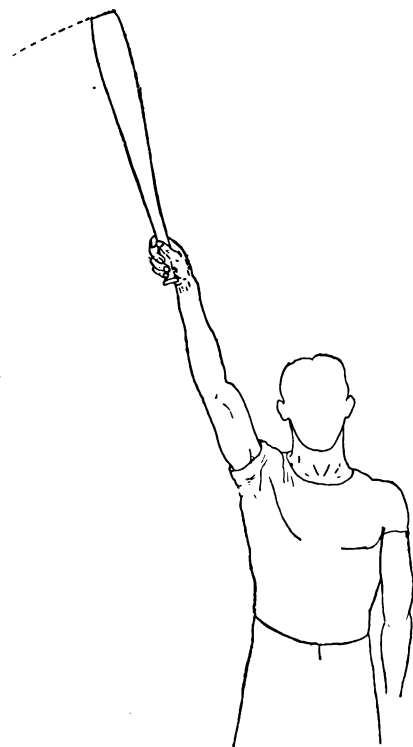


FIG. 4.

The outward front swing, though most usually done with the shoulders square, is often done with the shoulders half left (A) or full left (A), and sometimes with the shoulders

half right (\hat{A}) or full right ($\overset{\neg}{A}$). When the shoulders are turned, the point of the club should pursue as nearly as possible the same course as in the swing with the shoulders square; that is to say, the point of the club should move in a plane parallel to the principal plane. To put it otherwise, if you were to do the swing with a wall in front of you, in the manner which we suggested, the point of the club should touch the wall throughout the swing, whether the shoulders are square or turned more or less to the left or right.

In the front swing with the shoulders half or full left ($\overset{\prime}{A}$ or $\overset{\neg}{A}$), moreover, the arm should, as in the swing with the shoulders square, be kept straight and in a straight line with the club. In the front swing with the shoulders half or full right (\hat{A} or $\overset{\neg}{A}$), the arm cannot be kept quite straight as the club ascends, but it should be kept as nearly straight as possible during the ascent of the club, and quite straight throughout the rest of the circle; the club and forearm should be in a straight line throughout the movement.

It is advisable for beginners to practise consecutive front swings, without pause between them, until they are done really well, before attempting anything else. Some further remarks as to the consecutive front swings are contained in § 23.

§ 13. *The Outward Back Twist* (B).—This twist admits of great variety; the form we shall describe first is the back twist proper with the shoulders square (\overline{B}). To prepare for this twist from the carry; raise the hand just above the shoulder and pass it slightly to the rear, so that the forefinger is level with, and within about two inches of, the lobe of the ear, the finger nails being to the rear; at the same time raise the elbow to the right till it is nearly as high as the shoulder, and let the point of the club pass a few

inches further to the rear than the hand, so that the club slopes a little backwards from the hand. From this preparatory position let the point of the club move to the right, and, keeping the hand close to the ear throughout the movement, cause the point of the club to describe a circle in a plane parallel to the principal plane and some 9 or 10 inches behind it, about a point just behind the hand as a centre. Fig. 5 shows this form of the outward back twist.

To illustrate our meaning, as we did in the case of the front swing:—If you stood with a wall about 10 inches behind you, the point of the club would, in the preparatory position, touch the wall at the highest point you could reach with it without raising the hand



FIG. 5.

from its position close to the ear; and, as you did the twist, the point of the club would always touch the wall, and, if it were chalked, would draw a circle on the wall with a radius about equal to the length of the club.

Attention to the management of the wrist is even more important in the back twist than in the front swing. As you begin the twist, turn the wrist slightly out ; then, after the club has reached the horizontal position in its descent, bend the wrist well over, and turn it gradually in. As the club ascends, unbend the wrist and continue turning it gradually in till the twist is almost complete ; then, just as the twist is completed, turn the wrist sharply out so as to bring the club again to the preparatory position described above.

You must be careful, in this twist, to get the point of the club sufficiently to the right and to the rear as the club descends, and to avoid letting the point of the club pass too far to the rear as the club ascends. You must also take care to keep the hand in the same place throughout the twist ; beginners are apt to pass the hand behind the head as the club ascends. Fear of a blow on the head, moreover, produces a tendency, which must be guarded against, to duck the head forward during the ascent of the club.

It remains to discuss the other varieties of the outward back twist. Instead of holding the hand close to the ear, you may hold it more to the right, with the arm somewhat less bent than for the back twist proper, or even quite straight, and do a twist in other respects almost exactly similar to the back twist proper. A twist done in this way, with the hand at the height of, and to the right of, the shoulder, and about half-way between the point of the shoulder and full arm's length, is known as a back twist at half distance. A similar twist, done with the arm straight, is known as a back twist at arm's length. For the purpose of distinguishing between these varieties of the back twist in the short notation, we use the letter B by itself to denote the back twist proper, and add one dash above the letter to

denote the back twist at half distance—thus, B' ; and two dashes to denote the back twist at arm's length—thus, B'' .

The various forms of the back twist we have mentioned may all be done, not only with the shoulders square, but also with the shoulders half right ($\overset{\vee}{B}$, $\overset{\vee}{B}'$ and $\overset{\vee}{B}''$) or full right ($\overset{\vee}{\bar{B}}$, $\overset{\vee}{\bar{B}}'$ and $\overset{\vee}{\bar{B}}''$). In all these twists the point of the club describes a circle in a plane parallel to the principal plane and a few inches behind it, about a point just behind the hand as a centre; or, to put it otherwise, if you were to do a back twist with a wall just behind you, in the manner we have suggested, the point of the club should touch the wall throughout the twist, whether the shoulders are square or turned more or less to the right. Fig. 20, p. 56, shows two exercises introducing the back twist at half distance with the shoulders half right ($\overset{\vee}{B}'$), with the right club.

Back twists with the shoulders half or full left are exceedingly difficult and cramped.

Twists similar to the back twist at half distance or at arm's length, may be done with the hand above or below, instead of at, the level of the shoulder. In particular we may mention that, with the shoulders half or full right, a back twist may be done with the hand close to the right hip; this twist is denoted by the letter B with a dash below it—thus, $\underset{\sim}{B}$, or $\underset{\sim}{\bar{B}}$.

We may mention that several of the twists remaining to be described admit of variety much in the same way as the back twist; that is to say, they may be done with the hand close to the head, with the hand some little way from the head, or with the arm straight. All these twists are divided, like the back twist, into the twist proper, the twist at half distance, and the twist at arm's length; the varieties in all cases are indicated in the short notation by the use of the

letter denoting the twist, by itself for the twist proper, with the addition of one dash for the twist at half distance, and with the addition of two dashes for the twist at arm's length.

§ 14. *The Outward Cross Front Twist (C).*—This twist, like the outward back twist, admits of great variety; the form we shall describe first is the outward cross front twist proper with the shoulders square (\bar{C}). To prepare for this twist from the carry; pass the hand to the left till it is opposite the left breast, and let the point of the club move a few inches forward, so that the club slopes a little forward from the hand. From this preparatory position let the point of the club pass to the right, and, keeping the hand close to the left breast throughout the movement, cause the point of the club to describe a circle in a plane parallel to the principal plane and some 18 or 20 inches in front of it, about a point just in front of the hand as a centre, returning to the preparatory position described above. This twist is shown in fig. 6.



FIG. 6.

If you were to stand with a wall about 10 inches in front of you, the point of the club would, in the preparatory position, touch the wall at the highest point you could reach with it without raising the hand higher than the breast; and, as you did the twist, the point of the club would always touch the wall, and, if it were chalked, would draw a circle on the wall with a radius about equal to the length of the club.

It is not easy to make any mistake as to the management of the wrist in this twist; as the club descends turn the wrist out and bend it over, continue turning the wrist

out as the club ascends till it is horizontal on the left, and then turn it sharply in again as the club finishes its ascent.

It remains to discuss the other varieties of the cross front twist. A cross front twist may be done with the shoulders half or full left ; and, if the shoulders are thus turned, it may be done with the arm more or less bent, so that, like the back twist, the cross front twist with the shoulders half or full left, admits of the following forms :—

(i) The cross front twist proper ($\overset{\curvearrowright}{C}$ or $\overset{\curvearrowleft}{C}$). In this form of the twist the arm should be bent as much as possible, so that the hand is not far from the right shoulder.

(ii) The cross front twist at half distance ($\overset{\curvearrowright}{C'}$ or $\overset{\curvearrowleft}{C'}$). In this form of the twist the arm should be moderately bent, so that the hand is to the left of, and at the height of, the right shoulder, and about half-way between the point of the right shoulder and full arm's length. Fig. 21, p. 58, shows two exercises introducing the cross front twist at half distance with the shoulders half left ($\overset{\curvearrowright}{C'}$), with the right club.

(iii) The cross front twist at arm's length ($\overset{\curvearrowright}{C''}$ or $\overset{\curvearrowleft}{C''}$). In this form of the twist the hand should be to the left of, and at the height of, the right shoulder, and the arm should be straight, or as nearly straight as possible.

In all these varieties of the cross front twist, the point of the club should, of course, move in a plane parallel to the principal plane and some 18 or 20 inches in front of it, about a point just in front of the hand as a centre.

Twists similar to the cross front twist may also be done with the hand above or below the height of the shoulder. In particular, a cross front twist may be done with the hand at the height of and just in front of either the right or the left hip ; the form of the twist with the hand in front of the

left hip is denoted by the letter C with a dash below it—thus, C_r. In fig. 26 (2), p. 98, the left club is shown in a position it should pass through in the course of this twist.

§ 15. *The Outward Back Swing* (D).—The usual form of this swing is the outward back swing with the shoulders full right (D̄). To prepare

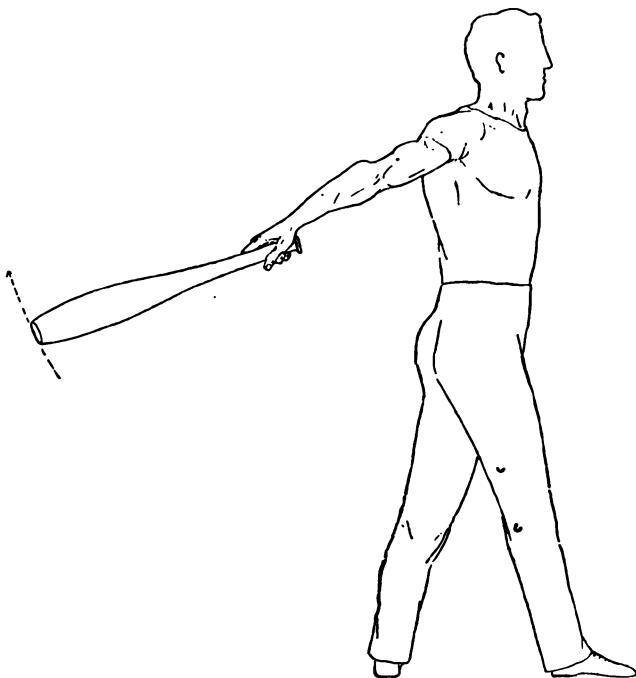


FIG. 7.

for this swing from the carry ; turn the shoulders full right, and straighten the arm completely till the hand is above, and a few inches to the rear of, the right shoulder ; at the same time let the point of the club move *rather* more to the rear than the hand, so that the arm and club may be

in a straight line, and turn the wrist in so as to bring the back of the hand to the left. From this preparatory position, let the point of the club pass to the right, and, keeping the arm straight and in a straight line with the club throughout the movement, cause the point of the club to describe a circle in a plane parallel to the principal plane and some 9 or 10 inches behind it, about a point just behind the right shoulder as a centre, returning to the preparatory position described above. This swing, as seen from the rear, is shown in fig. 7.

During the descent of the club the wrist does not turn, so that, when the club is horizontal on the right, the back of the hand is uppermost, and when the club reaches its lowest point the back of the hand is to the right. As the club ascends turn the wrist out, so that, when the club is horizontal on the left, the back of the hand is uppermost, and when the club again reaches its highest point, the back of the hand is again to the left.

Great care is necessary in the back swing to keep the arm straight, and to avoid letting the club go too far to the rear during its ascent.

A back swing may be done, after a fashion, with the shoulders only half right (D); this form of the swing is, however, awkward and constrained, and can hardly be done without letting the point of the club leave the proper plane.

§ 16. *The Outward Cross Swing Over (E).*—The most characteristic form of this circle is the outward cross swing over with the shoulders full left (E). To prepare for this swing from the carry; turn the shoulders full left and pass the hand to the rear, straightening the arm as nearly as possible, so that the hand is a few inches to the rear of the left shoulder and as high above the shoulder as you can raise it, the back of the hand being to the left; at the same time pass the point of the club rather more to the rear than the hand, so that the club may be in a straight line with the forearm. From this preparatory position, let the point of the club pass to the right, and, keeping the arm as nearly straight as possible throughout the movement, and keeping the club always as nearly as possible in a straight line with the forearm, cause the point of the club to describe a curve in a plane parallel to the principal plane and some 10 or 12 inches behind it, returning to the preparatory position described above. This swing, as seen from the rear, is shown in fig. 8.

It is impossible to keep the arm straight during the descent of the club; but during the greater part of the ascent the arm can be kept perfectly straight. The curve described by the point of the club will therefore be somewhat irregular; it should, however, be as nearly as possible a circle with the centre just behind the left shoulder; the larger the curve—that is to say, the more nearly the arm is straight throughout the movement—the better the swing.

During the descent of the club the wrist does not turn, so that, when the club is horizontal on the right, and during the remainder of its

descent, the back of the hand is to the rear ; as the club begins to ascend turn the wrist somewhat sharply out, so that, when the club is horizontal on the left, the back of the hand is to the front ; during the remainder of the swing turn the wrist slightly in, so as to return to the preparatory position.

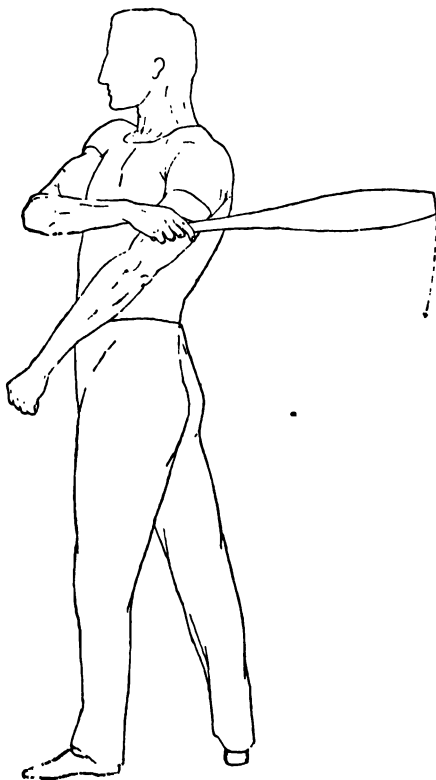


FIG. 8.

Great care is necessary in this swing to keep the point of the club in the proper plane ; the tendency is to let it come too far forward during the ascent of the club.

The cross swing over may be done with the shoulders only half left

(E) or even square (E) ; the less you turn the shoulders, however, the more you will have to bend the arm during the descent of the club, and the longer you will have to keep it bent. With the shoulders square, indeed, the circle partakes perhaps rather of the character of a twist than of a swing ; and, except that you straighten the arm during the latter part of the ascent of the club, is indistinguishable from the "cross back twist over" described in § 19.

§ 17. *The Outward*

Cross Swing Under (F).—This swing differs from the cross swing over only in that the hand, instead of being held above the left shoulder during the descent of the club, is held under the left arm ; you may learn

it by holding the left arm straight above the head, and proceeding as in the cross swing over, except that you must pass the hand to the rear to the left of the left arm in preparing for the swing; so that, as the club descends, the right hand passes close to the left armpit.

As in the case of the cross swing over, the most characteristic form of the swing is that with the shoulders full left (\bar{F}), which is shown, as seen from the rear, in fig. 9; it may, however, be done with the shoulders only half left (\bar{F}) or square (\bar{F}). In the latter forms, however, the arm must be considerably bent during the greater part of the movement; and indeed, when done with the shoulders square, the circle partakes perhaps more of the character of a twist than of a swing, and is hardly distinguishable from the "cross back twist under" described in § 20.

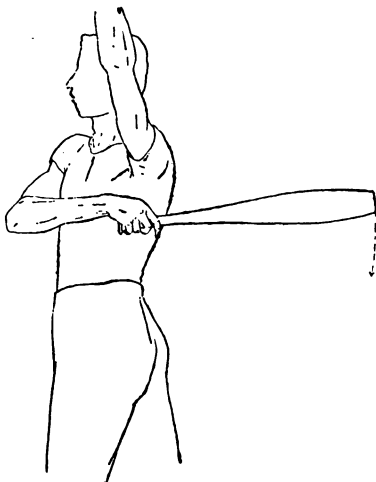


FIG. 9.

§ 18. *The Outward Front Twist (G).*—This twist admits of great variety. The form we may describe first is the outward front twist at half distance with the shoulders square (\bar{G}). To prepare for this twist from the carry; pass the hand to the right, till it is about half-way between the point of the right shoulder and full arm's length; at the same time let the point of the club pass a few inches forward, so that the club slopes slightly forward from the hand, and bend the wrist slightly over so as to bring the finger nails to the front. From this preparatory position, let the point of the club pass to the right, and, keeping the hand about half-way between the point of the shoulder and full arm's length throughout the movement, cause the point of the club to describe a circle in a plane parallel to the principal plane and some 18 or 20 inches in front of it, about a point just in front of the hand as a centre. This twist is shown in fig. 10.

The management of the wrist in this twist is difficult and peculiarly important, as the character of the twist depends to a great extent upon it. As the club descends turn the wrist somewhat sharply in and bend it up, so that, when the club is horizontal on the right, the back of the

hand is uppermost ; as the club continues its descent continue bending the wrist up, till, when the club finishes its descent, the back of the hand is to the front and the wrist is as much bent up as possible. The position of the hand at this point, as seen from the side, is shown in fig. 11. As the club ascends, keep the wrist bent up as much as possible, and turn the wrist gradually out, till the club is horizontal on the left ; then, during the remainder of the ascent of the club, straighten the wrist gradually, continuing to turn it slightly out, till the twist is almost complete ; then, just as the ascent is completed, turn the wrist sharply in and bend it slightly over so as to return to the preparatory position.

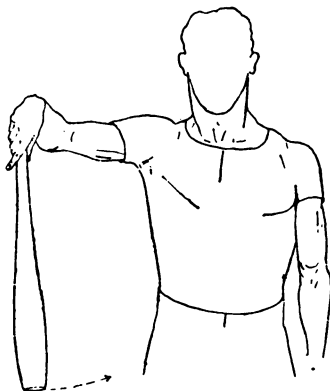


FIG. 10.

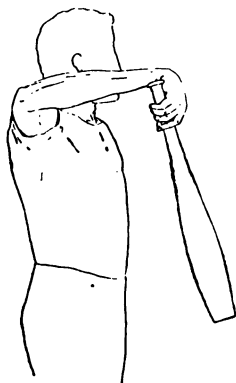


FIG. 11.

A front twist, similar to that described, may be done with the shoulders square, and with the arm much more bent, so that the hand is just in front of the right shoulder ; this twist is known as the front twist proper with the shoulders square (\bar{G}) ; it is, however, an exceedingly cramped and difficult movement.

A similar twist may also be done with the arm quite straight and the hand at the height of, and to the right of, the right shoulder ; this twist is known as the front twist at arm's length with the shoulders square (\bar{G}''). The management of the wrist in this form of the twist is, however, completely different from the management of the wrist in the front twist at half distance, or in the front twist proper. As the club descends turn the wrist slightly in, till, when the club is horizontal, the back of the hand is up. Then turn the wrist a little further in,

till the back of the hand is turned upwards and to the front, and bend the wrist somewhat over; at the same time slightly relax the grasp of the club, and allow it to almost complete the twist without any great movement of the hand, taking a firm grasp of the club again just as the twist is completed. This form of the twist is shown in fig. 12.

All the varieties of front twist we have described may be done with the shoulders half right (\bar{G} , \bar{G}' , \bar{G}''), or full right (\bar{G} , \bar{G}' , \bar{G}'').

The management of the wrist in the twist with the shoulders half or full right is the same as in the twist with the shoulders square. The front twist proper is not difficult

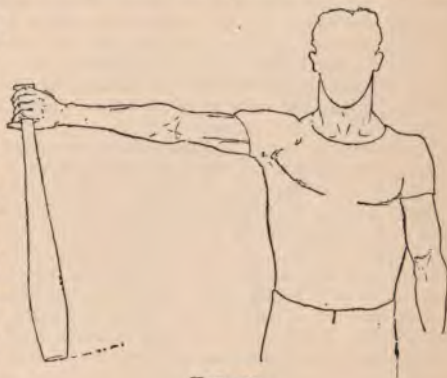


FIG. 12.

with the shoulders half or full right; in the front twist proper with the shoulders full right, the hand is, of course, close to the left shoulder. Front twists of various kinds may be done with the shoulders half left; but they are somewhat awkward. Fig. 21, p. 58, shows two exercises introducing the front twist at half distance with the shoulders half left (\bar{G}'), with the left club.

Twists similar to those we have described may, of course, be done with the hand above or below the level of the shoulders. In particular, a front twist may be done with the hand just in front of the right hip; this twist is denoted by the letter G with a dash below it—thus, \bar{G} ; it may be done with the shoulders square or turned more or less either to the right or left; it is not difficult.

The front twist in most of its forms is extremely difficult to do well, and requires much practice. It should be chiefly practised at first at half distance with the shoulders square (\bar{G}) or half right (\bar{G}'); in these forms of the twist you must be careful to retain a good grasp of the club throughout. The tendency at first is to relax the grasp and do the twist in the same manner as the twist at arm's length; this manner of doing the twist is, however, by no means so elegant or so valuable as an exercise as the correct method. The secret of success in doing the twist at half distance lies in bending the wrist sufficiently up.

§ 19. *The Outward Cross Back Twist Over (H).*—It will be convenient

to describe first the outward cross back twist over proper with the shoulders full left (\bar{H}), though other forms are perhaps more often done. To prepare for this twist from the carry; turn the shoulders full left, pass the hand to the rear till it is close to the left shoulder, and let the point of the club move a few inches more to the rear than the hand, so that the club slopes slightly backwards from the hand. From this preparatory position, let the point of the club pass to the right, and, keeping the hand close to the left shoulder throughout the movement, cause the point of the club to describe a circle in a plane parallel to the principal plane and some 10 or 12 inches behind it, about a point just behind the hand as a centre.

As the club descends turn the wrist in and bend it up, till, when the club finishes its descent, the back of the hand is to the rear and the wrist is as much bent up as possible. Keep the wrist as much bent up as possible during the first part of the ascent of the club, till, when the club is horizontal on the left, the back of the hand is to the rear, the wrist being still as much bent up as possible; then, in the course of the remainder of the ascent, unbend the wrist and turn it out somewhat sharply, so as to return to the preparatory position.

You may do a similar twist with the hand more to the left and the arm less bent; a twist so done with the hand at the height of the shoulder and about half-way between the point of the shoulder and full arm's length is, of course, known as the cross back twist over at half distance with the shoulders full left (\bar{H}').

You may also do a similar twist with the arm straight. In this twist, known, of course, as the cross back twist over at arm's length with the shoulders full left (\bar{H}''), however, the management of the wrist is quite different from the management of the wrist in the twist proper or at half distance. As the club descends turn the wrist slightly in, till, when the club is horizontal, the back of the hand is up. Then turn the wrist a little more in, till the back of the hand is upwards and a little turned to the rear, and bend the wrist somewhat over; at the same time slightly relax the grasp of the club, and allow it to almost complete the twist without any great movement of the hand, taking a firm grasp of the club again just as the twist is completed.

The cross back twist over proper, or at half distance, may be done with the shoulders half left (\bar{H} and \bar{H}'). The cross back twist over proper may also be done with the shoulders square (\bar{H}). The management of the wrist in the three last-mentioned varieties of the twist is the same as in the twist proper with the shoulders full left. The cross back twist over at half distance with the shoulders half left (\bar{H}') is shown, as seen from the rear, in fig. 13. Fig. 20, p. 56, shows two exercises introducing the outward cross back twist over at half distance with the shoulders half right (\bar{H}'), with the left club.

Twists similar to those we have just described may be done with the hand above or below, instead of at, the level of the shoulders.

The most usual form of the twist is probably the cross back twist over at half distance with the shoulders half

left (H'), which is extremely difficult to do well; you must be careful in doing it to retain a good grasp of the club throughout the twist. The tendency at first is to relax the grasp, and to do the twist in the same manner as the twist at arm's length. The correct method is, however, both more elegant and more valuable as an exercise. The secret of success lies in bending the wrist sufficiently up.

§ 20. *The Outward Cross Back Twist Under (I).*—This twist corresponds to the outward cross back twist over, just as the outward cross swing under corresponds to the outward cross swing over. You may learn it by holding the left arm out horizontally to the left, and then doing a twist exactly similar to a cross back twist over, except that the right hand is throughout the movement underneath the left arm.

This twist admits of much the same variety as the cross back twist over; with the shoulders full left you may do the twist proper (I), at half distance (I'), or at arm's length (I''); with the shoulders half left, you may do the twist proper (I), or at half distance (I'); with the shoulders square you may do the twist proper (I). The cross back twist under at half distance with the shoulders half left (I') is shown in fig. 14.

Twists similar to those we have described may be done with the hand above or below the level of the shoulders; in particular, a cross back twist under may be done with the hand close to the left hip; this form of the twist is denoted by the letter I with a dash below it—thus, I_- . Fig. 26 (I), p. 98, shows the left club in a position it should pass through in the course of its ascent in this twist.



FIG 13.

§ 21. *The Outward Cross Inside Twist (K).*—The only practicable form of this twist, with clubs of ordinary length, is the outward cross inside twist at arm's length with the shoulders full left ($\vec{K''}$).

This twist resembles the cross back twist over at arm's length with the shoulders full left ($\vec{H''}$), except that the course of the point of the club lies actually in the principal

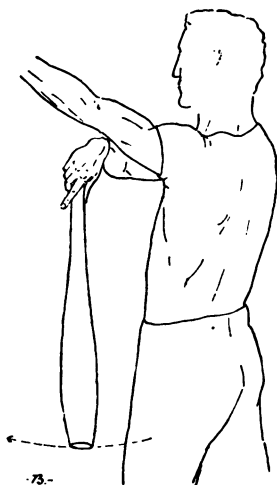


FIG. 14.

plane instead of a few inches behind it; so that, when the club descends, the point, instead of passing just behind the left shoulder, descends straight past the face. If you hold the left hand out to

the left, therefore, and do this twist, the right hand will be in front of the left, and the club will pass between the arms in its descent, whereas, in the cross back twist over, the right hand would be held behind the

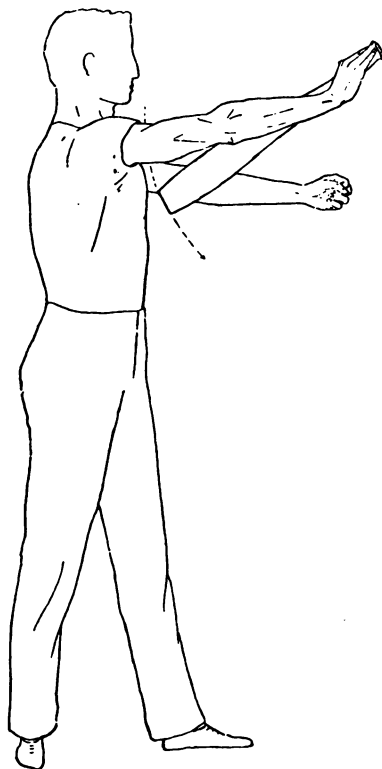


FIG. 15.

left hand, the wrists being crossed with the right wrist uppermost, and the club would pass behind the left arm in its descent. The outward cross inside twist at arm's length with the shoulders full left is shown in fig. 15.

CHAPTER III.

CONSECUTIVE OUTWARD CIRCLES.

§ 22. *Introductory.*—The present chapter is devoted to the description of exercises with one club, in which various outward circles are done in succession to each other.

In these exercises the motion of the club should not be checked between the successive circles, but the club should move in an even and continuous manner. Whenever, therefore, two circles are done in succession for which the preparatory positions are not the same, it is necessary to modify the first circle somewhat at the conclusion and the second somewhat at the commencement, in order to preserve the continuity of the movement. This is more particularly the case where a circle in which the point of the club moves in front of the principal plane is followed by a circle in which the point of the club moves behind the principal plane, or *vice versa*; in such combinations it is necessary to let the point of the club pursue a course inclined somewhat to the principal plane during the conclusion of the first circle and the commencement of the second. In exercises in which a circle requires considerable modification at the commencement, in order to connect it with the preceding circle, and at the conclusion to connect it with the succeeding circle, it may even happen that only a comparatively small portion of the circle in question remains unmodified.

The chapter is arranged as follows: we take the ten

outward circles described in Chapter II. in order, devoting a separate paragraph to each, and point out, also in order, which of the ten outward circles may be conveniently done in succession to it, adding, where it seems necessary, some explanation as to how the circles may be connected. We advise beginners, after reading the present paragraph, to turn to § 33, and learn the continuous exercises there given as examples of consecutive outward circles, reading such portions of the intervening paragraphs only as deal with the combinations occurring in those exercises, and then to pass on at once to Chapter VI.

We shall throughout the chapter describe the exercises as done by the right club.

In the small type, where the more difficult circles are dealt with, we shall henceforward employ the short notation freely, without adding lengthy descriptions in words.

§ 23. *Outward Circles in Succession to the Outward Front Swing (A).*

(i) Front Swing; Front Swing (A A). This exercise, which has been already mentioned in § 12, should be practised with the shoulders square ($\overline{A A}$); also with the shoulders half or full left throughout ($\acute{A} \acute{A}$ or $\overleftarrow{A} \overleftarrow{A}$); and also with the shoulders square during one swing, and half or full left during the other ($\overline{A} \acute{A}$; $\overline{A} \overleftarrow{A}$; $\acute{A} \overline{A}$; $\overleftarrow{A} \overline{A}$). In the last-mentioned exercises you should turn the shoulders somewhat sharply between the circles, taking care to keep the movement of the club perfectly even.

(ii) Front Swing; Back Twist (A B). This exercise admits of great variety according to the form of the back twist employed, and also according to the position of the shoulders during each circle.

If you employ the back twist proper, you should keep *the arm straight* till the club makes an angle of about 45°

with the vertical, or, in other words, till the upper arm is just in front of the nose, and then bend the elbow rather smartly, carrying it to the right at the same time, so as to bring the hand into position for the back twist. The point of the club should begin to pass to the rear shortly after the club passes the horizontal position in its ascent in the front swing, and should continue passing to the rear till the club is about horizontal in its descent in the back twist, by which time the point of the club should be as far to the rear as is necessary for a back twist.

If you employ the back twist at half distance, the point of the club should pass to the rear somewhat later, and the arm should be kept straight somewhat longer, than is the case if you employ the back twist proper.

If you employ the back twist at arm's length, you should keep the arm straight throughout the exercise, allowing the club to descend from the conclusion of the front swing with the arm straight and in a straight line with the club, till the arm and club are horizontal, and then complete the movement with the arm straight and horizontal. The point of the club should begin to pass to the rear from the moment the club begins to descend after the conclusion of the front swing, and should complete its movement to the rear just before reaching its lowest point in the back twist.

All the varieties of the exercise we have mentioned are often done with the shoulders square (\overline{AB} , $\overline{AB'}$, $\overline{AB''}$); the other forms of most frequent occurrence are:—Front Swing with shoulders square; Back Twist at Half Distance with shoulders half right ($\overline{AB'}$) and—Front Swing with shoulders square; Back Twist at Arm's Length with shoulders full right ($\overline{AB''}$).

(iii) Front Swing; Cross Front Twist (AC). If you employ the cross front twist proper or at half distance, you

should bend the elbow somewhat smartly, so as to prepare for the twist, when the club is about horizontal in its ascent in the front swing. If you employ the twist at arm's length, you have merely to stop the motion of the arm when the club is horizontal in its ascent.

The forms of the exercise of most frequent occurrence are :—Front Swing ; Cross Front Twist Proper, with shoulders square throughout ($\overline{A\ C}$) and—Front Swing with shoulders square ; Cross Front Twist at Half Distance with shoulders half left ($\overline{A\ C'}$).

(iv) A D. The most usual form is $\overline{A\ D}$.

(v) A E. The most usual form is $\overline{A\ E}$. Begin to carry the point of the club to the rear, and to turn the shoulders, as soon as the club passes the horizontal position in its ascent in the front swing.

(vi) A F. The manner in which this is done in exercises for both clubs depends very much upon the position of the left arm for the time being. In order to learn it you may practise $\overline{A\ F}$, holding the left arm out horizontally to the left throughout ; you must begin to carry the point of the club to the rear, and to bend the right arm slightly, rather before the club is horizontal in its ascent in the front swing ; so that, during the remainder of its ascent, the point of the club is behind the left arm.

(vii) A G. The most usual forms are $\overline{A\ G'}$, $\overline{A\ G''}$, $\overline{A\ G'}$ and $\overline{A\ G''}$. The junction of the two circles in the various forms of the exercise is effected much in the same manner as in the corresponding forms of A B.

(viii, ix) A H, A I. The junction of the circles is effected much in the same way as in A E and A F respectively.

(x) A K. The most usual form is $\overline{A\ K}$; the arm in this form is kept straight throughout.

§ 24. *Outward Circles in Succession to the Outward Back Twist (B).*

(i) Back Twist ; Front Swing (B A). If you employ the back twist proper, you should begin to straighten the arm, and to bring the point of the club forward, from the moment that the club and forearm are in a straight line as the club ascends in the back twist ; the arm should be completely *straight*, and the point of the club should be brought com-

pletely forward, by the time the club reaches an angle of about 45° with the vertical in its descent in the front swing.

If the back twist at half distance is employed, the arm should be straightened, and the point of the club brought forward, somewhat later.

If the back twist at arm's length is employed, you should begin to bring the point of the club forward just before the back twist is completed, so that, at the conclusion of the twist, the club is absolutely vertical; then, keeping the arm still horizontal, allow the point of the club to descend, passing at the same time slightly to the front, till the club is horizontal, when the arm and club should be exactly in the same position as if you had done the first quarter of a front swing. The arm, of course, remains straight throughout the exercise.

The three forms of the exercise are often done with the shoulders square throughout (\overline{BA} , $\overline{B'A}$, $\overline{B''A}$). The other forms of the exercise of most frequent occurrence are:—Back Twist at Half Distance with shoulders half right; Front Swing with shoulders square ($\overline{B'A}$) and—Back Twist at Arm's Length with shoulders full right; Front Swing with shoulders square ($\overline{B''A}$).

(ii) Back Twist; Back Twist (BB). This exercise admits of some variety; you may do the same form of twist twice, or two different forms in succession to each other. The most important form to practise at first is two back twists proper with the shoulders square throughout (\overline{BB}); care must be taken to do each twist properly; the tendency is to fail to get the point of the club high enough between the twists.

(iii) Back Twist; Cross Front Twist (BC). If both twists are done in their proper form, this exercise is not very difficult, though some care is necessary to keep the

movement of the club even. Other forms of the exercise, in which the hand has to travel some distance between its position for the back twist and its position for the cross front twist, are very difficult to do neatly.

- (iv) B D. The usual forms are $\overline{B} \overline{D}$, $\overline{B'} \overline{D}$ and $\overline{B''} \overline{D}$.
- (v) B E. The hand must be raised higher than the top of the head as the back twist is completed, and then be carried sharply to the left just as the point of the club begins to descend again, the elbow passing in front of the face. You must be careful not to check the movement of the club, and not to bring the hand forward, between the two circles; the exercise, which is by no means easy, is most often done in the forms $\overline{B} \overline{E}$ and $\overline{B'} \overline{E}$.
- (vi) B F. This is exceedingly difficult.
- (vii) B G. This admits of great variety; the forms of most frequent occurrence are $\overline{B'} \overline{G'}$, $\overline{B'} \overline{G''}$, $\overline{B''} \overline{G''}$ and $\overline{B''} \overline{G'}$. It is sufficiently obvious how these should be done.
- (viii) B H. This somewhat resembles B E; the most usual form is $\overline{B} \overline{H}$.
- (ix) B I. This resembles B F; it is exceedingly difficult.
- (x) B K. This is exceedingly difficult.

§ 25. *Outward Circles in Succession to the Outward Cross Front Twist (C).*

(i) Cross Front Twist; Front Swing (C A). If the cross front twist proper is employed, you should begin to straighten the arm shortly after the club is horizontal in its ascent in the cross front twist, so that the arm is straight by the time the club is vertical. If the cross front twist at half distance is employed, the arm should be straightened a little sooner, so that the arm is straight by the time the club forms an angle of about 45° with the vertical in its ascent. If the cross front twist at arm's length is employed, the arm remains straight throughout the exercise.

The forms of the exercise of most frequent occurrence are : —Cross Front Twist Proper; Front Swing, with shoulders square throughout ($\overline{C} \overline{A}$) and—Cross Front Twist at Half

Distance with shoulders half left ; Front Swing with shoulders square ($\bar{C}' \bar{A}$).

(ii) Cross Front Twist ; Back Twist (C B). This exercise admits of considerable variety. In all its forms you must, of course, carry the hand from its position for the cross front twist to its position for the back twist during the conclusion of the former twist and the commencement of the latter, passing the point of the club to the rear at the same time. In the course of thus carrying the hand from one position to the other, you should raise it considerably, so that in moving from one position to the other the hand pursues a semicircular course. The actual height to which the hand should be raised depends upon the form of the exercise ; the farther apart the positions of the hand for the two twists, the higher the hand should be raised. If you do both twists in their proper form, the hand has not far to travel, and it is sufficient to raise it about as high as the top of the head. If you do both twists at arm's length, the hand should be raised as high as possible, so that the arm is straight throughout the exercise, and, from the moment the club is horizontal in its ascent in the cross front twist till it is horizontal in its descent in the back twist, the arm and club are in a straight line with each other.

The forms of the exercise of most usual occurrence are : —Cross Front Twist Proper ; Back Twist Proper, with shoulders square throughout ($\bar{C} \bar{B}$) and—Cross Front Twist at Half Distance with shoulders half left ; Back Twist at Half Distance with shoulders half right ($\bar{C}' \bar{B}'$).

(iii) Cross Front Twist ; Cross Front Twist (C C). This exercise admits of some variety, but presents little difficulty.

(iv, v, vi) C D, C E, C F. These call for no remark.

(vii) C G. This is by no means easy. We may mention the following forms of the exercise :—1° $\bar{C} \bar{G}'$, 2° $\bar{C}' \bar{G}'$; in these the hand must be

carried from its position for C to its position for G rather sharply as the club finishes its ascent in C and begins its descent in G; the hand should move from the one position to the other almost in a straight line.

3° $\bar{C}'' \bar{G}''$, 4° $\bar{C}'' \bar{G}''$; in these the arm remains straight throughout.

5° $\bar{C} \bar{G}$; in this form the hand moves only a few inches between the two twists, which differ little except in the management of the wrist.

In \bar{C} the wrist is turned out and bent over as the club descends; in \bar{G} the wrist is turned in and bent up as the club descends.

(viii, ix) C H; C I. The most usual forms are $\bar{C}' \bar{H}'$, $\bar{C}' \bar{I}'$, $\bar{C}'' \bar{H}''$ and $\bar{C}'' \bar{I}''$.

(x) C K. The most usual form is $\bar{C}'' \bar{K}''$.

§ 26. *Outward Circles in Succession to the Outward Back Swing (D).*

(i) D A. The most usual form is $\bar{D} \bar{A}$.

(ii, iii, iv) D B, D C, D D. None of these call for remark.

(v) D E. This is difficult, but effective. The most usual form is $\bar{D} \bar{E}$; you must turn the shoulders square rather before you finish the back swing; then, just as the back swing is completed, bend the arm and carry the elbow sharply across from right to left in front of the face; the great difficulty is to avoid the checking movement of the club between the swings. The forms $\bar{D} \bar{E}'$ and $\bar{D} \bar{E}''$ may be done with

less bending of the arm between the swings than is requisite in $\bar{D} \bar{E}$.

(vi) D F. This is very difficult.

(vii) D G. This calls for no remark.

(viii) D H. This resembles D E.

(ix) D I. This resembles D F, and is extremely difficult.

(x) D K. This is very difficult.

§ 27. *Outward Circles in Succession to the Outward Cross Swing Over (E).*

(i, ii, iii, iv, v) E A, E B, E C, E D, E E. None of these call for remark.

(vi) E F. This is difficult; in order to effect it, you must pass the left hand over the right arm during the ascent of the club in E.

(vii, viii, ix, x) E G, E H, E I, E K. These call for no explanation; E H and E I, of course, somewhat resemble E E and E F respectively.

§ 28. *Outward Circles in Succession to the Outward Cross Swing Under (F).*

F A, F B, F C, F D, F E, F F, F G, F H, F I, F K, are all possible, and call for little remark. They may be learnt with the left hand held above the head, as in fig. 9, p. 23. Of course, in all these combinations, except F F and F I, the right hand and club must be brought to the front as the club ascends in F; in exercises for both clubs in which these combinations occur, it is often necessary to begin to bring the

club to the front from the very beginning of its ascent in order to get it in front of the left arm in preparation for the succeeding circle. FE is particularly worth practice.

§ 29. *Outward Circles in Succession to the Outward Front Twist (G).*

(i) G A. The junction of the circles is effected much in the same manner as in B A.

(ii) G B. This admits of considerable variety ; the most usual forms are $\overline{G' B'}$, $\overline{G' B'}$, $\overline{G'' B''}$, $\overline{G'' B''}$.

(iii) G C. The hand should be carried across the body from its position for G to its position for C during the ascent of the club in G. The hand should move nearly in a straight line, but should drop just a little below the level of the shoulders on its way. The farther apart the positions of the hand in the two twists, the earlier in the ascent of the club will you have to begin to shift the hand. The most important forms to practise are $\overline{G' C}$ and $\overline{G' C'}$. $\overline{G' C}$ may be done, like $\overline{C' G}$, without shifting the hand much.

(iv) G D. This calls for no remark.

(v, vi) G E, G F. These are difficult ; the hand must be carried across the body in the same way as in G C, but, of course, the point of the club must pass to the rear at the same time.

(vii) G G. This requires considerable practice ; it is not easy to keep the movement of the club even throughout. The most usual forms are $\overline{G' G'}$, $\overline{G' G'}$, $\overline{G'' G''}$, and $\overline{G'' G''}$.

(viii, ix) G H, G I. These are difficult, and much resemble G E and G F respectively.

(x) G K. This somewhat resembles G H, and is very difficult.

§ 30. *Outward Circles in Succession to the Outward Cross Back Twist Over (H).*

(i) H A. This calls for no remark.

(ii) H B. The hand is carried over much as in C B.

(iii) H C. The most usual forms are $\overline{H' C'}$, $\overline{H'' C''}$.

(iv) H D. This calls for no remark.

(v) H E. This is rather a useful exercise to practise with a view to learning to make the twist and the swing as different in character as possible.

(vi) H F. The junction of the circles is effected as in E F.

(vii) H G. The hand is carried across the body as in C B.

(viii) H H. This is difficult to do well ; the most usual form is $\overline{H' H'}$.

(ix) H I. The junction of the circles is effected as in H F.

(x) H K. This may be practised with the left arm held out horizontally to the left ; the most usual form is $\overline{H'' K''}$.

§ 31. *Outward Circles in Succession to the Outward Cross Back Twist Under (I).*

I A, I B, I C, I D, I E, I F, I G, I H, I I, and I K, are all possible,

the junction of the various circles being effected in very much the same manner as in the exercises mentioned in § 30. The club must, of course, in most cases be brought to the front in its ascent in I, as in the combinations with F mentioned in § 28. The most important combinations to practise are: I C, particularly in the forms $\overset{1'}{I} \overset{1'}{C}$ and $\overset{1'}{I} \overset{1'}{C''}$; I H, particularly in the forms $\overset{1'}{I} \overset{1'}{H}$ and $\overset{1'}{I} \overset{1'}{H''}$; I I, particularly in the forms $\overset{1'}{I} \overset{1'}{I}$ and $\overset{1'}{I} \overset{1'}{I''}$; and I K, in the form $\overset{1'}{I} \overset{1'}{K}$. I H, I I, and I K may be practised with the left arm held out horizontally to the left.

§ 32. *Outward Circles in Succession to the Outward Cross Inside Twist (K).*

K A, K B, K C, K D, K E, K F, K G, K H, K I, and K K, are all possible. The junction of the various circles is effected much as in the combinations with H, mentioned in § 30. The most important exercises to practise are $\overset{1'}{K} \overset{1'}{C''}$, $\overset{1'}{K} \overset{1'}{H''}$, $\overset{1'}{K} \overset{1'}{I''}$, and $\overset{1'}{K} \overset{1'}{K''}$.

§ 33. In the present paragraph we give a few examples of exercises consisting of consecutive outward circles for one club; they should be learnt both with the right club and with the left. Before trying to do any one of the exercises, you should see what combinations occur in it, and read the portions of the chapter in which those combinations are described. Many other exercises of the kind are given incidentally in subsequent chapters. Exercises with one club, introducing the circles B, C, G, and I, are discussed in the addendum, p. 114.

(i) With shoulders square throughout—Front Swing; Back Twist Proper; Repeat ($\overline{A B}$).

(ii) With shoulders square throughout—Front Swing; Front Swing; Back Twist Proper; Back Twist Proper; Repeat ($\overline{A A B B}$).

(iii) With shoulders square throughout—Front Swing; Cross Front Twist Proper; Repeat ($\overline{A C}$).

(iv) Front Swing with shoulders square; Cross Front Twist at Half Distance with shoulders half left; Back Twist Proper with shoulders square; Back Twist at Half Distance with shoulders half right; Repeat ($\overline{A C' B'}$).

CHAPTER IV.

INWARD CIRCLES.

§ 34. *Inward Circles.*—As we mentioned in § 9, there is an inward circle corresponding to every outward circle. In order to do the inward circle corresponding to any outward circle, you must cause the club to pursue exactly the same path as in the outward circle, but in the opposite direction. Inward circles require just as much practice as outward circles; but we shall not describe them at length, because a little thought will enable you, as soon as you have learnt an outward circle, to see exactly how the corresponding inward circle should be done. All you have to remember is that the arm, hand, and club will occupy exactly the same series of positions in the inward circle as in the corresponding outward circle, but that these positions will occur in the reverse order, and that the movements of the arm, hand, and club will be in the reverse direction.

For example, suppose you have learnt the outward back twist proper and propose to learn the inward back twist proper. You begin with the hand and arm in the position in which they are at the conclusion of the outward twist. In the outward twist the point of the club moves to the right as it completes its ascent; therefore in the inward twist the point of the club must move to the left as it begins its descent. In the outward twist the point of the club describes a circle in a plane a few inches behind the principal plane, about a point just behind the hand as a centre; therefore in the inward twist the point of the club must describe the same circle, but in the opposite direction. In the outward twist you turn the wrist sharply out at the conclusion of the

twist; therefore, in the inward twist, you turn the wrist sharply in at the commencement. In the outward twist you turn the wrist gradually in during the latter part of the descent of the club and during the greater part of its ascent; therefore in the inward twist you must, after turning the wrist sharply in at the commencement, turn it gradually out as the club descends and during the first part of its ascent. In the outward twist you turn the wrist slightly out as you begin the twist, therefore in the inward twist you turn it slightly in as you finish the twist.

From what we have said it will appear that there are ten inward circles corresponding to the ten outward circles described in Chapter II.; each of these inward circles is, in the short notation, denoted by the small letter corresponding to the capital letter denoting the corresponding outward circle.

Each of the illustrations showing outward circles given in Chapter II. will obviously become an illustration of the corresponding inward circle if you reverse the arrow-head indicating the direction in which the point of the club is moving.

Every inward circle may be called the reverse of the corresponding outward circle, and every outward circle may be called the reverse of the corresponding inward circle.

§ 35. *Consecutive Inward Circles.*—Inward circles may be done in succession to each other, just as outward circles may. Just as to every outward circle there is a corresponding inward circle, which may be called the reverse of the outward circle, so to every exercise consisting of a series of outward circles there is a corresponding exercise consisting of inward circles, which may be called the reverse of the former exercise. If you wish to do the reverse of any series of outward circles you must, just as in doing the reverse of

a single circle, cause the club to pursue the same path as in the original exercise, but in the opposite direction. In the reverse exercise, therefore, you must do the inward circles corresponding to the outward circles in the original exercise, and you must do them in the reverse order. For example, the reverse of the exercise—Outward Front Swing ; Outward Cross Front Twist Proper ; Outward Back Twist Proper (A C B)—is: Inward Back Twist Proper ; Inward Cross Front Twist Proper ; Inward Front Swing (*b c a*).

In this way you will be able to reverse all the combinations discussed in Chapter III., and so learn how to do inward circles in succession to each other. Each of the examples in § 33 may be reversed in the same way, and will then form an exercise consisting of consecutive inward circles. *You must not forget in reversing an exercise to take the circles in the reverse order.*

It is obvious that you may reverse any exercise consisting of inward circles by substituting for those circles the corresponding outward circles in the reverse order.

CHAPTER V.

HIP TWISTS AND CROSS HIP TWISTS.

§ 36. *Introductory.*—The present chapter is devoted to the discussion of certain circles presenting peculiarities which render it convenient to discuss them separately, instead of among other circles in the preceding chapters. The circles in question in some respects resemble B., C., G., and I.; and you will find it well, before reading the present chapter, to read the description in the addendum, p. 114, of exercises introducing those circles. As before, we confine ourselves to the right club.

§ 37. *The Outward Hip Twist.*—We shall begin our discussion of this twist by describing the following continuous exercise, which is not very difficult, and which we recommend beginners to learn before reading the subsequent paragraphs in the present chapter.

From the carry ; straighten the arm as if to prepare for a front swing ;

then, keeping the shoulders square throughout, let the point of the club pass to the right and descend, with the arm straight and in a straight line with the club, at the same time carrying the point of the club slightly to the rear and turning the wrist slightly in, till the club hangs almost straight down. At this point the arm should be close to the side; the hand should be just behind the outside of the right thigh, the back of the hand being turned to the right; and the club should hang almost straight down, the point, however, being a few inches farther to the rear than the hand. Then let the point of the club pass to the left behind the back, and cause it to describe a curve in a plane parallel to the principal plane and some 9 or 10 inches behind it; this

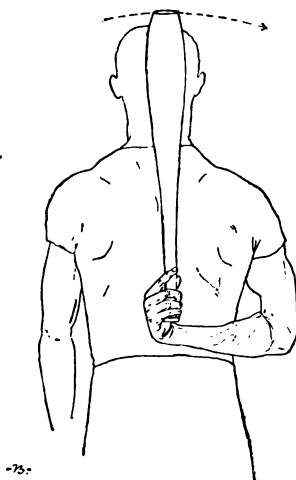


FIG. 16.

curve should be approximately three-quarters of a circle, about a point just behind the right hip as a centre, so that, at the conclusion of this part of the movement, the club is horizontal and pointing to the right. The management of the hand and wrist during this part of the movement must be carefully attended to. As you raise the point of the club bend the elbow and pass it to the right, so that you lift the hand straight up till the wrist is behind the right hip; at the same time bend the wrist up without turning it till, when the club completes its ascent, it reaches the position shown in fig. 16; then turn the wrist in and bring the elbow slightly forward till the club is horizontal in its descent, at the same time allowing the hand to pass slightly to the right. From this point allow the point of the club to pass to the front and descend; during this movement the hand is brought to the front of the hip, the

back of the wrist almost scraping along the belt; then, just before the club completes its descent, straighten the arm, so that the club reaches the same position as if you were half-way through a front swing. Fig. 17 shows the position of the club just after it has passed the horizontal in its descent. Then swing the club up to the left, as if you were doing the last half of a front swing, till the hand is above the right shoulder and the club points upwards, and repeat the whole movement.

§ 38. *The Outward Hip Twist—continued.*—The exercise described in the last paragraph introduces the outward hip twist in a modified form; it remains to describe the twist in its complete form.

To prepare for this twist bring the club to the position it reaches at the conclusion of its ascent behind the back in the exercise described in § 37. From this preparatory position (shown in fig. 16) let the point of the club pass to the right, and, keeping the hand throughout in rear of the right hip, cause the point of the club to describe a circle, in a plane parallel to and some 9 or 10 inches behind the principal plane, about a point just behind the hand as a centre, returning to the preparatory position above described.

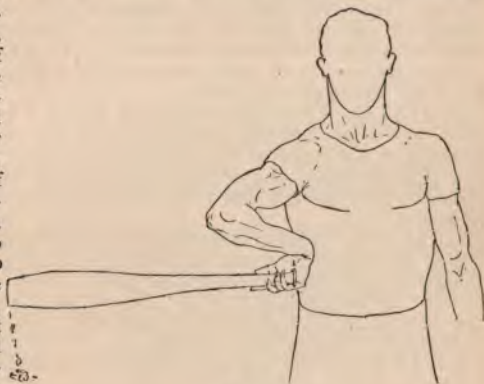


FIG. 17.

As the point of the club descends, you must turn the wrist sharply in, at the same time bringing the elbow slightly forward and keeping the wrist bent up, till the club is horizontal on the right; then, during the remainder of the descent of the club, unbend the wrist and turn it slightly out, so that when the club finishes its descent the back of the hand is towards the body. As the club begins to ascend turn the wrist farther out somewhat sharply, so that the back of the hand turns to the right; then during the remainder of the ascent of the club, bend the wrist up without turning it. At first you will find it necessary to bring the elbow considerably forward, and allow the hand to drop, during the descent of the club, and to raise the hand during the ascent of the club; you should, however, try to keep the elbow back as much as possible during the descent of the club, and to keep the hand as nearly as possible in the same place throughout the twist.

§ 39. *The Outward Hip Twist—continued.*—You will perceive that in doing the exercise described in § 37, you do first the descending half of a front swing slightly modified, then the ascending half of a hip twist, then the descending half of a hip twist slightly modified, and then the ascending half of a front swing. For time-keeping purposes it is necessary to regard every circle as commencing from a moment when the club points upwards, and concluding, after the club has made one complete revolution, when it points upwards again. The exercise in question must accordingly be described as consisting of two circles;

the first circle consisting of a descending half front swing and an ascending half hip twist, and the second circle consisting of a descending half hip twist and an ascending half front swing.

§ 40. *The Outward Hip Twist—continued.*—The letter L is used to denote the outward hip twist in the short notation. The exercise described in § 37 is accordingly written $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$.

Other circles may be done much resembling the circles $\frac{1}{2} A \frac{1}{2} L$ and $\frac{1}{2} L \frac{1}{2} A$. The most usual are:—

(i) $\frac{1}{2} G, \frac{1}{2} L$. You do the descending half of a front twist with the hand close to the right hip, bringing the hand and the club to the rear, however, in the course of the movement, and then do the ascending half of a hip twist. Fig. 26 (1), p. 98, shows an exercise introducing this circle with the right club; the club is there shown in the course of its ascent.

(ii) $\frac{1}{2} L \frac{1}{2} G$. After a descending half hip twist, bring the hand and club to the front of the body, very nearly as in $\frac{1}{2} L \frac{1}{2} A$, but instead of straightening the arm, keep the hand close to the front of the right hip and do the ascending half of G . Fig. 26 (2), p. 98, shows an exercise introducing this circle with the right club; the club is there shown rather before it completes its descent.

(iii) $\frac{1}{2} L \frac{1}{2} D$. This is usually done with the shoulders full right; it is easy to see how it is done.

The complete hip twist and most of the other circles we have described in the present chapter ($\frac{1}{2} L \frac{1}{2} A$, $\frac{1}{2} A \frac{1}{2} L$, etc.) are usually done with the shoulders square; but of course they may be also done with the shoulders turned.

§ 41. *Consecutive Outward Circles involving Hip Twists.*—The complete hip twist can only be done after some circle which brings the club to the preparatory position for the hip twist (shown in fig. 16), such as $\frac{1}{2} A \frac{1}{2} L$, or $\frac{1}{2} G, \frac{1}{2} L$; any of the last-mentioned circles may obviously be easily done after various outward circles.

After a complete hip twist, you may do any circle consisting of a descending half hip twist and an ascending half of some other circle, such as $\frac{1}{2} L \frac{1}{2} A$, $\frac{1}{2} L \frac{1}{2} G$, or $\frac{1}{2} L \frac{1}{2} D$; after which circles again you may obviously do other outward circles, just as after A , G , or D respectively.

The following are a few examples of continuous exercises involving the outward hip twist:—(i) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A B$. (ii) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A C$.

(iii) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$. (iv) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} D$.

§ 42. *The Inward Hip Twist.*—The circles and exercises described in §§ 37-41 may all be reversed just as any other outward circles and exercises consisting of outward circles may be. In doing the reverse of any of these circles or exercises, you must, of course, cause the point of the club to pursue the same path as in the circle or exercise you are reversing, but in the opposite direction. The letter I is, of course, used to denote the complete inward hip twist, which is the reverse of the complete outward hip twist.

Where an outward circle consists of the descending half of some outward circle followed by the ascending half of an outward hip twist, the corresponding inward circle consists, obviously, of the descending half of an inward hip twist followed by the ascending half of the inward circle corresponding to the first-mentioned outward circle; for example, the inward circle corresponding to, and forming the reverse of, $\frac{1}{2} A \frac{1}{2} L$, is $\frac{1}{2} l \frac{1}{2} a$.

Similarly, where an outward circle consists of the descending half of an outward hip twist followed by the ascending half of some other outward circle, the corresponding inward circle consists of the descending half of the inward circle corresponding to the last-mentioned outward circle followed by the ascending half of an inward hip twist; for example, the inward circle corresponding to, and forming the reverse of, $\frac{1}{2} L \frac{1}{2} A$, is $\frac{1}{2} a \frac{1}{2} l$.

Inward hip twists are most easily learnt by practising $\frac{1}{2} a \frac{1}{2} l \frac{1}{2} l \frac{1}{2} a$, which is the reverse of $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$, the exercise described in § 37. The easiest way to catch the trick of this movement is to begin $\frac{1}{2} L \frac{1}{2} A$, stopping just before the arm is straightened, and then cause the point of the club to return along the path it has just come.

§ 43. *The Outward Cross Hip Twist*.—This twist, like the hip twist, is most easily learnt in a modified form as part of a continuous exercise, consisting, however, of three circles instead of two.

For this exercise, you should raise the left arm to the left, keeping it straight, till the hand is as high as the hip. Having raised the left arm in this way, begin as in $\frac{1}{2} A \frac{1}{2} L$, till the club completes its descent; from that point bend the elbow, and let the point of the club pass to the left behind the back till the forearm is across the small of the back, and the hand is against the hollow of the waist just above the left hip; as you thus carry the hand across the body, allow the point of the club, as soon as it is clear of the legs, to pass to the front and ascend in front of the left arm, so that, when the hand reaches its position above the left hip, the club is horizontal and points to the left, the point of the club being some 16 or 18 inches in front of the principal plane; from this point cause the point of the club to describe three-quarters of a circle in a plane parallel to, and some 16 or 18 inches in front of, the principal plane, about a point just in front of the hand as a centre, till the club hangs straight down just in front of the left thigh (fig. 18 shows this part of the movement); then raise the point of the club to the left, letting it pass to the rear at the same time, so that the club ascends behind the left arm, gradually carrying the hand across the back to the right as the club ascends, till, when the club is vertical, you have reached the preparatory position for the hip twist (shown in fig. 16); then do a descending half hip twist and an ascending half front swing, and repeat the whole movement.

§ 44. *The Outward Cross Hip Twist—continued*.—The preparatory position for the complete outward cross hip twist is the position reached at the conclusion of the first circle in the exercise described in the last

paragraph. From this point the cross hip twist is done by causing the point of the club to describe a circle in a plane parallel to, and some

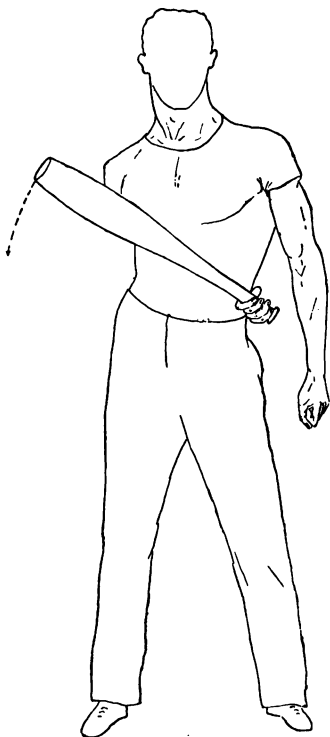


FIG. 18.

16 or 18 inches in front of, the principal plane, about a point just in front of the hand as a centre. Fig. 18 shows this twist, the club being shown in the position it reaches just before it is horizontal in its descent. In the preparatory position the hand is in the position there shown, and the point of the club is in front of, and a little higher than, the left shoulder.

The letter M is used to denote the outward cross hip twist, and it is clear that, on the same principle as that employed in writing exercises introducing the hip twist, the exercise described in § 43 is written $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$. Fig. 22, p. 68, illustrates an exercise in which this series of circles is executed by the right club; in that figure (1) shows the club as it ascends in the circle $\frac{1}{2} A \frac{1}{2} M$, and (2) shows the club as it descends in the circle $\frac{1}{2} M \frac{1}{2} L$.

§ 45. *Continuous Exercises introducing the Outward Cross Hip Twist.*—You may obviously do an ascending half cross hip twist after any half circle which may be followed by an ascending half hip twist; for example, you may do $\frac{1}{2} A \frac{1}{2} M$ or $\frac{1}{2} G \frac{1}{2} M$, and after any of these circles you may do a complete cross hip twist.

After the descending half cross hip twist, the usual continuation is an ascending half hip twist as in the exercise described in § 43; it is, however, not very difficult, with the shoulders full right, to do an ascending half back swing ($\frac{1}{2} M \frac{1}{2} D$). Fig. 24, p. 82, shows an exercise introducing this circle with the right club; in that figure (1) shows the club somewhat before the conclusion of its descent, and (2) shows the club just before the conclusion of its ascent.

§ 46. *The Inward Cross Hip Twist.*—The circles and exercises

described in §§ 43-45 may of course be reversed. You will have no difficulty in seeing how to do this. The reverse of $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$ is of course $\frac{1}{2} a \frac{1}{2} l \frac{1}{2} l \frac{1}{2} m \frac{1}{2} m \frac{1}{2} a$; the inward cross hip twist (m), the reverse of the outward cross hip twist, is most easily learnt by practising this exercise.

CHAPTER VI.

ALTERNATE EXERCISES WITH OUTWARD CIRCLES.

§ 47. *Introductory.*—The present chapter is devoted to exercises for both clubs of a particular class, the peculiar features of which we proceed to explain.

A combination consisting of a pair of outward circles, one with each club, in which the two circles are begun at the same moment and finished at the same moment, and in which the two clubs keep exact pace with each other throughout, so that, viewed from the front, the two clubs appear always to make equal angles with the vertical, is called an "alternate" combination.

The diagrams (fig. 19) will make the nature of an

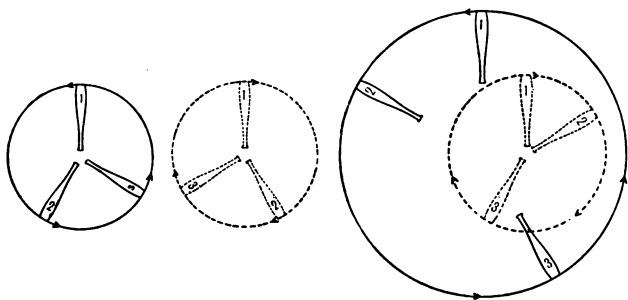


FIG. 19.

alternate combination clearer; in each diagram the heavy solid line shows the course pursued by the point of the right

club, and the heavy dotted line the path pursued by the point of the left club; and in each diagram the clubs are shown in various positions which they should occupy in the course of the combination. The positions of the clubs are numbered to correspond—that is to say, when the right club is in the position marked 1, the left club should occupy the position marked 1, and so on.

When you have learnt various alternate combinations, you may, of course, do such combinations in succession to each other; exercises consisting of series of alternate combinations done in succession to each other are called alternate exercises.

Alternate combinations and exercises may also be done consisting of inward circles; these are dealt with in Chapter VII.; the present chapter is entirely confined to alternate combinations and exercises consisting of outward circles.

It is most necessary in alternate exercises to attend to time-keeping; if time is not accurately kept—that is, if the two clubs do not keep exact pace with each other—the angles they make with the vertical cease to appear equal, and the exercises lose their distinctive character altogether.

In the short notation an alternate combination is indicated by placing the letter denoting the circle executed by the right club directly above the letter denoting the circle executed by the left club. Thus, $\frac{A}{B}$ denotes an alternate combination of an outward front swing right and an outward back twist left.

The chapter is arranged as follows. We take the ten outward circles described in Chapter II. in order, devoting in almost all cases a separate paragraph to each, and, assuming the circle under discussion to be done with the right club, we point out, also in order, which of the ten

outward circles with the left club may be conveniently combined with it so as to form an alternate combination.

When you have learnt an exercise consisting of a given movement with the right club and a given movement with the left club, you will easily see how to do a similar exercise in which the parts played by the two clubs are interchanged, so that the former movement is done with the left club and the latter with the right. For example, when you have learnt a combination consisting of a front swing right and a back twist left $\begin{pmatrix} A \\ B \end{pmatrix}$, you will easily learn a similar combination consisting of a front swing left and a back twist right $\begin{pmatrix} B \\ A \end{pmatrix}$. Indeed, two exercises corresponding in this way are really only two forms of the same exercise, and may be spoken of as being done on opposite sides, or one on one side and one on the other, or as being done right and left respectively.

It is obvious that, as the chapter is arranged, every combination consisting of different circles with the two clubs will be mentioned first on one side and then on the other; we shall, however, on the second occasion of mentioning a combination omit all description, as once an exercise is learnt on one side, there is no difficulty in understanding how it should be done on the other. For example, in § 49 we discuss the alternate combination of a front swing right and a back twist left $\begin{pmatrix} A \\ B \end{pmatrix}$. The corresponding combination on the other side, consisting of a front swing left and a back twist right $\begin{pmatrix} B \\ A \end{pmatrix}$, is mentioned in § 50, which deals with combinations with the back twist; but as the exercise on one side has been already fully dealt with, it is sufficient in that paragraph merely to mention it without further description.

After dealing in this way with the ten outward circles described in Chapter II., we give, in § 58, examples of com-

tinuous exercises in which various alternate combinations of pairs of circles are done in succession ; then in § 59 we deal with alternate exercises introducing the circles described in Chapter V.

The most advisable course for a learner will be to read the present paragraph and then turn to § 58, and attempt some of the exercises there given, reading such portions of the intervening paragraphs only as deal with the combinations occurring in those exercises.

In most cases an alternate combination of a pair of circles may be repeated time after time continuously ; in most cases, also, it may be followed by the corresponding combination on the other side, so that the combination may be done right and left alternately. Usually, therefore, two continuous exercises may be made out of any alternate combination of a pair of circles, the one consisting merely of a continual repetition of the combination, the other of a repetition of the combination right and left alternately. We shall almost always in discussing a particular combination mention whether it can be conveniently repeated or done right and left alternately.

In many alternate combinations, the clubs are crossed during parts of the movement ; in order to indicate in the short notation which club is in front when the clubs are so crossed, we employ two symbols—V and Λ.

V placed immediately after the letter denoting a circle performed by either club signifies that that club is to pass in front of the other when the clubs are crossed and pointing downwards.

Λ placed immediately after the letter denoting a circle performed by either club signifies that that club is to pass in front of the other when the clubs are crossed and pointing upwards.

An example of the use of these symbols is given in the next paragraph; we recommend beginners, however, not to trouble about their general meaning at first; their practical use in the case of the simpler combinations will be easily learnt from the paragraphs dealing with those combinations.

§ 48. *Use of the Symbols V and A.*—In order to illustrate the method of using the symbols V and A, we will consider an alternate combination of two front twists at half distance with the shoulders square ($\begin{smallmatrix} G' \\ G' \end{smallmatrix}$); as the clubs begin to ascend the clubs will cross while they are still pointing downwards (either club may of course cross in front of the other); then when the clubs are horizontal they will uncross for an instant, and then as they continue to ascend they will immediately cross again; on which occasion either the same club may be in front, as when they were crossed before, or the other club may be in front. The exercise admits, therefore, of four forms.

(i) The right club may be in front when the clubs are crossed, both when the clubs are pointing downwards and when they are pointing upwards; this form of the combination is written thus:— $\begin{smallmatrix} G'VA \\ G' \end{smallmatrix}$.

(ii) The right club may be in front when the clubs are crossed and pointing downwards, and the left club in front when the clubs are crossed and pointing upwards; this form of the combination is written thus:— $\begin{smallmatrix} G'V \\ G'A \end{smallmatrix}$. In order to do it you must allow the left club to lag a little just as the clubs reach the horizontal position in their ascent.

(iii) The left club may be in front on both occasions when the clubs are crossed ($\begin{smallmatrix} G' \\ G'VA \end{smallmatrix}$).

(iv) The left club may be in front when the clubs are crossed and pointing downwards, and the right club in front when the clubs are crossed and pointing upwards ($\begin{smallmatrix} G' \\ G'V \end{smallmatrix}$).

§ 49. *Combinations with the Outward Front Swing (A) Right.*

(i) Front Swing Right and Front Swing Left ($\begin{smallmatrix} A \\ A \end{smallmatrix}$). This combination is usually done with the shoulders square ($\begin{smallmatrix} A \\ A \end{smallmatrix}$); the two clubs descend in exactly similar paths until they point straight down; then one club passes in front of the other, and, as the clubs ascend, first the clubs, and then the arms, are crossed, till the clubs are horizontal; at this point

the arm which was behind the other lags a little, as little however as possible, so that the arms uncross for an instant; then the arms cross each other again, the other arm in front, and first the arms, and then the clubs, are crossed, till the arms are almost straight above the head, when the clubs uncross and come clear. The clubs should pass as close to each other as possible, both when they first cross and when they finally uncross.

You must be careful to do each front swing in good style; there is a strong tendency to let the clubs go too far forward while they are below the horizontal and too far back during the higher part of the movement; there is also a tendency to stoop as the clubs pass each other when they begin to ascend. The combination obviously admits of two forms, in one of which the right club passes in front of the left as the clubs begin to ascend, and in the other of which the left club passes in front of the right at that point. The form of the combination in which the right club passes in front as the clubs begin to ascend is written \overline{AV}_A ; the form in which the left club passes in front at that point is written \overline{AV}_A .

The combination may be repeated time after time continuously, or the two forms just mentioned may be alternated ($\overline{AV}_A \overline{AV}_A$).

(ii) Front Swing Right and Back Twist Left (\overline{A}_B). This combination may be done with the back twist proper (\overline{A}_B), at half distance ($\overline{A}_{B'}$), or at arm's length ($\overline{A}_{B''}$); all these forms of the combination are usually done with the shoulders square ($\overline{A}, \overline{A}, \overline{A}$). All forms of the combination may be repeated or done right and left alternately. Front swing right and back twist proper left, alternating with front swing left and

back twist proper right, is the first exercise of any difficulty that beginners should learn. In this exercise each club does front swings and back twists alternately; these combinations have been discussed in §§ 23 and 24.

(iii) Front Swing Right and Cross Front Twist Left ($\begin{smallmatrix} A \\ C \end{smallmatrix}$). This combination is usually done with the shoulders square and the cross front twist proper, the right arm passing behind the left club shortly after the clubs begin to ascend ($\begin{smallmatrix} \bar{A} \\ CV \end{smallmatrix}$); it is difficult to repeat neatly, but may be done right and left alternately.

(iv) $\begin{smallmatrix} A \\ D \end{smallmatrix}$. The usual form is $\begin{smallmatrix} \bar{A} \\ D \end{smallmatrix}$, which is very effective; it may be repeated or done right and left alternately.

(v) $\begin{smallmatrix} A \\ E \end{smallmatrix}$. The usual form is $\begin{smallmatrix} \bar{A} \\ E \end{smallmatrix}$; you must pass the left hand to the right before beginning, and be careful to straighten the left arm as early as possible; the combination is, however, nearly indistinguishable from $\begin{smallmatrix} \bar{A} \\ H \end{smallmatrix}$. It may be repeated or done right and left alternately.

(vi) $\begin{smallmatrix} A \\ F \end{smallmatrix}$. The forms $\begin{smallmatrix} \bar{A} \\ F \end{smallmatrix}$ and $\begin{smallmatrix} \bar{A} \\ F \end{smallmatrix}$ are both possible, but difficult to do neatly. Either form may be repeated or, though by no means easily, done right and left alternately.

(vii) $\begin{smallmatrix} A \\ G \end{smallmatrix}$. This admits of some variety; the following are the most usual forms: 1° $\begin{smallmatrix} \bar{A} \\ G'V \end{smallmatrix}$, 2° $\begin{smallmatrix} \bar{A} \\ G''V \end{smallmatrix}$, 3° $\begin{smallmatrix} \bar{A} \\ G'V \end{smallmatrix}$; in these the right club passes behind the left shortly after the clubs begin to ascend: 4° $\begin{smallmatrix} \bar{A} \\ G''V \end{smallmatrix}$; in this the right club passes in front of the left shortly after the clubs begin to ascend, so that the left club ascends between the arms. All these forms of the combination may be repeated or done right and left alternately.

(viii) $\begin{smallmatrix} A \\ H \end{smallmatrix}$. The most usual form is $\begin{smallmatrix} \bar{A} \\ H \end{smallmatrix}$, which much resembles $\begin{smallmatrix} \bar{A} \\ E \end{smallmatrix}$; it may be repeated or done right and left alternately.

(ix) $\begin{smallmatrix} A \\ I \end{smallmatrix}$. This much resembles $\begin{smallmatrix} \bar{A} \\ F \end{smallmatrix}$; it is difficult, but can be repeated or done right and left alternately.

(x) $\begin{smallmatrix} A \\ K \end{smallmatrix}$. This is exceedingly difficult; but can be repeated or done right and left alternately.

§ 50. *Combinations with the Outward Back Twist (B) Right.*

(i) Back Twist Right and Front Swing Left $\left(\begin{smallmatrix} B \\ A \end{smallmatrix}\right)$. The corresponding combination on the other side—namely, front swing right and back twist left $\left(\begin{smallmatrix} A \\ B \end{smallmatrix}\right)$ —has been dealt with in § 49 (ii).

(ii) Back Twist Right and Back Twist Left $\left(\begin{smallmatrix} B \\ B \end{smallmatrix}\right)$. This is a most important combination to practise, and admits of some variety. The most usual forms are:—1° two back twists proper with the shoulders square $\left(\begin{smallmatrix} \bar{B} \\ B \end{smallmatrix}\right)$; 2° two back twists at arm's length with the shoulders square $\left(\begin{smallmatrix} B'' \\ B'' \end{smallmatrix}\right)$; 3° one back twist proper and the other at arm's length with the shoulders square $\left(\begin{smallmatrix} B \\ B'' \end{smallmatrix}\right)$ or $\left(\begin{smallmatrix} B'' \\ B \end{smallmatrix}\right)$. In the first-mentioned form $\left(\begin{smallmatrix} \bar{B} \\ B \end{smallmatrix}\right)$ the clubs, shortly after they begin to ascend, will cross each other; they will uncross again for a moment as the clubs reach the horizontal position, and will then immediately recross, with the other club in front, finally uncrossing just before the clubs complete their ascent. You should practise the combination both with the right club in front (*i.e.* nearest the back), when the clubs cross as they begin their ascent $\left(\begin{smallmatrix} \bar{B}V \\ B \end{smallmatrix}\right)$, and with the left club in front at that point $\left(\begin{smallmatrix} \bar{B} \\ BV \end{smallmatrix}\right)$. The great difficulty in this form of the combination is to keep the clubs moving in similar paths; the tendency is to let the club in front (*i.e.* nearest the back), when the clubs cross as they begin their ascent, lag behind, and to get the hand holding the other club too high. The hands should be held at the same height; and you must be careful also to keep the elbows well pressed back, so that the upper arms are in the line of the shoulders.

The various forms of the combination may all be repeated. You may also do two back twists proper and two at arm's length alternately $\left(\begin{smallmatrix} \bar{B} & B'' \\ B & B'' \end{smallmatrix}\right)$, and other continuous exercises of a like character.

(iii) Back Twist Right and Cross Front Twist Left ($\begin{smallmatrix} B \\ C \end{smallmatrix}$). T' is an important combination to practise, and admits of some variety. The most usual form is with the shoulders half right and both twists at half distance ($\begin{smallmatrix} B' \\ C' \end{smallmatrix}$); in this form of the combination the hands should be about six inches apart, the left hand being directly in front of the right; the combination may be repeated, or, though not at all easily, done right and left alternately.

(iv) $\begin{smallmatrix} B \\ D \end{smallmatrix}$. The forms $\begin{smallmatrix} B' \\ D \end{smallmatrix}$ and $\begin{smallmatrix} B \\ D' \end{smallmatrix}$ are both possible, and may be repeated or done right and left alternately; the combination is awkward and not effective.

(v) $\begin{smallmatrix} B \\ E \end{smallmatrix}$. This is very difficult but effective; it can be repeated or done right and left alternately.

(vi) $\begin{smallmatrix} B \\ F \end{smallmatrix}$. This can be repeated; but it is extremely difficult to do right and left alternately.

(vii) $\begin{smallmatrix} B \\ G \end{smallmatrix}$. This admits of some variety; the most usual forms are $\begin{smallmatrix} B' \\ G' \end{smallmatrix}$ and $\begin{smallmatrix} B'' \\ G'' \end{smallmatrix}$; all forms of the combination may be repeated or done right and left alternately.

(viii) $\begin{smallmatrix} B \\ H \end{smallmatrix}$. The most usual form is $\begin{smallmatrix} B' \\ H' \end{smallmatrix}$, which itself admits of two varieties: 1° $\begin{smallmatrix} B' \\ H' \end{smallmatrix} V$; in this, the left hand should be held a little above and to the rear of the right hand, the hands being as close together as possible and equally far to the right; this form of the combination is shown in fig. 20 (1). 2° $\begin{smallmatrix} B' \\ H' \end{smallmatrix} V$; in this the wrists may be crossed and almost in contact, with the left wrist uppermost; or the right hand may be held a little to the right of the left hand; this form of the combination is shown in fig. 20 (2). Both forms of $\begin{smallmatrix} B' \\ H' \end{smallmatrix}$ are very effective; the second is much the more difficult. Either form may be repeated; but it is very difficult to do either right or left alternately.

(ix) $\begin{smallmatrix} B \\ I \end{smallmatrix}$. The usual form is $\begin{smallmatrix} B' \\ I' \end{smallmatrix}$, which itself admits of two varieties: 1° $\begin{smallmatrix} B' \\ I' \end{smallmatrix} V$; in this the left hand should be held a little below and to the rear of the right hand, the hands being as close together as possible and equally far to the right; this form of the combination is extremely effective. 2° $\begin{smallmatrix} B' \\ I' \end{smallmatrix} V$; in this the wrists must be crossed and in contact.



FIG. 20 (see § 50, viii).

with the right wrist uppermost; it is extremely difficult. Either form of $\frac{B'}{I}$ may be repeated; but it is extremely difficult to do either right and left alternately.

(x) $\frac{B}{K}$. The usual form is $\frac{B''}{K''}$; it may be repeated, but is extremely difficult to do right and left alternately.

§ 51. *Combinations with the Outward Cross Front Twist (C) Right.*

(i, ii) Cross Front Twist Right and Front Swing Left $\left(\begin{smallmatrix} C \\ A \end{smallmatrix}\right)$, Cross Front Twist Right and Back Twist Left $\left(\begin{smallmatrix} C \\ B \end{smallmatrix}\right)$. The corresponding forms of these combinations on the other side have been dealt with.

(iii) Cross Front Twist Right and Cross Front Twist Left $\left(\begin{smallmatrix} C \\ C \end{smallmatrix}\right)$. This combination may be done with the shoulders square and both twists in their proper form. This form of the combination is usually done with the wrists crossed; if the right wrist is crossed in front of the left, the left club should pass in front of the right as the clubs begin to descend, so that, as the clubs complete their descent, the right club passes in front of the left {this form of the combination may be written \overline{C}^V or \overline{C}_A } ; if the left wrist is crossed in front of the right, the right club should, of course, pass in front of the left as the clubs begin to descend $\left\{\overline{C}_{CV} \text{ or } \overline{C}_A\right\}$. The combination can also be done with the shoulders square and both twists in their proper form, with the hands close together, but the wrists not crossed.

(iv) $\begin{smallmatrix} C \\ D \end{smallmatrix}$. The most effective form is \overline{C}_D ; it may be repeated, but is difficult to do right and left alternately.

(v, vi) $\begin{smallmatrix} C & C \\ E & F \end{smallmatrix}$. These are very difficult, but can be repeated or done right and left alternately.

(vii) $\begin{smallmatrix} C \\ G \end{smallmatrix}$. This admits of considerable variety; the most usual forms are:—1° $\begin{smallmatrix} C \\ G \end{smallmatrix} V$; this is usually done with the left hand a little above and in front of the right hand, the hands being as close together as possible; this variety of $\begin{smallmatrix} C \\ G \end{smallmatrix} V$ is shown in fig. 21 (1). It can also be done with the wrists crossed and almost in contact, with the right wrist uppermost; but this method of doing the combination is very difficult. 2° $\begin{smallmatrix} C \\ G \end{smallmatrix} V$; this is usually done with the left hand a little below or to the left of the right hand, the hands being as close together as possible; this variety of $\begin{smallmatrix} C \\ G \end{smallmatrix} V$ is shown in fig. 21 (2). It can also be done with



(1)
FIG. 20 (see § 50. viii).

with the right wrist uppermost ;
of $\frac{B'}{I}$, may be repeated ; but
left alternately.

(x) $\frac{B}{K}$. The use
difficult to do

(i, ii) Cross Front Twist Right and Front Swing Left $\left(\begin{smallmatrix} C \\ A \end{smallmatrix}\right)$, Cross Front Twist Right and Back Twist Left $\left(\begin{smallmatrix} C \\ B \end{smallmatrix}\right)$. The corresponding forms of these combinations on the other side have been dealt with.

(iii) Cross Front Twist Right and Cross Front Twist Left $\left(\begin{smallmatrix} C \\ C \end{smallmatrix}\right)$. This combination may be done with the shoulders square and both twists in their proper form. This form of the combination is usually done with the wrists crossed; if the right wrist is crossed in front of the left, the left club should pass in front of the right as the clubs begin to descend, so that, as the clubs complete their descent, the right club passes in front of the left {this form of the combination may be written $\overline{C}V_C$ or $\overline{C}A_C$ }; if the left wrist is crossed in front of the right, the right club should, of course, pass in front of the left as the clubs begin to descend { $\overline{C}C_V$ or $\overline{C}C_A$ }. The combination can also be done with the shoulders square and both twists in their proper form, with the hands close together, but the wrists not crossed.

(iv) $\begin{smallmatrix} C \\ D \end{smallmatrix}$. The most effective form is $\overline{C}D$; it may be repeated, but is difficult to do right and left alternately.

(v, vi) $\begin{smallmatrix} C \\ E, F \end{smallmatrix}$. These are very difficult, but can be repeated or done right and left alternately.

This admits of considerable variety; the most usual form is $\begin{smallmatrix} C \\ G \end{smallmatrix}$; this is usually done with the left hand a little above the right hand, the hands being as close together as possible. The form of $\begin{smallmatrix} C \\ G \end{smallmatrix}$ is shown in fig. 21 (1). It can also be done with the hands almost in contact, with the right wrist crossed, and of doing the combination in a way different from that shown in fig. 21 (2).

With the left hand a little above the right hand, the hands being as close together as possible, the combination can be done in two ways: (1) with the right wrist crossed, and (2) with the left wrist crossed.

forms of

most u

il cross, a

last two

the wrists crossed and in contact, with the left wrist uppermost; but this method of doing the combination is exceedingly difficult. 3°

$\frac{1}{C''VA}$; in this the left club ascends between the arms.



FIG. 21 (see § 51, vii).

All these forms of the combination may be repeated and, though not without considerable difficulty, done right and left alternately.

(viii, ix, x) $\begin{smallmatrix} C \\ H \end{smallmatrix}, \begin{smallmatrix} C \\ I \end{smallmatrix}, \begin{smallmatrix} C \\ K \end{smallmatrix}$. These are all very difficult in any form.

§ 52. *Combinations with the Outward Back Swing (D) Right.*

(i, ii, iii) $\begin{smallmatrix} D \\ A \end{smallmatrix}, \begin{smallmatrix} D \\ B \end{smallmatrix}, \begin{smallmatrix} D \\ C \end{smallmatrix}$. The corresponding forms of these on the other side have been dealt with.

(iv) $\begin{smallmatrix} D \\ E \end{smallmatrix}$. The usual form is $\begin{smallmatrix} \overline{D} \\ E \end{smallmatrix}$, which is very effective; it may be repeated and, with difficulty, done right and left alternately. In this combination it is possible to keep the left arm straight almost throughout E.

(v) $\begin{smallmatrix} D \\ F \end{smallmatrix}$. The usual form is $\begin{smallmatrix} \overline{D} \\ F \end{smallmatrix}$, which is very effective; the left hand must be passed to the right beyond the right arm before the combination is begun. It may be repeated, but is extremely difficult to do right and left alternately. In this combination the left arm may be kept straight almost throughout F.

(vi) $\begin{smallmatrix} D \\ G \end{smallmatrix}$. This is not particularly effective in any form.

(vii, viii) $\begin{smallmatrix} D \\ H \end{smallmatrix}, \begin{smallmatrix} D \\ I \end{smallmatrix}$. These somewhat resemble $\begin{smallmatrix} D \\ E \end{smallmatrix}$ and $\begin{smallmatrix} D \\ F \end{smallmatrix}$, with the left arm bent instead of nearly straight.

(ix) $\begin{smallmatrix} D \\ K \end{smallmatrix}$. The only practicable form is $\begin{smallmatrix} \overline{D} \\ K \end{smallmatrix}$, which is effective and may be repeated, but is extremely difficult to do right and left alternately.

§ 53. *Combinations with the Outward Cross Swing Over (E) Right.*

(i, ii, iii, iv) $\begin{smallmatrix} E \\ A \end{smallmatrix}, \begin{smallmatrix} E \\ B \end{smallmatrix}, \begin{smallmatrix} E \\ C \end{smallmatrix}, \begin{smallmatrix} E \\ D \end{smallmatrix}$. The corresponding forms of these on the other side have been dealt with.

(v, vi) $\begin{smallmatrix} E \\ E \end{smallmatrix}, \begin{smallmatrix} E \\ F \end{smallmatrix}$. These are extremely difficult.

(vii) $\begin{smallmatrix} E \\ G \end{smallmatrix}$. This admits of some variety, but is not particularly effective in any form.

(viii, ix) $\begin{smallmatrix} E \\ H \end{smallmatrix}, \begin{smallmatrix} E \\ I \end{smallmatrix}$. These are extremely difficult.

§ 54. *Combinations with the Outward Cross Swing Under (F) Right.*

(i, ii, iii, iv, v) $\begin{smallmatrix} F \\ A \end{smallmatrix}, \begin{smallmatrix} F \\ B \end{smallmatrix}, \begin{smallmatrix} F \\ C \end{smallmatrix}, \begin{smallmatrix} F \\ D \end{smallmatrix}, \begin{smallmatrix} F \\ E \end{smallmatrix}$. The corresponding forms of these on the other side have been dealt with.

(vi) $\begin{smallmatrix} F \\ G \end{smallmatrix}$. This admits of some variety, but is not particularly effective in any form.

(vii) $\begin{smallmatrix} F \\ H \end{smallmatrix}$. This is extremely difficult.

§ 55. *Combinations with the Outward Front Twist (G) Right.*

(i, ii, iii, iv, v, vi) $\begin{smallmatrix} G \\ A \end{smallmatrix}, \begin{smallmatrix} G \\ B \end{smallmatrix}, \begin{smallmatrix} G \\ C \end{smallmatrix}, \begin{smallmatrix} G \\ D \end{smallmatrix}, \begin{smallmatrix} G \\ E \end{smallmatrix}, \begin{smallmatrix} G \\ F \end{smallmatrix}$. The corresponding forms of these on the other side have been dealt with.

(vii) $\begin{smallmatrix} G \\ G \end{smallmatrix}$. This combination admits of some variety; the most usual forms are $\begin{smallmatrix} \overline{G} \\ G \end{smallmatrix}$ and $\begin{smallmatrix} \overline{G}'' \\ G \end{smallmatrix}$; in the first of these the clubs will cross, and it admits of four forms: $\begin{smallmatrix} \overline{G} \vee \Lambda \\ G \end{smallmatrix}, \begin{smallmatrix} \overline{G}' \vee \Lambda \\ G \end{smallmatrix}, \begin{smallmatrix} \overline{G} \vee \Lambda \\ G \end{smallmatrix}$, and $\begin{smallmatrix} \overline{G} \wedge \\ G \end{smallmatrix}$, the last two being the most effective.

(viii) $\begin{smallmatrix} G \\ H \end{smallmatrix}$. This admits of some variety; the most usual forms are: 1° $\begin{smallmatrix} G' \\ H \end{smallmatrix}$, 2° $\begin{smallmatrix} G'' \\ H \end{smallmatrix}$; in these the left hand is close to the neck, and the right club ascends in front of the left arm. 3° $\begin{smallmatrix} G' \\ H' \end{smallmatrix}$; in this form also the right club ascends in front of the left arm. 4° $\begin{smallmatrix} G'' \\ H'' \end{smallmatrix}$; this admits of two varieties; the right club may ascend in front of the left arm or between the arms; the last form is probably the most effective of all forms of the combination. All these forms of the combination may be repeated; they are all very difficult to do right and left alternately.

(ix) $\begin{smallmatrix} G \\ I \end{smallmatrix}$. This admits of variety in much the same way as $\begin{smallmatrix} G \\ H \end{smallmatrix}$; the most usual forms are $\begin{smallmatrix} G' \\ I \end{smallmatrix}$, $\begin{smallmatrix} G'' \\ I \end{smallmatrix}$, $\begin{smallmatrix} G' \\ I' \end{smallmatrix}$, and $\begin{smallmatrix} G'' \\ I'' \end{smallmatrix}$; the last form itself admits of two varieties: the right club may ascend in front of the left arm or between the arms. All the forms of the combination may be repeated; but they are all very difficult to do right and left alternately.

(x) $\begin{smallmatrix} G \\ K \end{smallmatrix}$. The usual form is $\begin{smallmatrix} G'' \\ K'' \end{smallmatrix}$, which itself admits of two varieties: 1° $\begin{smallmatrix} G'' \\ K''V \end{smallmatrix}$, in which the right club ascends between the arms; 2° $\begin{smallmatrix} G''V \\ K'' \end{smallmatrix}$, in which the right club ascends in front of the left arm. Both varieties are difficult and effective; they may both be repeated, but it is extremely difficult to do either right and left alternately.

§ 56. *Combinations with the Outward Cross Back Twist Over (H) Right.*

(i, ii, iii, iv, v, vi, vii) $\begin{smallmatrix} H & H & H & H & H & H & H \\ A & B & C & D & E & F & G \end{smallmatrix}$. The corresponding forms of these on the other side have been dealt with.

(viii) $\begin{smallmatrix} H \\ H \end{smallmatrix}$. This may be done in the form $\begin{smallmatrix} H \\ H \end{smallmatrix}$ with the arms crossed in front of the chest, the right hand close to the left ear, and the left hand close to the right ear; it is very difficult and has rather a comic effect; it may be repeated.

(ix) $\begin{smallmatrix} H \\ I \end{smallmatrix}$. This may be done in the form $\begin{smallmatrix} H \\ I \end{smallmatrix}$; which somewhat resembles $\begin{smallmatrix} H \\ H \end{smallmatrix}$, and is very difficult; it may be repeated.

§ 57. *Combinations with the Outward Cross Back Twist Under (I) Right and with the Outward Cross Inside Twist (K) Right.*—The corresponding forms on the other side of the practicable combinations with these circles have been dealt with.

§ 58. *Examples of Alternate Exercises.*—In the present paragraph we give a number of examples of alternate exercises, arranging them in several sets according to the character of the combinations introduced. The several sets, and the several examples in each set, are arranged

roughly in a progressive order of difficulty ; but the more complicated exercises in an earlier set will often be found more difficult than the simpler exercises in a later set. The exercises in the first two sets, which are very elementary, we write out at length, giving their description in the short notation also ; the remaining exercises are written in the short notation only.

You will find it advisable, before attempting to do an exercise, first to learn the movement of each club separately, referring to Chapter III. in order to see how it should be done ; and then to learn each individual combination of a pair of circles, which occurs in the exercise, separately, referring to the previous paragraphs of this chapter to see how it should be done.

In the short notation a single vertical line placed after a group of letters denoting an exercise means that the exercise may be repeated as often as you please ; if it is necessary to show that the exercise is to be done only once, or is to be repeated a given number of times, the number 1, or the number indicating the desired number of repetitions, may be placed after the vertical line.

A double vertical line placed after a group of letters denoting an exercise means that after doing the exercise you are to do the corresponding exercise on the other side, and then repeat the whole movement, consisting of the exercise done right and left alternately, as often as you please ; if it is desired to show that the exercise is to be done only once on each side, or is to be repeated a given number of times on each side, the number 1, or the number indicating the desired number of repetitions, may be placed after the double vertical line.

The use of the vertical lines will be sufficiently illustrated in the examples we are about to give.

I. *Exercises with the Front Swing (A) and the Back Twist (B).*

(i) With shoulders square throughout—Front Swing Right and Front Swing Left, passing the right club in front when the clubs begin to ascend (\overline{AV} _A); Front Swing Right and Front Swing Left, passing the left club in front when the clubs begin to ascend (\overline{AV} _A); repeat. { This may be written $\overline{AV} \overline{A}$ _A \overline{AV} _A or \overline{AV} _A \overline{A} }.

(ii) With shoulders square throughout—Front Swing Right and Back Twist Proper Left (\overline{B} _B); Front Swing Left and Back Twist Proper Right (\overline{B} _A); repeat. { $\overline{A} \overline{B}$ _B \overline{A} _A or shortly, \overline{A} _B \overline{B} _A }.

(iii) With shoulders square throughout—Front Swing Right and Front Swing Left, passing the right club in front when the clubs begin to ascend (\overline{AV} _A); Back Twist Proper Right and Back Twist Proper Left, passing the right club in front (that is, nearest the back) when the clubs begin to ascend (\overline{BV} _B); do the corresponding exercise on the other side; that is to say, passing the left club in front on both occasions instead of the right; then repeat the whole exercise. { $\overline{AV} \overline{BV} \overline{A} \overline{B}$ _A $\overline{AV} \overline{BV}$ _B or shortly, $\overline{AV} \overline{BV}$ _A $\overline{A} \overline{B}$ _B }.

(iv) With shoulders square throughout—Front Swing Right and Front Swing Left, passing the left club in front when the clubs begin to ascend (\overline{A} _{AV}); Front Swing Right and Back Twist Proper Left (\overline{A} _B); same on the other side; repeat. { $\overline{A} \overline{A} \overline{AV} \overline{B}$ _A $\overline{A} \overline{A}$ _{AV} or shortly, $\overline{A} \overline{A}$ _{AV} $\overline{A} \overline{B}$ _B }.

In this exercise great care must be taken to keep the right arm straight as the first front swing is finished.

II. *Exercises with the Cross Front Twist (C).*

(i) Front Swing Right and Back Twist Proper Left with shoulders square $\left(\begin{smallmatrix} \bar{A} \\ B \end{smallmatrix}\right)$; Cross Front Twist at Half Distance Right and Back Twist at Half Distance Left with shoulders half left $\left(\begin{smallmatrix} \bar{C}' \\ B' \end{smallmatrix}\right)$; same on the other side; repeat. $\left\{ \begin{smallmatrix} \bar{A} & \bar{C}' \\ B & B' \end{smallmatrix} \right\}$
 $\begin{smallmatrix} \bar{B} & \bar{B}' \\ A & C' \end{smallmatrix} \parallel$ or shortly, $\begin{smallmatrix} \bar{A} & \bar{C}' \\ B & B' \end{smallmatrix} \parallel$.

(ii) Front Swing Right and Front Swing Left with shoulders square, passing the left club in front as the clubs begin to ascend $\left(\begin{smallmatrix} \bar{A} \\ A_V \end{smallmatrix}\right)$; Front Swing Right and Back Twist Proper Left with shoulders square $\left(\begin{smallmatrix} \bar{A} \\ B \end{smallmatrix}\right)$; Cross Front Twist Right at Half Distance and Back Twist Left at Half Distance with shoulders half left $\left(\begin{smallmatrix} \bar{C}' \\ B' \end{smallmatrix}\right)$; same on the other side; repeat. $\left\{ \begin{smallmatrix} \bar{A} & \bar{A} & \bar{C}' \\ A_V & B & B' \end{smallmatrix} \parallel \right\}$ In this exercise, as in I. (iv.), care must be taken to keep the right arm straight as the first front swing is finished.

(iii) With shoulders square throughout—Front Swing Right and Cross Front Twist Proper Left, passing the right club behind the left as the clubs begin to ascend $\left(\begin{smallmatrix} \bar{A} \\ C_V \end{smallmatrix}\right)$; Front Swing Left and Cross Front Twist Proper Right, passing the left club behind the right as the clubs begin to ascend $\left(\begin{smallmatrix} \bar{C}_V \\ A \end{smallmatrix}\right)$; repeat. $\left\{ \begin{smallmatrix} \bar{A} & \bar{C}_V \\ C_V & A \end{smallmatrix} \parallel \right\}$ or shortly, $\begin{smallmatrix} \bar{A} \\ C_V \end{smallmatrix} \parallel$.

(iv) Front Swing Right and Cross Front Twist Left with shoulders square, passing the right club behind the left as the clubs begin to ascend $\left(\begin{smallmatrix} \bar{A} \\ C_V \end{smallmatrix}\right)$; Cross Front Twist Right at Half Distance and Back Twist Left at Half Distance with shoulders half left $\left(\begin{smallmatrix} \bar{C}' \\ B' \end{smallmatrix}\right)$; Front Swing Right and Back Twist

Proper Left with shoulders square (\bar{A}_B); same on the other side; repeat. $\{\bar{A} \quad \bar{C}' \quad \bar{A} \parallel \bar{C}_V \quad \bar{B}' \quad \bar{B} \parallel\}$

III. *Additional exercises with the Front Swing (A), the Back Twist (B), and the Cross Front Twist (C).—*

(i) $\frac{\bar{A} \bar{V} \bar{A} \quad \bar{B} \bar{V} \bar{B}}{\bar{A} \quad \bar{A} \bar{V} \bar{B} \quad \bar{B} \bar{V}}$. (ii) $\frac{\bar{A} \bar{A} \bar{B} \bar{B}}{\bar{B} \bar{B} \bar{A} \bar{A}}$. (iii) $\frac{\bar{A} \bar{V} \bar{B} \bar{V} \bar{B}'' \bar{A}}{\bar{A} \quad \bar{B} \quad \bar{B}'' \bar{A} \bar{V}}$
 $\frac{\bar{B} \quad \bar{B}''}{\bar{B} \bar{V} \bar{B}''}$. (iv) $\frac{\bar{A} \bar{V} \bar{B} \quad \bar{A} \quad \bar{C}'}{\bar{A} \quad \bar{B} \bar{V} \bar{B} \quad \bar{B}''}$. (v) $\frac{\bar{A} \bar{V} \bar{A}}{\bar{A} \quad \bar{C}_V}$. (vi) $\frac{\bar{A} \bar{V} \bar{A}}{\bar{A} \quad \bar{C}_V}$
 $\frac{\bar{C}' \quad \bar{B} \bar{V}}{\bar{B}' \quad \bar{B}}$. (vii) $\frac{\bar{A} \bar{C} \quad \bar{B}'' \bar{B} \bar{V}}{\bar{B} \quad \bar{B}'' \quad \bar{B} \quad \bar{B}}$. (viii) $\frac{\bar{A} \bar{V} \bar{B} \bar{V} \bar{B}'' \bar{B}}{\bar{A} \quad \bar{B} \quad \bar{B} \quad \bar{B}''}$.
 (ix) $\frac{\bar{A} \bar{V} \bar{B}'' \quad \bar{B}'}{\bar{A} \quad \bar{C} \quad \bar{C}'}$. (x) $\frac{\bar{A} \quad \bar{C}_V \bar{C} \quad \bar{C}'}{\bar{C}_V \bar{A} \quad \bar{C}_V \bar{B}'}$.
 (xi) $\frac{\bar{A} \bar{V}}{\bar{A}} \parallel^2, \frac{\bar{A}}{\bar{B}} \parallel^2, \frac{\bar{A} \quad \bar{A}}{\bar{A} \bar{V} \bar{B}} \parallel^2, \frac{\bar{A} \bar{A}}{\bar{B} \bar{B}} \parallel^2, \frac{\bar{A} \quad \bar{C}'}{\bar{B} \quad \bar{B}'} \parallel^2, \frac{\bar{A} \quad \bar{A} \quad \bar{C}'}{\bar{A} \bar{V} \bar{B} \bar{B}'} \parallel^2,$
 $\frac{\bar{A} \bar{V} \bar{B} \bar{V}}{\bar{A} \quad \bar{B}} \parallel^2$. This exercise may serve as a model to show how

exercises of some length may be made up of the various short exercises we give. It serves, also, to illustrate the use of the short notation. You do $\frac{\bar{A} \bar{V}}{\bar{A}}$; then, as is indicated by the double vertical line, the corresponding combination on the other side, $\frac{\bar{A}}{\bar{A} \bar{V}}$; this whole exercise— $\frac{\bar{A} \bar{V} \bar{A}}{\bar{A} \quad \bar{A} \bar{V}}$ —you do twice, as is indicated by the number 2. Then you pass on to $\frac{\bar{A}}{\bar{B}}$; this you do twice on each side; that is, you do $\frac{\bar{A} \bar{B} \bar{A} \bar{B}}{\bar{B} \bar{A} \bar{B} \bar{A}}$; then you pass on to the next part of the exercise, and so on. There are 52 circles for each club in the whole exercise.

IV. *Exercises with the Back Swing (D).—*(i) $\frac{\bar{A} \quad \bar{A}}{\bar{A} \bar{V} \bar{D}}$. (ii) $\frac{\bar{A} \quad \bar{A} \quad \bar{C}''}{\bar{A} \bar{V} \bar{D} \bar{B}''}$.
 (iii) $\frac{\bar{A}}{\bar{D}}$. (iv) $\frac{\bar{A} \quad \bar{C}' \quad \bar{A}}{\bar{A} \bar{V} \bar{B}' \bar{D}}$.

V. *Exercises with the Cross Swing Over (E) and the Cross Swing*

Under (F).—(i) $\frac{\bar{A} \bar{E} \bar{C}''}{B D B''}$. (ii) $\frac{\bar{A} \bar{V} \bar{E} \bar{C}''}{A D B''}$. (iii) $\frac{\bar{A} \bar{F} \bar{C}''}{A V D B''}$. In this exercise the left club passes in front of the right when the clubs begin to ascend in \bar{A} ; then, as the clubs continue their ascent, you turn the shoulders to the left and pass the right hand to the rear.

(iv) $\frac{\bar{A} \bar{F} \bar{E} \bar{C}''}{B D D B''}$. (v) $\frac{\bar{A} \bar{A} \bar{E}}{A V B A}$. (vi) $\frac{\bar{A} \bar{A} \bar{C}' \bar{F} \bar{E}}{A V B B' D A}$.

VI. Exercises with the Front Twist (G).—(i) $\frac{\bar{A} \bar{V} \bar{B}'}{A G'}$.

(ii) $\frac{\bar{A} \bar{V} G'' B'' b'' G'' G''}{A G'' B'' G'' B'' G''}$. (iii) $\frac{\bar{A} G'' B''}{G' V B'' G''}$. (iv) $\frac{\bar{A} \bar{C}' \bar{C}' \bar{C}'}{A V B' G' V B'}$.

In this exercise $\frac{\bar{C}'}{G' V}$ is to be done in its easier form. (v) $\frac{\bar{A} \bar{A} \bar{C}'}{A V D G''}$

left club ascending $\frac{\bar{F} \bar{C}''}{D B''}$. In this exercise, in G'' the left club ascends between the arms, and then, immediately after the clubs have passed the horizontal position in their ascent, the point of the right club passes behind the left arm so as to prepare for F.

VII. Exercises with the Cross Back Twist Over (H) and the Cross Back Twist Under (I).—[N.B. In the exercises in this set, $\frac{\bar{C}'}{G' V}$ and $\frac{\bar{C}'}{G' V}$ are to be done in their easier forms unless the contrary appears.]—(i) $\frac{\bar{A} \bar{C}' \bar{H}'}{B B' B' V B'}$. (ii) $\frac{\bar{A} \bar{C}' \bar{I}' \bar{V} \bar{C}'}{A V B' B' B'}$. (iii) $\frac{\bar{I}' \bar{V} \bar{C}'}{B' G' V}$.

Observe that this is to be repeated on the same side. (iv) $\frac{\bar{A} \bar{I}' \bar{V} \bar{C}'}{B B' G' V}$

(v) $\frac{\bar{A} \bar{C}' \bar{I}' \bar{V} \bar{C}'}{A V B' B' G' V B'}$. (vi) $\frac{\bar{H}' \bar{C}' \bar{V}}{B' V G'}$. This, like No. iii, is to be

repeated on the same side. (vii) $\frac{\bar{I}' \bar{V} \bar{H}' \bar{C}' \bar{V} \bar{C}'}{B' B' V G' G' V}$. (viii) $\frac{\bar{A} \bar{I}' \bar{V} \bar{H}'}{B B' B' V}$

$\frac{\bar{C}' \bar{V} \bar{C}'}{G' G' V}$. (ix) $\frac{\bar{A} \bar{I}' \bar{V} \bar{H}' \bar{I}' \bar{V} \bar{C}' \bar{C}' \bar{V} \bar{C}' \bar{V}}{B B' B' V B' G' V G' G' V}$. (x) $\frac{\bar{I}' \bar{V} \bar{H}' \bar{C}' \bar{V}}{B' B' V G'}$

$\frac{\bar{C}' \bar{C} \bar{V}}{G' V C}$ with wrists crossed, $\frac{\bar{G}' \bar{G}' \bar{V}}{C' V C'}$. (xi) $\frac{\bar{C}' \bar{H}' \bar{V} \bar{H}' \bar{C}' \bar{V}}{B' B' B' V}$. (xii) $\frac{\bar{C}' \bar{C}' \bar{C}' \bar{V}}{B' G' V G'}$

with left wrist crossed over right. (xiii) $\frac{\bar{A} \bar{I}' \bar{V} \bar{H}' \bar{V} \bar{H}' \bar{C}' \bar{V} \bar{C}' \bar{C}' \bar{V}}{B B' B' B' V G' G' V G'}$ with left wrist crossed over right.

(xiv) $\frac{\bar{C}' \bar{I}' \bar{I}' \bar{V}}{B' B' V B'}$. (xv) $\frac{\bar{C}' \bar{C}' \bar{V} \bar{C}' \bar{C}' \bar{V}}{B' G' G' V}$ with right wrist crossed over left. (xvi) $\frac{\bar{A} \bar{I}' \bar{I}' \bar{V}}{B B' V B'}$

$\overset{H'}{H} \overset{V}{V} \quad \overset{H'}{H} \quad \overset{C'}{C} \overset{V}{V} \quad \overset{C'}{C}$ with right wrist $\overset{C'}{C} \quad \overset{C'}{C} \overset{V}{V}$ with left wrist
 $\overset{B'}{B} \quad \overset{B'}{B} \overset{V}{V} \quad \overset{G'}{G} \quad \overset{G'}{G} \overset{V}{V}$ crossed over left, $\overset{G'}{G} \overset{V}{V} \quad \overset{G'}{G}$ crossed over right.

The exercises in this set and other similar exercises are among the most elegant of alternate exercises.

- VIII. *Exercises with the Cross Inside Twist* (K).—(i) $\overline{\overset{A}{A}} \quad \overline{\overset{C'}{C}} \quad \overline{\overset{K''}{K''}} \quad \overline{\overset{C'}{C}}$
 $\overline{\overset{B}{B}} \quad \overline{\overset{B'}{B}} \quad \overline{\overset{B''}{B''}} \quad \overline{\overset{B'}{B}}$.
 (ii) $\overline{\overset{A}{A}} \quad \overline{\overset{A}{A}} \quad \overline{\overset{K''}{K''}} \quad \overline{\overset{K''}{K''}} \quad \overline{\overset{C'}{C}}$. In $\overset{K''}{K''}$ the right club descends and the left ascends between the arms.
 (iii) $\overline{\overset{A}{A}} \quad \overline{\overset{C'}{C}} \quad \overline{\overset{K''}{K''}} \quad \overline{\overset{K''}{K''}} \quad \overline{\overset{C'}{C}} \quad \overline{\overset{V}{V}} \quad \overline{\overset{A}{A}} \quad \overline{\overset{K''}{K''}} \quad \overline{\overset{G''}{G''}}$
 $\overline{\overset{A}{A}} \quad \overline{\overset{V}{V}} \quad \overline{\overset{B''}{B''}} \quad \overline{\overset{G''}{G''}} \quad \overline{\overset{G''}{G''}} \quad \overline{\overset{B''}{B''}} \quad \overline{\overset{G''}{G''}}$.

§ 59. *Alternate Exercises introducing the Outward Hip Twist* (L) and *the Outward Cross Hip Twist* (M).—As we explained in Chapter V., these twists are most easily done in modified forms in exercises consisting of two or more circles, such as $\frac{1}{2} A \frac{1}{2} L \quad \frac{1}{2} L \frac{1}{2} A$, or $\frac{1}{2} A \frac{1}{2} M \quad \frac{1}{2} M \frac{1}{2} L \quad \frac{1}{2} L \frac{1}{2} A$. To deal systematically with alternate exercises in which the hip twist and cross hip twist are introduced in this way, or even with the alternate combinations of individual circles such as $\frac{1}{2} A \frac{1}{2} L$, in which these twists are introduced, would occupy more space than we have at our disposal; moreover, a systematic description of such movements would not be of much use, for although exercises introducing the twists in question are most of them difficult to do, it is not, as a rule, difficult to see how they should be done. We shall therefore content ourselves with giving a certain number of examples of alternate exercises introducing these twists, adding such explanations as may seem necessary.

The circles C, G, and I, in which the hand is held at the height of the hips, may be effectively employed in combination with the hip twist and cross hip twist. With regard to exercises introducing such circles, reference may be made to the addendum, p. 114.

I. *Exercises Introducing the Outward Hip Twist* (L).—(i) $\overline{\frac{1}{2} A \frac{1}{2} L}$
 $\overline{\frac{1}{2} L \frac{1}{2} A} \quad \overline{\overset{C'}{C}}$. (ii) $\overline{\frac{1}{2} A \frac{1}{2} L} \quad \overline{\frac{1}{2} L \frac{1}{2} A}$. (iii) $\overline{\frac{1}{2} L \frac{1}{2} A}$. In order to prepare for this exercise, you must, of course, do some combination which will bring the right club to the preparatory position for the hip twist; for example, $\frac{1}{2} A \frac{1}{2} L$. If you use this combination as an introduction the whole exercise might be written: $\overline{\frac{1}{2} A \frac{1}{2} L} \quad \overline{\frac{1}{2} L \frac{1}{2} A}$, $\overline{\frac{1}{2} A \frac{1}{2} L}$.

Moreover, if you wish to continue with other movements after doing the exercise a certain number of times, you must introduce some such

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combination as $\frac{1}{2} L \frac{1}{2} A$, in order to bring hands to the front again. Some of the other examples we shall give must be led up to in the same way. (iv) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V$. (v) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V B$.

(vi) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A B$. (vii) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A C$.

(viii) $\frac{1}{2} L \frac{1}{2} A \frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$. This wants leading up to like No. iii.

(ix) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A B$. This wants leading up to.

(x) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A C$. (xi) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V$. This is by no means easy. As the clubs begin to ascend behind the back in $\frac{1}{2} A \frac{1}{2} L$, the right club must pass between the left club and the back; it is difficult in doing this combination to get the point of the right club high enough and to avoid allowing the right club to lag behind. When you

do the second half of the exercise, namely, $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$, the left club, of course, passes between the right club and the body as the clubs begin to ascend behind the back. (xii) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$.

(xiii) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V$. (xiv) $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V$.

(xv) $\frac{1}{2} L \frac{1}{2} G \frac{1}{2} L$. (xvi) $\frac{1}{2} G \frac{1}{2} L \frac{1}{2} L \frac{1}{2} G$. (xvii) $\frac{1}{2} L \frac{1}{2} G \frac{1}{2} L$.

You will find it easy to devise further exercises with the hip twist for yourself. A number of effective exercises may be arranged by substituting more complicated movements, such as $\frac{1}{2} V \frac{1}{2} V$ and $\frac{1}{2} V \frac{1}{2} V$, for $\frac{1}{2} C$ and $\frac{1}{2} C$ in the exercises (i), (vi), (ix), (x), and (xvi).

II. Exercises with the Outward Cross Hip Twist (M).—(i) $\frac{1}{2} A \frac{1}{2} M$. (ii) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V$. This exercise, which is very effective and not so difficult as it looks, is illustrated in fig. 22. As the clubs ascend in $\frac{1}{2} A \frac{1}{2} M$ you must pass the right club between the left club and the body; this part of the exercise is shown



FIG. 22 (see § 59, II, ii).

in fig. 22 (1). Fig. 22 (2) shows the clubs as they descend in $\frac{1}{2} M \frac{1}{2} L$
 $\frac{1}{2} L \frac{1}{2} A$.

(iii) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A \frac{1}{2} C'$
 $G'' B B B'$. (iv) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$
 $G'' B'' G''$.

(v) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} D \frac{1}{2} A \frac{1}{2} A V$. (vi) $\frac{1}{2} A \frac{1}{2} M V \frac{1}{2} M \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V$
 $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} G, \frac{1}{2} G, \frac{1}{2} A$.

(vii) $\frac{1}{2} A \frac{1}{2} M V \frac{1}{2} M \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A V$. (viii) $\frac{1}{2} L \frac{1}{2} M V \frac{1}{2} M V$
 $\frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} G, \frac{1}{2} G, \frac{1}{2} L \frac{1}{2} L \frac{1}{2} A$. (viii) $\frac{1}{2} L \frac{1}{2} M V \frac{1}{2} M V$
 $L \frac{1}{2} L \frac{1}{2} G,$

$\frac{1}{2} M \frac{1}{2} L$
 $\frac{1}{2} G, \frac{1}{2} L$. This exercise must, of course, be led up to.

CHAPTER VII.

ALTERNATE EXERCISES WITH INWARD CIRCLES.

§ 60. Alternate exercises consisting of inward circles are of exactly the same character as alternate exercises consisting of outward circles ; they require just as much practice as the latter exercises, but they do not require lengthy description, for they may be learnt by reversing alternate exercises consisting of outward circles, just as exercises for one club, consisting of consecutive inward circles, may be learnt by reversing exercises consisting of consecutive outward circles.

In reversing an exercise for both clubs you must, in the first place, reverse the movement of each club ; that is to say, you must cause each club to pursue exactly the same path as in the original exercise, but in the opposite direction ; secondly, you must take care that the way in which the clubs keep time with each other corresponds exactly with the way in which they keep time in the original exercise, so that the series of positions passed through in the original exercise is exactly reproduced, in the opposite order, in the reverse exercise.

In reversing an alternate combination of a pair of outward circles, therefore, you must substitute for each outward circle the corresponding inward circle ; you must also, as in the original combination, begin the two circles at the same moment, finish them at the same moment, and cause the clubs to keep pace with each other throughout, so that the angles they make with the vertical always appear to be equal. Again, if the clubs cross in the original combination, they will cross in the reverse combination, and whichever

club is in front when the clubs are crossed and pointing downwards in the original combination, the same club will be in front when the clubs are crossed and pointing downwards in the reverse combination, and whichever club is in front, when the clubs are crossed and pointing upwards in the original combination, will be in front at the corresponding point of the reverse combination.

In reversing an alternate exercise consisting of a series of alternate combinations, you must, of course, reverse each combination and do the combinations in the reverse order. For example, the reverse of—Outward Front Swing Right and Outward Back Twist Proper Left with shoulders square; Outward Cross Front Twist at Half Distance Right and Outward Back Twist at Half Distance Left with shoulders

half left ($\begin{smallmatrix} \bar{A} & \bar{C}' \\ B & B' \end{smallmatrix}$) is: Inward Cross Front Twist at Half Distance Right and Inward Back Twist at Half Distance Left with shoulders half left; Inward Front Swing Right and Inward Back Twist Proper Left with shoulders square ($\begin{smallmatrix} \bar{c}' & \bar{a} \\ b' & b \end{smallmatrix}$).

In the way we have described, you will be able to reverse all the combinations and exercises described in Chapter VI., including all the examples given in §§ 58 and 59.

CHAPTER VIII.

PARALLEL EXERCISES.

§ 61. *Introductory.*—The present chapter is devoted to a new class of exercises for both clubs, called parallel exercises, the peculiar features of which we proceed to explain.

A combination consisting of an outward circle with the

one club and an inward circle with the other, in which the two circles are begun at the same moment and finished at the same moment, and in which the two clubs keep exact pace with each other throughout, so that, viewed from the front, the two clubs appear to be always exactly parallel to each other, is called a "parallel" combination.

When you have learnt various parallel combinations, you may, of course, do such combinations in succession to each other; exercises consisting of parallel combinations done in succession to each other are called parallel exercises.

In many parallel exercises the hands are kept close together throughout, and in exercises of this class the clubs, viewed from the front, should look as if they were fastened together like a pair of parallel rulers. Parallel exercises are the greatest test of proficiency with clubs, as the slightest mistake will cause an apparent divergence of the clubs, and will therefore be immediately detected.

In the short notation, a parallel combination is indicated by placing the letter denoting the circle executed by the right club directly above the letter denoting the circle executed by the left club; thus, $\frac{A}{b}$ denotes a parallel combination of an outward front swing right and an inward back twist left.

The chapter is arranged upon very much the same plan as Chapter VI. We take the ten outward circles described in Chapter II. in order, and, assuming the circle under discussion to be done with the right club, we point out, also in order, which of the ten inward circles with the left club may be conveniently combined with it so as to form a parallel combination. In § 71 we give examples of continuous parallel exercises, and in § 72 we deal with parallel exercises introducing the circles described in Chapter V.

It is obvious that in all the combinations we shall describe, the clubs move with the hands of a clock placed facing you.

once you have learnt one of the combinations, however, you will easily see how, by interchanging the movements of the two clubs, you can do the corresponding combination on the other side. For example, when you have learnt a parallel combination consisting of an outward front swing right and an inward back twist left $\begin{pmatrix} A \\ b \end{pmatrix}$, you will easily see how to do the corresponding combination on the other side, consisting of an outward front swing left and an inward back twist right $\begin{pmatrix} b \\ A \end{pmatrix}$.

Every parallel exercise may be reversed in the same sort of way that an alternate exercise may be reversed; you have merely to cause each club to pursue the same path as in the exercise you propose to reverse, but in the opposite direction. In order to reverse a parallel combination consisting of an outward circle right and an inward circle left, you have, therefore, merely to substitute for the outward circle the corresponding inward circle, and for the inward circle the corresponding outward circle. Thus, the reverse of a parallel combination consisting of an outward front swing right and an inward back twist left $\begin{pmatrix} A \\ b \end{pmatrix}$, consists of an inward front swing right and an outward back twist left $\begin{pmatrix} a \\ B \end{pmatrix}$.

Once you have learnt a parallel combination, therefore, you will easily see how to do the corresponding combination on the other side; also, how to do the reverse of the combination; and lastly, how to do the reverse of the combination on the other side. Thus, when you have learnt the combination of an outward front swing right and an inward back twist left $\begin{pmatrix} A \\ b \end{pmatrix}$, you will easily learn:—

- (i) The combination on the other side; namely, an outward front swing left and an inward back twist right $\begin{pmatrix} b \\ A \end{pmatrix}$.
- (ii) The reverse of the combination; namely, an inward front swing right and an outward back twist left $\begin{pmatrix} a \\ B \end{pmatrix}$.

(iii) The reverse of the combination on the other side ; namely, an inward front swing left and an outward back twist right $\left(\begin{smallmatrix} B \\ a \end{smallmatrix}\right)$.

You will observe that, according to our arrangement, the original combination $\left(\begin{smallmatrix} A \\ b \end{smallmatrix}\right)$ will be described in dealing with the outward front swing, and that the reverse of the combination on the other side $\left(\begin{smallmatrix} B \\ a \end{smallmatrix}\right)$ will be mentioned in dealing with the outward back twist. Once $\begin{smallmatrix} A \\ b \end{smallmatrix}$ has been described, it is, however, obviously unnecessary to describe $\begin{smallmatrix} B \\ a \end{smallmatrix}$ at length, and we shall be enabled to save space, as we did in Chapter VI., by refraining, once we have described a combination, from dealing at length with another combination which is merely the reverse of the former on the other side.

The most advisable course for a learner will be to read the present paragraph and then turn to § 71 and attempt some of the exercises there given, reading so much of the intervening matter only as deals with the combinations occurring in those exercises.

Almost all parallel combinations may be repeated time after time.

§ 62. *Combinations with the Outward Front Swing (A) Right.*

(i) Outward Front Swing Right and Inward Front Swing Left $\left(\begin{smallmatrix} \bar{A} \\ a \end{smallmatrix}\right)$ This combination is usually done with the shoulders square $\left(\begin{smallmatrix} A \\ a \end{smallmatrix}\right)$; you must be very careful in doing this form of the combination to keep the shoulders square throughout; there is a strong tendency to let the shoulders turn to the right as the clubs descend and to the left as they ascend.

(ii) Outward Front Swing Right and Inward Back Twist Left $\left(\begin{smallmatrix} A \\ b \end{smallmatrix}\right)$. This combination is most usually done with the

shoulders square; it may be done with all varieties of the back twist ($\bar{A}_{\bar{b}}, \bar{A}_{\bar{b}'}, \bar{A}_{\bar{b}''}$); it is not difficult.

(iii) Outward Front Swing Right and Inward Cross Front Twist Left (\bar{A}_c). This admits of some variety, but is not very effective.

(iv) \bar{A}_d . The form \bar{A}_d can be done, but it is almost impossible to do it in good style.

(v) \bar{A}_e . The usual form is \bar{A}_e .

(vi) \bar{A}_f . The usual form is \bar{A}_f ; it is rather awkward.

(vii) \bar{A}_g . The most usual forms are $\bar{A}_{g'}$ and $\bar{A}_{g''}$; in either form the combination is rather difficult, but well worth practice. The reverse of the combination (\bar{A}_g) is a good deal easier.

(viii) \bar{A}_h . The form \bar{A}_h with the left hand close to the neck is rather effective.

(ix) \bar{A}_i . The usual form is \bar{A}_i with the left hand close to the right armpit.

(x) \bar{A}_k . The only practicable form is \bar{A}_k .

§ 63. *Combinations with the Outward Back Twist (B) Right.*

(i) Outward Back Twist Right and Inward Front Swing Left (\bar{B}_a). The reverse form on the other side (\bar{A}_b) has been dealt with.

(ii) Outward Back Twist Right and Inward Back Twist Left (\bar{B}_b). This combination is usually done with the shoulders square and admits of some variety; it may be done with both twists in their proper form (\bar{B}_b), two twists at arm's length ($\bar{B}_{b''}$), one twist proper and one twist at arm's length (\bar{B}'_b or $\bar{B}_{b''}$), &c. It is an important combination to practise at first, and not difficult.

(iii) Outward Back Twist Right and Inward Cross Front

Twist Left $\left(\begin{smallmatrix} B \\ c \end{smallmatrix}\right)$. This combination admits of considerable variety; the most usual form is with the shoulders half right and both twists at half distance $\left(\begin{smallmatrix} B' \\ c' \end{smallmatrix}\right)$; in this form the hands should be about six inches apart, the right hand being directly behind the left.

(iv) $\begin{smallmatrix} B \\ d' \end{smallmatrix}$. The most usual form is $\begin{smallmatrix} B \\ d' \end{smallmatrix}$, which is very difficult.

(v, vi) $\begin{smallmatrix} B \\ e' \end{smallmatrix}$, $\begin{smallmatrix} B \\ f' \end{smallmatrix}$. These are not very effective.

(vii) $\begin{smallmatrix} B \\ g' \end{smallmatrix}$. The most usual forms are $\begin{smallmatrix} B' \\ g' \end{smallmatrix}$ and $\begin{smallmatrix} B'' \\ g'' \end{smallmatrix}$; both these forms are effective, and require much practice.

(viii) $\begin{smallmatrix} B \\ h' \end{smallmatrix}$. This admits of considerable variety. The most usual form is $\begin{smallmatrix} B' \\ h' \end{smallmatrix}$, in which the wrists must be crossed, with the left wrist uppermost, and almost, but not quite, in contact.

(ix) $\begin{smallmatrix} B \\ i' \end{smallmatrix}$. This admits of considerable variety. The most usual form is $\begin{smallmatrix} B' \\ i' \end{smallmatrix}$, in which the wrists must be crossed, with the right wrist uppermost, and should touch each other lightly.

(x) $\begin{smallmatrix} B \\ k' \end{smallmatrix}$. The usual form is $\begin{smallmatrix} B'' \\ k'' \end{smallmatrix}$, in which the left club ascends between the arms; the hands should be kept as close together as will conveniently allow of this.

§ 64. *Combinations with the Outward Cross Front Twist (C) Right.*

(i, ii) Outward Cross Front Twist Right and Inward Front Swing Left $\left(\begin{smallmatrix} C \\ a \end{smallmatrix}\right)$, Outward Cross Front Twist Right and Inward Back Twist Left $\left(\begin{smallmatrix} C \\ b \end{smallmatrix}\right)$. The reverse forms of these combinations on the other side $\left(\begin{smallmatrix} A, B \\ c \end{smallmatrix}\right)$ have been dealt with.

(iii) Outward Cross Front Twist Right and Inward Cross Front Twist Left $\left(\begin{smallmatrix} C \\ c \end{smallmatrix}\right)$. This combination may be done with the shoulders square and both twists in their proper form $\left(\begin{smallmatrix} C \\ c \end{smallmatrix}\right)$. In this form of the combination the hands are close together in front of the chest; it is usually done with the wrists crossed, but it can also be done without crossing the wrists.



FIG. 23 (see § 64, vii).

- (iv) $\overset{C}{\underset{d}{\curvearrowright}}$. The usual forms are $\overset{1}{\underset{d}{\curvearrowright}}$ and $\overset{1}{\underset{d'}{\curvearrowright}}$.
 (v, vi) $\overset{C}{\underset{e, f}{\curvearrowright}}$. These are both very difficult.
 (vii) $\overset{C}{\underset{g}{\curvearrowright}}$. This is a very important combination to practise; its reverse form ($\overset{c}{\underset{G}{\curvearrowright}}$) is, however, considerably easier, and should be learnt first. The most usual forms of the latter combination are: $1^{\circ} \overset{c}{\underset{G'}{\curvearrowright}}$; in this the wrists should be crossed and nearly, but not quite, in contact, the right hand being a little to the left of the left hand; it may be done with either wrist uppermost, so that it admits of two distinct varieties.

Fig. 23 (1) shows $\overset{f}{G}$ with the left wrist uppermost; fig 23 (2) shows $\overset{f}{G}$ with the right wrist uppermost. $2^{\circ} \overset{h}{G''}$; this may be done with the wrists crossed as in $\overset{f}{G''}$ with either wrist uppermost; it may also be done with the hands about six inches apart and the right hand in front of the left, so that the left club ascends between the arms.

(viii) $\overset{C}{h}$. This is very difficult to do neatly; the easiest form is \overline{C}_h .

(ix) $\overset{C}{i}$. This is very difficult to do neatly; the least difficult form is \overline{C}_i .

§ 65. *Combinations with the Outward Back Swing (D) Right.*

(i, ii, iii) $\overset{D}{a}, \overset{D}{b}, \overset{D}{c}$. The reverse forms of these on the other side have been dealt with.

(iv) $\overset{D}{e}$. The usual form is $\overset{b}{e}$, which is effective.

(v) $\overset{D}{f}$. The usual form is $\overset{b}{f}$, which is effective; it is to be observed that f has to be done in rather a peculiar manner, as the left arm hardly gets under the right.

(vi) $\overset{D}{h}$. The most effective form is $\overset{b}{h}$, the left hand being held close to the neck.

(vii) $\overset{D}{i}$. The most effective form is $\overset{b}{i}$, the left hand being held close to the right armpit.

(viii) $\overset{D}{k}$. The form $\overset{b}{k''}$ is effective.

§ 66. *Combinations with the Outward Cross Swing Over (E) Right.*

(i, ii, iii, iv) $\overset{E}{a}, \overset{E}{b}, \overset{E}{c}, \overset{E}{d}$. The reverse forms of these on the other side have been dealt with.

(v) $\overset{E}{g}$. This admits of some variety, but is not particularly effective.

§ 67. *Combinations with the Outward Cross Swing Under (F) Right.*

(i, ii, iii, iv) $\overset{F}{a}, \overset{F}{b}, \overset{F}{c}, \overset{F}{d}$. The reverse forms of these on the other side have been dealt with.

(v) $\overset{F}{g}$. This admits of some variety, and in several forms is not ineffective.

§ 68. *Combinations with the Outward Front Twist (G) Right.*

(i, ii, iii, iv, v) $\overset{G}{a}, \overset{G}{b}, \overset{G}{c}, \overset{G}{e}, \overset{G}{f}$. The reverse forms of these on the other side have been dealt with; and the combination $\overset{G}{c}$, which is merely the corresponding form of $\overset{G}{c}$ on the other side, has been described fully.

(vii) \bar{G}_g . The most usual forms are \bar{G}'_g and \bar{G}''_g , both of which are worth considerable practice.

(viii) \bar{G}_h . This admits of some variety; perhaps the most effective form is \bar{G}''_h .

(ix) \bar{G}_i . This admits of some variety; perhaps the most effective form is \bar{G}''_i .

(x) \bar{G}_h . The usual form is \bar{G}''_h in which both clubs ascend between the arms.

§ 69. *Combinations with the Outward Cross Back Twist Over (H) Right.*

(i, ii, iii, iv, v) $\bar{H}_a, \bar{H}_b, \bar{H}_c, \bar{H}_d, \bar{H}_g$. The reverse forms of these on the other side have been dealt with; \bar{H}_b is peculiarly worth practice, and is much more difficult than \bar{B}_h .

(vi) \bar{H}_h . This can be accomplished in the form \bar{H}_h , by crossing the arms in front of the chest and holding the right hand close to the left side of the neck, and the left hand close to the right side of the neck; it has, however, rather a ludicrous appearance.

(vii) \bar{H}_i . This can be accomplished in the form \bar{H}_i , in the same way as the last-mentioned combination: like that it has rather a ludicrous appearance.

§ 70. *Combinations with the Outward Cross Back Twist Under (I) Right and with the Outward Cross Inside Twist (K) Right.*—The reverse forms on the other side of the practicable combinations with these twists have been dealt with.

§ 71. *Examples of Parallel Exercises.*—In the present paragraph we give a series of examples of parallel combinations arranged, like the examples in Chapter VI., in sets of, roughly speaking, progressive order of difficulty. The simpler exercises are written at length, but the more advanced in the short notation only. In learning these exercises, you will find it easiest to pursue a similar plan to that suggested in § 58 with regard to alternate exercises. As soon as you have mastered one of these exercises, you should learn the corresponding exercise on the other side, and also the reverse form of the exercise on both sides. In reversing an exercise, you must not

forget to take the individual combinations in the reverse order.

I. *Exercises with Front Swings (A a) and Back Twists (B b).*

(i) With shoulders square throughout—Outward Front Swing Right and Inward Front Swing Left (\overline{A} _a); Outward Back Twist Proper Right and Inward Back Twist Proper Left (\overline{B} _b); repeat. $\left\{ \begin{array}{c} \overline{A} \overline{B} \\ a \ b \end{array} \right\}$

(ii) With shoulders square throughout—Outward Front Swing Right and Inward Front Swing Left (\overline{A} _a); Outward Front Swing Right and Inward Back Twist Proper Left (\overline{A} _b); Outward Back Twist Proper Right and Inward Back Twist Proper Left (\overline{B} _b); Outward Back Twist Proper Right and Inward Front Swing Left (\overline{B} _a); repeat. $\left\{ \begin{array}{c} \overline{A} \overline{A} \overline{B} \overline{B} \\ a \ b \ b \ a \end{array} \right\}$

II. *Exercise with Cross Front Twists (C c).*

Outward Front Swing Right and Inward Front Swing Left with shoulders square (\overline{A} _a); Outward Cross Front Twist Right at Half Distance and Inward Back Twist Left at Half Distance with shoulders half left (\overline{C} _{b'}); Outward Back Twist Proper Right and Inward Back Twist Proper Left with shoulders square (\overline{B} _b); Outward Back Twist at Half Distance Right and Inward Cross Front Twist at Half Distance Left with shoulders half right (\overline{B} _{c'}); repeat. $\left\{ \begin{array}{c} \overline{A} \overline{C} \overline{B} \overline{B} \\ a \ b' \ b \ c' \end{array} \right\}$

III. *Additional Exercises with Front Swings, Back Twists and Cross Front Twists.*—(i) $\overline{B} \overline{B} \overline{A}$ _{b a b}. (ii) $\overline{A} \overline{B} \overline{A}$ _{a a b}.
(iii) $\overline{A} \overline{B}'' \overline{B}'' \overline{A} \overline{C}''$ _{a c'' a b'' b''}.

IV. *Exercises with Back Swings (D d), Cross Swings Over (E e), and*

Cross Swings Under (Ff).—It should be mentioned that the exercises with these circles, particularly those introducing E and e, F and f, are

- not among the most elegant of parallel exercises. (i) $\begin{array}{c} \bar{A} \bar{C}'' \bar{A} \bar{D} \\ a \ d \ a \ c'' \end{array}$.
 (ii) $\begin{array}{c} \bar{A} \bar{A} \bar{D} \\ b \ e \ c'' \end{array}$. (iii) $\begin{array}{c} \bar{A} \bar{B}'' \bar{B}'' \\ a \ e \ c'' \end{array}$. (iv) $\begin{array}{c} \bar{A} \bar{B}'' \bar{A} \bar{E} \\ a \ e \ a \ b'' \end{array}$. (v) $\begin{array}{c} \bar{A} \bar{D} \bar{D} \\ a \ e \ f \end{array}$.
 (vi) $\begin{array}{c} \bar{A} \bar{D} \bar{A} \bar{F} \\ a \ f \ a \ d \end{array}$. (vii) $\begin{array}{c} \bar{A} \bar{A} \bar{A} \\ a \ f \ e \end{array}$. (viii) $\begin{array}{c} \bar{A} \bar{C} \bar{F} \\ a \ c \ b' \end{array}$. In this exercise the wrists are crossed with the left wrist uppermost in \bar{C} , and you turn to the left as the clubs ascend in that combination, keeping the wrists still crossed. (ix) $\begin{array}{c} \bar{A} \bar{C} \bar{B} \\ a \ c \ f \end{array}$. This somewhat resembles the last exercise.

- V. *Exercises with Front Twists* (Gg).—(i) $\begin{array}{c} \bar{B}' \bar{G}' \\ c' \ c' \end{array}$ right wrist uppermost.
 (ii) $\begin{array}{c} \bar{A} \bar{B}' \bar{G}' \\ a \ c' \ c' \end{array}$ left wrist uppermost. (iii) $\begin{array}{c} \bar{B}' \bar{G}' \\ c' \ c' \end{array}$ right wrist uppermost, $\begin{array}{c} \bar{G}' \\ c' \end{array}$ left wrist uppermost.
 (iv) $\begin{array}{c} \bar{C}' \bar{C}' \\ b' \ g' \end{array}$ left wrist uppermost. (v) $\begin{array}{c} \bar{A} \bar{C}' \bar{C}' \\ a \ b' \ g' \end{array}$ right wrist uppermost. (vi) $\begin{array}{c} \bar{C}' \bar{C}' \\ b' \ g' \end{array}$ right wrist \bar{C}' left wrist uppermost, \bar{g}' uppermost. (vii) $\begin{array}{c} \bar{A} \bar{C}' \bar{C}' \\ a \ b' \ g' \end{array}$ right wrist \bar{C}' left wrist uppermost, \bar{g}' uppermost, $\bar{C}' \bar{B} \bar{B}' \bar{G}'$ right wrist \bar{G}' left wrist uppermost, \bar{c}' uppermost. (viii) $\begin{array}{c} \bar{B}' \bar{G}' \\ c' \ c' \end{array}$ left wrist uppermost, \bar{C} left wrist \bar{C}' left wrist $\bar{C}' \bar{B}$ \bar{c} uppermost, \bar{g}' uppermost, $\bar{b}' \bar{b}$. (ix) $\begin{array}{c} \bar{B}' \bar{G}' \\ c' \ c' \end{array}$ left wrist \bar{C} left wrist uppermost, \bar{g}' uppermost, $\bar{b}' \bar{b}$. This cannot be conveniently repeated without intermediate movements. (x) $\begin{array}{c} \bar{B}' \bar{G}' \\ c' \ c' \end{array}$ right wrist uppermost, \bar{G}' left wrist \bar{C}' uppermost, \bar{c}' uppermost, $\bar{C}' \bar{B}$. In this exercise the wrists must be uncrossed for a moment as the shoulders are turned between \bar{G}' and \bar{C}' . (xi) $\begin{array}{c} \bar{A} \bar{G}'' \bar{A} \\ a \ a \ g'' \end{array}$. (xii) $\begin{array}{c} \bar{A} \bar{C}'' \bar{G}'' \bar{A} \bar{B}'' \\ a \ b'' \ a \ g'' \ c'' \end{array}$. (xiii) $\begin{array}{c} \bar{B}'' \bar{G}'' \bar{G}'' \bar{A} \bar{C}'' \bar{C}'' \\ c'' \ c'' \ a \ g'' \ c'' \ b'' \end{array}$.

- VI. *Exercises with Cross Back Twists Over* (Hh) and *Cross Back Twists Under* (Ii).—(i) $\begin{array}{c} \bar{A} \bar{B}' \bar{B}' \bar{B}' \\ a \ c' \ h' \ c' \end{array}$. (ii) $\begin{array}{c} \bar{A} \bar{B}' \bar{B}' \bar{B}' \bar{B}' \\ a \ c' \ h' \ i' \ c' \end{array}$. (iii) $\begin{array}{c} \bar{B}' \bar{B}' \bar{B}' \bar{G}' \\ c' \ h' \ i' \ c' \end{array}$ right wrist \bar{G}' left wrist uppermost, \bar{c}' uppermost. (iv) $\begin{array}{c} \bar{A} \bar{I}' \bar{H}' \bar{C}' \bar{B} \\ a \ b' \ b' \ b' \ b' \end{array}$. (v) $\begin{array}{c} \bar{A} \bar{B}' \bar{B}' \bar{G}' \\ a \ h' \ i' \ c' \end{array}$

right wrist $\overset{\vee}{G'}$ left wrist \bar{C} left wrist $\overset{\vee}{C'}$ left wrist $\overset{\vee}{I'}$ $\overset{\vee}{H'}$
 uppermost, $\overset{\vee}{c'}$ uppermost, $\overset{\vee}{c}$ uppermost, $\overset{\vee}{g'}$ uppermost, $\overset{\vee}{b'}$ $\overset{\vee}{b'}$.
 (vi) \bar{A} $\overset{\vee}{I'}$ $\overset{\vee}{H'}$ $\overset{\vee}{C'}$ right wrist $\overset{\vee}{C'}$ left wrist \bar{C} left wrist $\overset{\vee}{G'}$
 $\overset{\vee}{a}$ $\overset{\vee}{b'}$ $\overset{\vee}{b'}$ $\overset{\vee}{g'}$ uppermost, $\overset{\vee}{g'}$ uppermost, $\overset{\vee}{c}$ uppermost, $\overset{\vee}{c'}$
 left wrist $\overset{\vee}{B'}$ $\overset{\vee}{B'}$ $\overset{\vee}{B'}$
 uppermost, $\overset{\vee}{h'}$ $\overset{\vee}{i'}$ $\overset{\vee}{c'}$.

VII. Exercises with Cross Inside Twists (K k).—(i) \bar{A} $\bar{C''}$ $\bar{K''}$ $\bar{C''}$ $\bar{K''}$ $\bar{C''}$.
 $\overset{\vee}{a}$ $\overset{\vee}{b''}$ $\overset{\vee}{b''}$ $\overset{\vee}{g''}$ $\overset{\vee}{g''}$ $\overset{\vee}{b''}$.
 (ii) \bar{A} $\bar{B''}$ $\bar{G''}$ \bar{A} $\bar{K''}$.
 $\overset{\vee}{a}$ $\overset{\vee}{k''}$ $\overset{\vee}{a}$ $\overset{\vee}{g''}$ $\overset{\vee}{b''}$.

§ 72. *Parallel Exercises introducing Hip Twists (L l) and Cross Hip Twists (M m).*—We shall not attempt to deal systematically with parallel combinations in which these twists occur, but shall content ourselves, as in Chapter VI., with giving a certain number of examples of exercises in which they are introduced. Of course, like other parallel exercises, the exercises dealt with in this paragraph may all be done on both sides, and also reversed.

I. Exercises introducing Hip Twists (L l).—(i) \bar{A} $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$.
 $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$.
 (ii) \bar{A} $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$ \bar{A} $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$. (iii) $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$.
 $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$.
 (iv) $\frac{1}{2} \bar{G}$, $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{G}$. As to exercises introducing G, c, i, and
 $\frac{1}{2} \bar{c}$, $\frac{1}{2} \bar{i}$, $\frac{1}{2} \bar{i}$, $\frac{1}{2} \bar{c}$. similar circles, see the addendum, p. 114. (v) $\frac{1}{2} \bar{C}$, $\frac{1}{2} \bar{I}$, $\frac{1}{2} \bar{I}$, $\frac{1}{2} \bar{C}$. This is
 $\frac{1}{2} \bar{g}$, $\frac{1}{2} \bar{l}$, $\frac{1}{2} \bar{l}$, $\frac{1}{2} \bar{g}$. the reverse of (iv) on the other side. (vi) $\bar{B'}$ $\frac{1}{2} \bar{G}$, $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{G}$, $\frac{1}{2} \bar{C}$, $\frac{1}{2} \bar{I}$,
 $\frac{1}{2} \bar{c'}$, $\frac{1}{2} \bar{i}$, $\frac{1}{2} \bar{i}$, $\frac{1}{2} \bar{c'}$, $\frac{1}{2} \bar{g}$, $\frac{1}{2} \bar{l}$.
 $\frac{1}{2} \bar{I}$, $\frac{1}{2} \bar{C}$, $\frac{1}{2} \bar{I}$, $\frac{1}{2} \bar{C}$. (vii) \bar{L} . This, of course, must be led up to.
 $\frac{1}{2} \bar{l}$, $\frac{1}{2} \bar{g}$, $\frac{1}{2} \bar{b'}$, $\frac{1}{2} \bar{b'}$. (viii) $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{L}$ \bar{L} \bar{L} $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$.
 $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$.

II. Exercises with Cross Hip Twists (M m).—(i) $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{L}$.
 $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{b}$ $\overset{\vee}{b}$.
 $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$. (ii) $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$. (iii) $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{L}$.
 $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{b}$ $\overset{\vee}{b}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$.
 $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$ \bar{A} . (iv) \bar{A} $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{D}$. (v) \bar{A} $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{D}$.
 $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$ $\overset{\vee}{a}$.
 \bar{A} $\frac{1}{2} \bar{A}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{L}$ $\frac{1}{2} \bar{A}$. Fig. 24 illustrates the com-
 $\frac{1}{2} \bar{l}$ $\frac{1}{2} \bar{m}$ $\frac{1}{2} \bar{m}$ $\frac{1}{2} \bar{a}$ $\frac{1}{2} \bar{a}$ $\frac{1}{2} \bar{a}$ $\frac{1}{2} \bar{a}$.
 bination $\frac{1}{2} \bar{M}$ $\frac{1}{2} \bar{D}$; in that figure, (1) shows the combination at the
 moment when the clubs are approaching the conclusion of their



FIG. 24 (see § 72, II, v).

descent, and (2) shows the combination at the moment when the clubs are approaching the conclusion of their ascent. (vi) $\frac{1}{2} L \frac{1}{2} A \frac{1}{2} M \frac{1}{2} D \frac{1}{2} I$. This must, of course, be led up to with some such combination as $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} L \frac{1}{2} I$. (vii) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} L \frac{1}{2} I$. (viii) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} L \frac{1}{2} I$. (ix) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} L \frac{1}{2} I$. (x) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} L \frac{1}{2} I$.

(ix) $\frac{1}{2}L \frac{1}{2}M \frac{1}{2}M \frac{1}{2}L \frac{1}{2}L \frac{1}{2}A \frac{1}{2}A \frac{1}{2}L$. This exercise must, of course, be led up to. (x) $\frac{1}{2}L \frac{1}{2}M \frac{1}{2}M \frac{1}{2}L \frac{1}{2}L \frac{1}{2}G \frac{1}{2}G \frac{1}{2}m \frac{1}{2}m$.

Other exercises introducing M and m may easily be devised. In particular, very elegant exercises may be arranged by combining the exercises in this set with those in the last.

CHAPTER IX.

WINDMILL EXERCISES.

§ 73. *Introductory*.—The exercises to which the present chapter is devoted, and which are known as windmill exercises, present the following characteristics:—

(i) As in parallel exercises, the one club does outward circles and the other does inward circles.

(ii) The two clubs keep exact pace with each other, but the one is always exactly half a circle ahead of the other, so that when one club points straight up the other points straight down; and so that, viewed from the front, the clubs appear always to point in exactly opposite directions.

The circles executed by the two clubs appear to follow each other alternately; though, of course, after the first half circle, which is necessary to start the exercise, the two clubs really both move continuously.

In the short notation, a windmill exercise is indicated by placing the letters denoting the circles executed by the two hands alternately. Thus, a windmill combination consisting of an outward front swing right followed by an inward back twist left is written—^A

The arrangement of the present chapter is similar to that adopted in the last. We take the ten inward circles mentioned in Chapter IV. and the ten corresponding outward circles alternately in order, devoting, in most cases, a separate paragraph to each. In dealing with inward circles, we assume the circle under discussion to be done with the left club, and point out by what outward circles with the right it may be conveniently succeeded so as to form a windmill combination. In dealing with outward circles, we assume the circle under discussion to be done with the right club, and point out by what inward circles with the left club it may be conveniently followed so as to form a windmill combination. We shall in this way deal exclusively with combinations in which both clubs move with the hands of a clock placed facing you.

A windmill exercise may, of course, like a parallel exercise, be done on either side and may be reversed ; and the reverse form also may, of course, be done on either side. In reversing a windmill exercise, you must remember to replace outward circles by the corresponding inward circles, and inward circles by the corresponding outward circles, and to do the circles in the opposite order.

For example, if you have learnt a windmill combination of an inward front swing left followed by an outward back twist right $\left(\begin{smallmatrix} B \\ a \end{smallmatrix} \right)$, you will easily learn :—

(i) The same combination on the other side, consisting of an inward front swing right followed by an outward back twist left $\left(\begin{smallmatrix} a \\ B \end{smallmatrix} \right)$.

(ii) The reverse of the combination, consisting of an inward back twist right followed by an outward front swing left $\left(\begin{smallmatrix} b \\ A \end{smallmatrix} \right)$.

(iii) The reverse of the combination on the other side,

consisting of an inward back twist left followed by an outward front swing right $\left(\begin{smallmatrix} A \\ b \end{smallmatrix} \right)$.

You will observe that according to our arrangement the original combination $\left(\begin{smallmatrix} B \\ a \end{smallmatrix} \right)$ will be described in dealing with the inward front swing, and that the reverse of the combination on the other side $\left(\begin{smallmatrix} A \\ b \end{smallmatrix} \right)$ will be mentioned in dealing with the inward back twist. Once a_B has been described it is, however, unnecessary to describe ${}_b^A$ at length, and we shall accordingly be able to save space, as in previous chapters, by refraining, once we have described a combination, from dealing at length with a combination which is merely the reverse form of the former on the other side.

Learners may, after reading the present paragraph, turn at once to § 89, and attempt some of the exercises there given, reading so much of the intervening matter only as deals with the combinations occurring in those exercises.

Many windmill combinations may be repeated time after time, and we shall almost always, in dealing with a combination, mention whether it can be conveniently repeated or not. Unless a windmill combination can be repeated, it is not much use trying to learn it by itself, for reasons which will be explained in § 89.

§ 74. *Combinations with the Inward Front Swing (a) Left.*

(i) Inward Front Swing Left; Outward Front Swing Right $\left(\begin{smallmatrix} A \\ a \end{smallmatrix} \right)$. This is usually done with the shoulders square $\left(\begin{smallmatrix} A \\ a \end{smallmatrix} \right)$; it cannot be repeated.

(ii) Inward Front Swing Left; Outward Back Twist Right $\left(\begin{smallmatrix} B \\ a \end{smallmatrix} \right)$. This is usually done with the shoulders square $\left(\begin{smallmatrix} B \\ a \end{smallmatrix} \right)$; it may be repeated, but not very effectively.

(iii) Inward Front Swing Left; Outward Cross Front

Twist Right ($\overset{C}{a}$). This is rarely done, and cannot be repeated at all neatly.

(iv) $\overset{D}{a}$. The usual form is $\overset{+}{a}\overset{+}{D}$, which may be repeated very effectively.

(v) $\overset{E}{a}$. This is difficult, but effective in the form $\overset{+}{a}\overset{+}{E}$; it can be repeated, though by no means easily.

(vi) $\overset{F}{a}$. This is effective in the form $\overset{+}{a}\overset{+}{F}$; which may be repeated, though not easily.

(vii) $\overset{G}{a}$. This may be done in the forms $\overset{+}{a}\overset{+}{G}$ and $\overset{+}{a}\overset{+}{G'}$, which may be repeated, not ineffectively.

(viii, ix) $\overset{H}{a}$, $\overset{I}{a}$. These are somewhat similar to $\overset{E}{a}$ and $\overset{F}{a}$.

(x) $\overset{K}{a}$. This cannot be repeated.

§ 75. *Combinations with the Outward Front Swing (A) Right.*

(i) Outward Front Swing Right; Inward Front Swing Left ($\overset{A}{a}$). This cannot be repeated.

(ii) Outward Front Swing Right; Inward Back Twist Left ($\overset{A}{b}$). This is usually done with the shoulders square ($\overset{A}{b}$); it can be repeated.

(iii) Outward Front Swing Right; Inward Cross Front Twist Left ($\overset{A}{c}$). This is not particularly effective in any form; it cannot be repeated.

(iv) $\overset{A}{d}$. The usual form is $\overset{+}{A}\overset{+}{d}$, which may be repeated effectively.

(v) $\overset{A}{e}$. This is effective in the form $\overset{+}{A}\overset{+}{e}$, which may be repeated.

(vi) $\overset{A}{f}$. The usual form is $\overset{+}{A}\overset{+}{f}$; the arms must be crossed before you begin; it may be repeated.

(vii) $\overset{A}{g}$. This may be repeated in the form $\overset{+}{A}\overset{+}{g}$.

(viii, ix) $\overset{A}{h}$, $\overset{A}{i}$. These somewhat resemble $\overset{A}{e}$ and $\overset{A}{f}$; they may be repeated.

(x) $\overset{A}{k}$. This is very difficult.

§ 76. *Combinations with the Inward Back Twist (b) Left.*

(i) Inward Back Twist Left; Outward Front Swing Right

($\overset{A}{b}$). The reverse of this on the other side ($\overset{B}{a}$) has been dealt with.

(ii) Inward Back Twist Left; Outward Back Twist Right ($\overset{B}{b}$). This is easy and admits of some variety; in the form $\overset{B''}{b''}$ it may be repeated.

(iii) Inward Back Twist Left; Outward Cross Front Twist Right ($\overset{C}{b}$). This admits of some variety; the most usual forms are: 1° with the shoulders half left and both twists at half distance ($\overset{C'}{b'}$). This is usually done with the right hand directly in front of the left and about six inches from it, in which form it is easy, and may be effectively repeated. It can also be done with the wrists crossed, right wrist uppermost, and turned so that the backs of the wrists are in contact; this variety of the combination is very difficult to do and extremely difficult to repeat; an exercise in which the reverse of the combination on the other side ($\overset{B'}{c'}$) is done in this manner is shown in Fig. 25, p. 96; 2° with the shoulders full left and both twists at arm's length ($\overset{C''}{b''}$). This form may be repeated effectively.

(iv) $\overset{D}{b}$. This is easy in the form $\overset{-1}{b} \overset{D}{b}$, but is difficult to repeat.

(v) $\overset{E}{b}$. This is easy and effective in several forms, but cannot be repeated.

(vi) $\overset{F}{b}$. This is rather awkward in any form; it can be repeated, but not effectively.

(vii) $\overset{G}{b}$. The most usual forms are $\overset{G'}{b'}$ and $\overset{G''}{b''}$, either of which may be repeated.

(viii) $\overset{H}{b}$. This admits of some variety; the most usual form is $\overset{H'}{b'}$; in this the right wrist crosses over the left in the course of the movement; it is effective, but cannot be repeated. The form $\overset{H''}{b''}$ can be repeated, but is not very effective.

(ix) $\overset{I}{b}$. The form $\overset{I}{b}$ is very effective, but very difficult; the wrists must be crossed with the left wrist uppermost, and turned so that the backs of the wrists are in contact, before you begin; the wrists uncross in the course of the movement; this form cannot be repeated. The form $\overset{-1}{b''}$ is much less difficult, but less effective; it can be repeated.

(x) $\overset{K}{b}$. This is effective in the form $\overset{-1}{b''} \overset{-1}{K''}$, which may be repeated.

§ 77. *Combinations with the Outward Back Twist (B) Right.*

(i) Outward Back Twist Right; Inward Front Swing Left ($\overset{B}{a}$). The reverse form of this on the other side has been dealt with.

(ii) Outward Back Twist Right; Inward Back Twist Left ($\overset{B}{b}$). This may be done with the shoulders square and both twists at arm's length ($\overset{B''}{b''}$), in which form it may be repeated.

(iii) Outward Back Twist Right; Inward Cross Front Twist Left ($\overset{B}{c}$). This admits of some variety. The most usual forms are:—1° with the shoulders half right and both twists at half distance ($\overset{B^A}{c}$). This is usually done with the left hand directly in front of the right and about six inches from it, in which form it is easy and may be effectively repeated. It may also be done with the wrists crossed, right wrist uppermost, and turned so that the backs of the wrists are in contact; this form of the combination is very difficult to do and extremely difficult to repeat. 2° with the shoulders full right and both twists at arm's length ($\overset{B''}{c''}$). This form of the combination may be repeated.

(iv) $\overset{B}{d}$. This is difficult to do, and very difficult to repeat.

(v) $\overset{B}{e}$. This is very difficult in any form.

(vi) $\overset{B}{f}$. This is rather effective in the form $\overset{B''}{f}$, which can be repeated, but not effectively.

(vii) $\overset{B}{g}$. The usual forms are $\overline{B'g}$ and $\overline{B''g''}$, both of which may be repeated.

(viii) $\overset{B}{h}$. The form $\overset{\wedge}{B'h}$ is very effective, but very difficult; you must begin with the wrists crossed, with the left wrist uppermost, and turned so that the backs of the wrists are in contact; the wrists uncross in the course of the movement; it cannot be repeated. An exercise in which this form of the combination occurs is shown in fig. 25, p. 96. The form $\overline{B''h}$ is much easier, but less effective; it can be repeated.

(ix) $\overset{B}{i}$. The usual form is $\overset{\wedge}{B'i}$, which is very effective; the left wrist crosses under the right in the course of the movement; in this form the combination cannot be repeated, though it can in the form $\overline{B''i}$.

(x) $\overset{B}{k}$. The usual form is $\overline{B''k''}$, which may be repeated effectively.

§ 78. *Combinations with the Inward Cross Front Twist*

(c) *Left.*

(i, ii) Inward Cross Front Twist Left; Outward Front Swing Right ($\overset{A}{c}$), Inward Cross Front Twist Left; Outward Back Twist Right ($\overset{B}{c}$). The reverse forms of these on the other side have been dealt with.

(iii) Inward Cross Front Twist Left; Outward Cross Front Twist Right ($\overset{C}{c}$). This combination is effective with the shoulders square and both twists in their proper form ($\overline{\overset{C}{c}}$). The movement is rather peculiar; the left hand must be brought somewhat sharply across the chest from right to left as the inward cross front twist is done, and the right hand must follow the left as the outward cross front twist is done. It may also be done with an inward cross front twist proper with the shoulders square, and an outward cross front twist at half distance with the shoulders half left, beginning with the left wrist crossed over and touching the right wrist; this form of the combination is very difficult. Neither form can be repeated.

(iv) c^D . This is easy in the form $c^{\overline{D}}$, which may be repeated effectively.

(v, vi) c^E, c^F . These are not effective, but can be done and repeated.

(vii) c^G . The most usual forms are:— $1^{\circ} c^{\overline{G}}$; this itself admits of two varieties: you may cross the right wrist under the left in the course of the movement, or you may begin with the wrists crossed, with the right wrist uppermost, and turned so that the backs of the wrists are in contact, in which case the wrists uncross in the course of the movement. Neither variety of this form can be repeated; the latter is much the more difficult. $2^{\circ} c^{\overline{G''}}$; in this the right club ascends between the arms; it may be repeated.

(viii, ix) c^H, c^I . These are not particularly effective in any form.

§ 79. *Combinations with the Outward Cross Front Twist*

(C) *Right.*

(i, ii) Outward Cross Front Twist Right; Inward Front Swing Left (c_a^C). Outward Cross Front Twist Right; Inward Back Twist Left (c_b^C). The reverse forms of these on the other side have been dealt with.

(iii) Outward Cross Front Twist Right; Inward Cross Front Twist Left (c_c^C). This can be done with the wrists crossed, but it is not effective.

(iv) c^d . The usual form is $c^{\overline{d}}$, which may be repeated effectively.

(v, vi) c^e, c^f . These may be done and repeated in the forms $c^{\overline{e}}, c^{\overline{f}}$ but they are not effective.

(vii) c^g . The usual forms are:— $1^{\circ} c^{\overline{g'}}$; this itself admits of two varieties: you may either cross the left wrist over the right in the course of the movement, or you may begin with the wrists crossed, with the right wrist uppermost, and turned so that the backs of the wrists are in contact, in which case the wrists uncross in the course of the movement. Neither variety of this form can be repeated; the latter is much the more difficult. An exercise in which the reverse of $c^{\overline{g'}}$ on the other side ($c^{\overline{g''}}$) occurs in the more difficult form is shown in fig. 25, p. 96. $2^{\circ} c^{\overline{g''}}$; in this the left club descends between the arms; it may be repeated effectively.

(viii, ix) $\begin{smallmatrix} C & C \\ h & f \end{smallmatrix}$ These may be done and repeated in the forms $\begin{smallmatrix} C \\ h & f \end{smallmatrix}$, but they are not effective.

§ 80. *Combinations with the Inward Back Swing (d) Left.*

(i, ii, iii) $\begin{smallmatrix} A & B & C \\ d & d & d \end{smallmatrix}$; the reverse forms of these on the other side have been dealt with.

(iv) $\begin{smallmatrix} D \\ d \end{smallmatrix}$. This is effective in the form $\begin{smallmatrix} \text{---} \\ d & \text{---} \end{smallmatrix}$; it cannot be repeated.

(v) $\begin{smallmatrix} E \\ d \end{smallmatrix}$. This is effective in the form $\begin{smallmatrix} \text{---} & \text{---} \\ d & \text{---} \end{smallmatrix}$; it cannot be repeated.

(vi) $\begin{smallmatrix} G \\ d \end{smallmatrix}$. This is not effective in any form; it can be repeated.

(vii) $\begin{smallmatrix} H \\ d \end{smallmatrix}$. This resembles $\begin{smallmatrix} E \\ d \end{smallmatrix}$.

(viii) $\begin{smallmatrix} K \\ d \end{smallmatrix}$. This is effective in the form $\begin{smallmatrix} \text{---} & \text{---} \\ d & \text{---} \end{smallmatrix}$, which may be repeated.

§ 81. *Combinations with the Outward Back Swing (D) Right.*

(i, ii, iii) $\begin{smallmatrix} D & D & D \\ a & b & c \end{smallmatrix}$. The reverse forms of these on the other side have been dealt with.

(iv) $\begin{smallmatrix} D \\ f \end{smallmatrix}$. This is very effective in the form $\begin{smallmatrix} \text{---} & \text{---} \\ D & f \end{smallmatrix}$; it cannot be repeated.

(v, vi) $\begin{smallmatrix} D & D \\ g & h \end{smallmatrix}$. These are difficult and ineffective.

(vii) $\begin{smallmatrix} D \\ f \end{smallmatrix}$. This is easy; it resembles $\begin{smallmatrix} D \\ f \end{smallmatrix}$.

(viii) $\begin{smallmatrix} D \\ k \end{smallmatrix}$. This is effective in the form $\begin{smallmatrix} \text{---} & \text{---} \\ D & k \end{smallmatrix}$, which may be repeated.

§ 82. *Combinations with the Inward Cross Swing Over (e) Left.*

(i, ii, iii, iv) $\begin{smallmatrix} A & B & C & D \\ e & e & e & e \end{smallmatrix}$. The reverse forms of these on the other side have been dealt with.

(v) $\begin{smallmatrix} G \\ e \end{smallmatrix}$. This may be done in several forms, in some of which it may be repeated. If you intend to repeat the movement or to do some similar movement, the right club ascends in front of the left arm; if you intend to proceed with movements of a different kind, you may bring the left club to the front as you finish e , and cause the right club to ascend between the arms.

§ 83. *Combinations with the Outward Cross Swing Over (E) Right.*

(i, ii, iii) $\begin{smallmatrix} E & E & E \\ a & b & c \end{smallmatrix}$. The reverse forms of these on the other side have been dealt with.

(v) $\begin{smallmatrix} E \\ f \end{smallmatrix}$. This is possible in the form $\begin{smallmatrix} \text{---} \\ E & f \end{smallmatrix}$, but very difficult.

(vi) $\begin{smallmatrix} E \\ g \end{smallmatrix}$. This is very difficult and not effective; it can be repeated.

(vii, viii) $\begin{smallmatrix} E & E \\ h & i \end{smallmatrix}$. These are very difficult.

§ 84. *Combinations with the Inward Cross Swing Under (f) Left.*

(i, ii, iii, iv, v) f^A, f^B, f^C, f^D, f^E . The reverse forms of these on the other side have been dealt with.

(vi) f^G . This is difficult and not particularly effective; it can be repeated.

(vii, viii) f^H, f^K . These are very difficult.

§ 85. *Combinations with the Outward Cross Swing Under (F) Right.*

(i, ii, iii, iv, v) F^a, F^b, F^c, F^d, F^e . The reverse forms of these on the other side have been dealt with.

(vi) F^f . This is difficult; it can be repeated.

(vii) F^h . This is very difficult.

§ 86. *Combinations with the Inward Front Twist (g) Left.*

(i, ii, iii, iv, v, vi) $g^A, g^B, g^C, g^D, g^E, g^F$. The reverse forms of these on the other side have been dealt with.

(vii) g^G . This admits of some variety; the most usual forms are $\overline{g^G}$ and $\overline{g^G}$, both of which may be repeated.

(viii) g^H . The usual form is $\overline{g^H}$, which is difficult but effective, and may be repeated.

(ix) g^I . The usual form is $\overline{g^I}$, which is difficult but effective, and may be repeated.

(x) g^K . The usual form is $\overline{g^K}$, which is very effective though difficult: the clubs both descend between the arms; it may be repeated.

§ 87. *Combinations with the Outward Front Twist (G) Right.*

(i, ii, iii, iv, v, vi) $G^a, G^b, G^c, G^d, G^e, G^f$. The reverse forms of these on the other side have been dealt with.

(vii) G^g . The usual forms are $\overline{G^g}$ and $\overline{G^g}$, which may both be repeated.

(viii) G^h . The form $\overline{G^h}$ is effective, and may be repeated.

(ix) G^i . The form $\overline{G^i}$ is effective though difficult, and may be repeated.

(x) G^k . The usual form is $\overline{G^k}$, which is effective, and may be repeated.

§ 88. *Combinations with Cross Back Twists Over (H h), Cross Back Twists Under (I i), and Cross Inside Twists (K k).*—The practicable combinations with these twists have been dealt with.

§ 89. *Examples of Windmill Exercises.*—In the present

chapter we give a series of examples of windmill exercises arranged like the examples in previous chapters. In learning the exercises you may pursue the same sort of plan as was suggested in § 58 with regard to alternate exercises.

There is, however, a difference of character between windmill exercises on the one hand and alternate or parallel exercises on the other, which makes the former in some ways much more difficult to learn than the latter. A windmill exercise, like an alternate or parallel exercise, consists of a series of combinations of pairs of circles done in succession. But whereas, in an alternate or parallel exercise, a circle with the one club is always combined with a single circle with the other, in a windmill exercise, every circle with one club is combined with two circles with the other, forming the conclusion of a combination with the first of these circles and the commencement of a combination with the second. For example, consider the first exercise given below: the outward front swing right forms the conclusion of the combination $\begin{smallmatrix} A \\ a \end{smallmatrix}$, and at the same time the commencement of the combination $\begin{smallmatrix} A \\ b \end{smallmatrix}$. So the inward back twist left forms the conclusion of $\begin{smallmatrix} A \\ b \end{smallmatrix}$ and the commencement of $\begin{smallmatrix} B \\ b \end{smallmatrix}$.

It will appear from what we have said, that a windmill combination done by itself has not altogether the same character as it has when it occurs in an exercise, and that, when you have learnt such a combination by itself, you may still have some difficulty in seeing how to do it when it occurs in the course of an exercise.

For example, suppose you do the combination $\begin{smallmatrix} A \\ b \end{smallmatrix}$ by itself: while you do the descending half of A, the left club is stationary; then both clubs move while the right club ascends; then the right club is stationary while the left club

ascends. Whereas, in doing the combination as it occurs in the exercise above mentioned, the left club ascends in *a* while the right club descends in *A*, and the right club descends in *B* while the left club ascends in *b*.

In learning a windmill exercise, therefore, you will have to try various expedients. Combinations that can be easily repeated may be pretty thoroughly learnt by themselves. Other combinations may be learnt by doing some short continuous exercise in which they occur. Sometimes, also, a windmill exercise may be learnt by doing a parallel exercise which differs from the windmill exercise only in the matter of time-keeping, and gradually getting one club ahead of the other till at last it is ahead by a full half-circle. The exercise above mentioned, for example, may be learnt in this way: Do $\begin{smallmatrix} A & B \\ a & b \end{smallmatrix}$ [(i) in § 71, (I.)], repeating it time after time, and gradually cause the left club to get ahead of the right, so that the clubs diverge and at last point in opposite directions.

Where, in a windmill exercise, a circle with the shoulders in one position is followed by a circle with the shoulders in another position, the shoulders must be turned as the one club ascends in the first circle and the other descends in the second circle.

When you have learnt an exercise, you should always learn the corresponding form on the other side, and also the reverse of the exercise on both sides.

I. *Combinations with Front Swings (A a) and Back Twists (B b).*

(i) With shoulders square throughout—Inward Front Swing Left; Outward Front Swing Right; Inward Back Twist Proper Left; Outward Back Twist Proper Right; repeat. $\left(\begin{smallmatrix} A & B \\ a & b \end{smallmatrix} \right)$. The easiest way to learn this exercise has been explained.

(ii) With shoulders square throughout—Inward Front Swing Left; Outward Front Swing Right; Inward Back Twist Proper Left; Outward Front Swing Right; Inward Back Twist Proper Left; Outward Back Twist Proper Right; Inward Front Swing Left; Outward Back Twist Proper Right; repeat. $\left(\begin{array}{cccc} \overline{A} & \overline{A} & \overline{B} & \overline{B} \\ a & b & b & a \end{array} \right)$ This may be learnt from (ii) in § 71 (I.), by causing the left club to get ahead of the right.

II. *Combinations with Cross Front Twists (C c).*

(i) With shoulders half right—Inward Cross Front Twist at Half Distance Left; Outward Back Twist at Half Distance Right; repeat. $\left(\begin{array}{c} \overline{B'} \\ c' \end{array} \right)$

(ii) With shoulders square, Inward Front Swing Left; Outward Front Swing Right. With shoulders half left, Inward Back Twist at Half Distance Left; Outward Cross Front Twist at Half Distance Right. With shoulders square, Inward Back Twist Proper Left; Outward Back Twist Proper Right. With shoulders half right, Inward Cross Front Twist at Half Distance Left; Outward Back Twist at Half Distance Right; repeat. $\left(\begin{array}{cccc} \overline{A} & \overline{C'} & \overline{B} & \overline{B'} \\ a & b' & b & c' \end{array} \right)$ This may be learnt from the exercise given in § 71 (II.).

III. *Exercises with Back Swings (D d).*—(i) $\begin{array}{c} \overline{D} \\ a \end{array}$ (ii) $\begin{array}{c} \overline{A} \\ d \end{array}$.
(iii) $\begin{array}{c} \overline{A} \\ a \end{array} \begin{array}{c} \overline{D} \\ d \end{array}$. These exercises are very effective.

IV. *Exercises with Cross Swings Over (E e) and Cross Swings Under (F f).*—(i) $\begin{array}{c} \overline{A} \overline{D} \\ a \quad e \end{array}$. (ii) $\begin{array}{c} \overline{D} \overline{A} \\ a \quad f \end{array}$. (iii) $\begin{array}{c} \overline{A} \overline{A} \overline{D} \\ f \quad a \quad e \end{array}$. (iv) $\begin{array}{c} \overline{D} \\ f \end{array}$
 $\begin{array}{c} \overline{A} \overline{A} \overline{D} \overline{A} \overline{E} \overline{A} \overline{F} \\ a \quad e \quad a \quad d \quad a \quad a \quad d \end{array}$ These exercises are very effective.

V. *Exercises with Front Twists (G g), Cross Back Twists Over (H h), and Cross Back Twists Under (I i).*—(i) $\begin{array}{c} \overline{G'} \\ c' \end{array} \begin{array}{c} \overline{B'} \\ h' \end{array}$. (ii) $\begin{array}{c} \overline{B'} \\ i' \end{array} \begin{array}{c} \overline{G'} \\ c' \end{array}$.



FIG. 25 (see § 89, V, vii).

(iii) $\begin{matrix} G' \\ i' \end{matrix} \begin{matrix} G' \\ e' \end{matrix} \begin{matrix} G' \\ h' \end{matrix}$. (iv) $\begin{matrix} H' \\ s' \end{matrix} \begin{matrix} C' \\ s' \end{matrix} \begin{matrix} I' \\ y' \end{matrix}$. This is merely the reverse of (iii) on the other side. (v) $\frac{A}{a} \begin{matrix} H' \\ y' \end{matrix} \begin{matrix} C' \\ s' \end{matrix} \begin{matrix} I' \\ s' \end{matrix} \frac{B}{b} \begin{matrix} G' \\ i' \end{matrix}$ $\begin{matrix} G' \\ e' \end{matrix} \begin{matrix} B' \\ h' \end{matrix}$. (vi) $\begin{matrix} G' \\ i' \end{matrix} \begin{matrix} C' \\ e' \end{matrix} \begin{matrix} I' \\ s' \end{matrix}$. This cannot be repeated without some intermediate movements. (vii) $\begin{matrix} G' \\ e' \end{matrix} \begin{matrix} B' \\ e' \end{matrix} \begin{matrix} B' \\ h' \end{matrix}$. This exercise is

illustrated in fig. 25. In that figure (1) shows the clubs at the moment when the left club begins its ascent in the second c' and the right club begins its descent in the first B' ; (2) shows the exercise half a circle later, when the left club begins its descent in h' and the right club its ascent in the first B' . The exercise is difficult and peculiar and very

effective; it introduces the combinations $\begin{smallmatrix} G' & B' \\ c' & c' \end{smallmatrix}$ and $\begin{smallmatrix} B' \\ h' \end{smallmatrix}$ in their more difficult forms.

(viii) $\begin{array}{ccccc} \diagup & \diagdown & \diagup & \diagdown & \diagup \\ G' & B' & B' & B' & G' \end{array}$ with the right wrist crossed over the left. This exercise

resembles the last in character. (ix) $\begin{array}{c} G' \\ \diagdown \quad \diagup \\ e \quad e' \end{array} \begin{array}{c} C' \\ \diagdown \quad \diagup \\ e \quad e' \end{array} \begin{array}{c} I' \\ \diagdown \quad \diagup \\ b' \quad b' \end{array} \Big|_I$. This cannot be repeated without intermediate movements.

VI. *Exercises with Cross Inside Twists* (Kk).—(i) $e'' \overline{G''}$ ascending between the arms $\overline{B''}$. (ii) $\overline{B''} \overline{e''} \overline{G''}$ ascending between the arms k'' . These may be reversed, and similar exercises may be easily devised.

§ 90. *Windmill Exercises introducing Hip Twists (L l) and Cross Hip Twists (M m).*—We shall, as in previous chapters, give numerous examples of these exercises, but shall make no attempt to deal with them systematically.

I. Exercises with Hip Twists (LJ). — (i) $\frac{1}{2}A \frac{1}{2}L$ $\frac{1}{2}L \frac{1}{2}A$
 $\frac{1}{2}I \frac{1}{2}a$ (ii) $\frac{1}{2}A \frac{1}{2}L$ $\frac{1}{2}L \frac{1}{2}A$ $\frac{1}{2}I \frac{1}{2}a$ (iii) $\frac{1}{2}G, \frac{1}{2}L$

$\frac{1}{2} i, \frac{1}{2} j$ | $\frac{1}{2} L, \frac{1}{2} G,$ | $\frac{1}{2} j, \frac{1}{2} g,$ | (iv) $\frac{1}{2} G, \frac{1}{2} L$ | $\frac{1}{2} L, \frac{1}{2} G,$ | $\frac{1}{2} C, \frac{1}{2} I,$ | $\frac{1}{2} g, \frac{1}{2} j$ |
 $\frac{1}{2} I, \frac{1}{2} C,$ | $\frac{1}{2} j, \frac{1}{2} g,$ | (v) B, | $\frac{1}{2} G, \frac{1}{2} L$ | $\frac{1}{2} L, \frac{1}{2} G,$ | As you do
 $\frac{1}{2} G, \frac{1}{2} L$ the wrists cross and come in contact, and throughout $\frac{1}{2} i, \frac{1}{2} j, \frac{1}{2} c,$
the wrists remain crossed and in contact, with the right wrist in front.
The exercise is illustrated in fig. 26; where (1) shows the clubs as the
left club descends in $\frac{1}{2} i, \frac{1}{2} j, \frac{1}{2} c,$ and the right club ascends in $\frac{1}{2} G, \frac{1}{2} L,$
and (2) shows the clubs half a circle later as the left club ascends in
 $\frac{1}{2} i, \frac{1}{2} j, \frac{1}{2} c,$ and the right club descends in $\frac{1}{2} L, \frac{1}{2} G.$

(vi) $B_1 \frac{1}{2} G_1 \frac{1}{2} L \frac{1}{2} L \frac{1}{2} G_1 C_1 \frac{1}{2} I_1$
 $\frac{1}{2} c_1 \frac{1}{2} i_1 \frac{1}{2} i_1 \frac{1}{2} c_1 c_1 \frac{1}{2} g_1 \frac{1}{2} l \frac{1}{2} l \frac{1}{2} g_1$
 $\frac{1}{2} I_1 \frac{1}{2} C_1$. This will not repeat without intermediate movements.

(vii) $\frac{1}{2}G, \frac{1}{2}L$ L $\frac{1}{2}L, \frac{1}{2}G,$
 $\frac{1}{2}C, \frac{1}{2}I$ $\frac{1}{2}I, \frac{1}{2}C$ C . In this the shoulders
 may be a little turned to the right during the first two circles.

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FIG. 26 (see § 90, I, v).

II. Exercises with Cross Hip Twists (M m).—(i) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} L$
 $\frac{1}{2} L \frac{1}{2} A \frac{1}{2} B$ | (ii) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} L$ $\frac{1}{2} L \frac{1}{2} A \frac{1}{2} B$
 $\frac{1}{2} a \frac{1}{2} l$ | $\frac{1}{2} l \frac{1}{2} m \frac{1}{2} a$ |
 (iii) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} D \frac{1}{2} A$ | (iv) $\frac{1}{2} A \frac{1}{2} l \frac{1}{2} m \frac{1}{2} m \frac{1}{2} a$
 $\frac{1}{2} M \frac{1}{2} D$ | (v) $\frac{1}{2} A \frac{1}{2} M \frac{1}{2} M \frac{1}{2} D$ | $\frac{1}{2} a \frac{1}{2} l \frac{1}{2} l \frac{1}{2} a$ | (vi) $\frac{1}{2} a \frac{1}{2} l$



FIG. 27 (see § 90, II, ix).

$\frac{1}{2} A \frac{1}{2} M$ $\frac{1}{2} M \frac{1}{2} L$ $\frac{1}{2} L \frac{1}{2} A$ B . As you do $\frac{1}{2} A \frac{1}{2} M$ you must pass the right hand between the left club and the back.

(vii) $\frac{1}{2} a \frac{1}{2} l$ $\frac{1}{2} l \frac{1}{2} m$ $\frac{1}{2} m \frac{1}{2} a$ $\frac{1}{2} L \frac{1}{2} A$ B . (viii) $\frac{1}{2} a \frac{1}{2} l$ $\frac{1}{2} L \frac{1}{2} A$

$\frac{1}{2} l \frac{1}{2} m$ $\frac{1}{2} m \frac{1}{2} l$ $\frac{1}{2} L \frac{1}{2} M$ $\frac{1}{2} M \frac{1}{2} L$. This must, of course, be led up to. As you do $\frac{1}{2} A \frac{1}{2} L$ the right club passes behind the left; then as you do $\frac{1}{2} L \frac{1}{2} M$ the right club passes in front of the left.

(ix) $\frac{1}{2} g, \frac{1}{2} l$ $\frac{1}{2} L \frac{1}{2} G$ $\frac{1}{2} G \frac{1}{2} L$ $\frac{1}{2} L \frac{1}{2} M$ $\frac{1}{2} M \frac{1}{2} L$.

This differs from (viii) only in that, instead of straightening the arm when it comes in front of the body, you keep the arm bent and the hand close to the hip. The exercise is illustrated in fig. 27; where (1) shows the clubs as the left club descends in $\frac{1}{2} l \frac{1}{2} g$, and the right club ascends in $\frac{1}{2} L \frac{1}{2} M$; and (2) shows the clubs a quarter of a circle later as the left club ascends in $\frac{1}{2} l \frac{1}{2} g$, and the right club descends in

$\frac{1}{2} M \frac{1}{2} L$. (x) $\frac{1}{2} a \frac{1}{2} l \frac{1}{2} m \frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} M \frac{1}{2} M \frac{1}{2} L$
 $\frac{1}{2} L \frac{1}{2} A$ $\frac{1}{2} A \frac{1}{2} L$ $\frac{1}{2} L \frac{1}{2} M$ $\frac{1}{2} M \frac{1}{2} D$
 a $\frac{1}{2} d \frac{1}{2} m$ $\frac{1}{2} m \frac{1}{2} l$ $\frac{1}{2} l \frac{1}{2} a$

CHAPTER X.

MISCELLANEOUS.

§ 91. *Changes from Outward to Inward Circles, and vice versa.*—In the present paragraph we describe certain movements by means of which the direction in which a club has been circling may be neatly reversed; such movements are, of course, necessary as connecting links between exercises of different kinds. Reversing the direction in which a club has been circling is called changing, and a movement by which it is effected is called a change. We shall as usual deal only with the right club.

(i) Begin an outward back twist, and, as the club begins to ascend, carry the right hand to the left behind the head, passing the elbow in front of the face; then, by the time the club is horizontal, check its movement, and immediately do an inward front swing or cross front twist. These movements may be written: B, change, a ; and B, change, a .

(ii) Begin an inward back twist, and, as the club begins to ascend, carry the right hand to the right; when the club is horizontal, check the movement, and do an outward front swing or front twist (b , change, A; or b , change, G).

(iii) Begin an outward front swing, and, when the club is

nearly horizontal in its ascent, bend the arm, check the club, and do an inward cross front twist (A, change, c).

(iv) Begin an inward front swing, and, when the club is almost horizontal in its ascent, bend the arm, check the club, and do an outward back twist (a, change, B).

(v) Changes similar to the two last described may be effectively done after $\frac{1}{2}$ L $\frac{1}{2}$ A and $\frac{1}{2}$ l $\frac{1}{2}$ a respectively ($\frac{1}{2}$ L $\frac{1}{2}$ A, change, c; and $\frac{1}{2}$ l $\frac{1}{2}$ a, change, B). When you change in this way, the check in the movement of the club does not catch the eye easily; these changes are therefore among the most effective for use as connecting links between exercises of different kinds.

Other changes may be easily devised.

The following examples show how changes may be employed as connecting links between exercises of different

kinds:—(i) $\overline{\text{A B B}}$, change, $\overline{a b a}$
 B A B , change, $\overline{a a b}$. (ii) $\overline{a b}$, change, $\overline{\text{A}}$
 $\overline{a b}$, change, $\overline{\text{A'}}$. (iii) $\overline{a b}$,
 change, $\overline{\text{G' A}}$. These three exercises show how alternate

exercises with outward and inward circles respectively

may be connected with each other. (iv) $\overline{\text{B}}$ $\overline{\text{B' A}}$
 $\overline{\text{A}}$, change, $\overline{\text{c' a}}$

(v) $\overline{\frac{1}{2}\text{A} \frac{1}{2}\text{L}}$ $\overline{\frac{1}{2}\text{L} \frac{1}{2}\text{A}}$ $\overline{\text{C'}}$
 $\overline{\frac{1}{2}\text{a} \frac{1}{2}\text{l}}$ $\overline{\frac{1}{2}\text{l} \frac{1}{2}\text{a}}$, change, $\overline{\text{B'}}$. These two exercises show how alternate and parallel exercises may be connected with each other.

Exercises are sometimes done consisting of a series of combinations of pairs of circles, with changes for one club, or for both, introduced after every combination or after every two or three combinations. These exercises are called pendulum exercises; they may easily be devised, but are ineffective.

§ 92. *Further Observations on Style.*—The chief matters to attend to in regard to style may be summed up as follows:—

(i) Stand firmly on the feet, keep the hips pressed back, carry the head erect, and avoid all unnecessary movement of the body.

(ii) In swings keep the arm as nearly straight as possible ; in twists keep the hand as nearly as possible in the same place throughout the movement.

(iii) Keep the movement of the club even and smooth ; avoid all abrupt movements or sudden changes of pace.

(iv) Cause the clubs to keep accurate time with each other.

(v) Keep the point of each club constantly in its proper place relatively to the principal plane.

You may correct your own style as regards the first four points by practising in front of a looking-glass, or in front of a wall with a light behind you, so that you can see your shadow. As regards the last point, which is the most difficult matter to attain proficiency in, you cannot very easily correct your own style without a very elaborate arrangement of looking-glasses ; you may, however, do a good deal by practising sometimes with a wall close in front of you, and sometimes with a wall close behind you, so that you are obliged to keep the club in its proper place in order to avoid hitting the wall.

It follows from what we have said that, in teaching clubs, the instructor should look at his pupils from the side as often as from the front, and that in competitions it is essential to have judges at the sides of the competitors as well as in the front.

In order to give your exercise a properly rhythmical appearance, you should, at all events as long as you continue to do exercises of the same class, cause every circle to occupy exactly the same time. You may, however, *quicken a little* for a long series of exercises involving

twists and no swings, and slow down a little for a long series of exercises involving swings and no twists.

The actual speed is not a matter of great consequence. In doing alternate or parallel exercises, you may select the speed at which the clubs can be swung with the least exertion; with clubs of the weight and shape we advise for ordinary use, we should recommend a speed of about 60 circles with each club to the minute; or, in other words, about one circle with each club to every bar of a waltz. In doing windmill exercises, you may effectively increase the speed a good deal, doing, with clubs of the above-mentioned size, 75 to 80 circles a minute with each club.

In a performance in which different classes of exercises are introduced, it is best, in order to avoid unnecessary changes, to finish one class of exercises before passing on to another. For example, you may do alternate exercises with outward circles, then change with both clubs, and do alternate exercises with inward circles, then change with one club and do parallel exercises, then change with both clubs and do parallel exercises the other way round, then alter the time and do windmill exercises the same way round as the last series of parallel exercises, then change with both clubs and finish with windmill exercises the other way round. If you do not care to do your parallel exercises and windmill exercises both ways round, you may further reduce the number of changes.

The following may serve as models for the arrangement of a performance lasting about three minutes, and suitable for a competition or a display.

I. $\overline{AV} \parallel_2, \overline{A} \parallel_2, \overline{A} \overline{C'} \parallel_2, \overline{A} \overline{A} \overline{I'V} \overline{C'} \parallel_2, \overline{\frac{1}{2} A \frac{1}{2} L} \overline{\frac{1}{2} L \frac{1}{2} A}$
 $\overline{I'V} \overline{H'} \overline{C'V} \overline{C'} \parallel_2, \overline{\frac{1}{2} A \frac{1}{2} L} \overline{\frac{1}{2} L \frac{1}{2} A}, \text{change, } \overline{C'} \overline{I}, \overline{a} \overline{b} \parallel_2, \overline{a} \overline{b} \overline{c}$
 $B' B'V G' G'V \parallel_2, \overline{\frac{1}{2} A \frac{1}{2} L} \overline{\frac{1}{2} L \frac{1}{2} A}, \text{change, } \overline{C'} \overline{I}, \overline{a} \overline{b} \parallel_2, \overline{a} \overline{b} \overline{c}$

$\bar{b} \bar{c}' |^2$, $\bar{h}' \bar{i}' \bar{c}'$ left wrist \bar{c} right wrist $\bar{c} \bar{g}'$ right wrist $\bar{b}' \bar{b}' \bar{g}'$
 $\bar{B} \bar{B}' |^2$, $\bar{B}' \bar{B}' \bar{G}'$ uppermost, \bar{G}' uppermost, $\bar{C} \bar{C}'$ uppermost, $\bar{I}' \bar{H}' \bar{C}'$
 left wrist \bar{g}' right wrist $\bar{b}' \bar{b} \bar{c}' |^2$, $\bar{c}' \bar{h}' \bar{h}' \bar{c}' \bar{a} \bar{g}' \bar{b}' \bar{h}'$
 uppermost, \bar{C}' uppermost, $\bar{C}' \bar{B} \bar{B}' |^2$, $\bar{G}'' \bar{B}'' \bar{G}'' \bar{B}'' \bar{G}'' \bar{A} \bar{C}'' \bar{K}''$
 $\bar{b}'' \bar{g}'' \bar{a} |^2$, \bar{b} B, change 'see § 91 (i) | \bar{I} , $\bar{a} \bar{d} |^2$, $\bar{a} \bar{d} \bar{d} |^2$, $\bar{a} \bar{b} \bar{V} \bar{b}''$
 $\bar{K}'' \bar{C}'' \bar{A} |^2$, $\bar{a} \bar{V} \bar{a} |^2$, $\bar{a} \bar{V} \bar{e} \bar{f} |^2$, $\bar{a} \bar{V} \bar{b} \bar{b}''$
 $\bar{g}'' \bar{g}'' \bar{g}'' |^1$, $\bar{a} \bar{V} \bar{a} \bar{a} \bar{V} \bar{a} \bar{b} |^2$, change [see § 91 (ii)], $\bar{A} \bar{B} |^2$,
 $\bar{A} \bar{C}' \bar{B} \bar{B}' |^2$, $\bar{D} \bar{A} \bar{A} \bar{D} \bar{A} \bar{E} \bar{A} \bar{F} |^2$, $\bar{A} \bar{A} \bar{L}$
 $\bar{a} \bar{b}' \bar{b} \bar{c}' |^2$, $\bar{a} |^1$, $\bar{f} \bar{a} \bar{e} \bar{a} \bar{d} \bar{a} \bar{a} \bar{d} |^2$, $\bar{A} \bar{A} \bar{L}$
 $\bar{a} \bar{L} \bar{A} \bar{H}' \bar{C}' \bar{I}' \bar{B}' \bar{G}' \bar{G}' |^2$, $\bar{B}' |^2$.
 $\bar{a} \bar{L} \bar{A} \bar{H}' \bar{C}' \bar{I}' \bar{B}' \bar{G}' \bar{G}' |^2$, $\bar{B}' |^2$.
 II. \bar{A} , change | \bar{I} , $\bar{A} \bar{V} \bar{B} \bar{A} |^2$, $\bar{A} \bar{V} \bar{D} \bar{A} \bar{B}' \bar{B}' \bar{G}' \bar{V} \bar{G}' \bar{B}' \bar{V} \bar{B}' |^2$,
 $\bar{A} \bar{A} \bar{F} \bar{E} |^2$, $\bar{A} \bar{A} \bar{F} \bar{C}' \bar{I}' \bar{V} \bar{C}' \bar{C}' \bar{V} \bar{H}' \bar{B}' |^2$,
 $\bar{A} \bar{M} \bar{M} \bar{L} \bar{L} \bar{A} |^2$, $\bar{A} \bar{L} \bar{V} \bar{L} \bar{A} \bar{V}$, change, $\bar{b} \bar{V} |^1$,
 $\bar{A} \bar{G} \bar{B} |^2$, $\bar{A} \bar{L} \bar{L} \bar{A}$, change, $\bar{b} |^1$,
 $\bar{b} \bar{L} \bar{L} \bar{L} \bar{L} \bar{a} \bar{a} \bar{a} \bar{a} \bar{a} |^2$, $\bar{b} \bar{V}$, change | \bar{I} , $\bar{A} \bar{L} \bar{L} \bar{L} \bar{G}$,
 $\bar{a} \bar{L} \bar{L} \bar{L} \bar{L} \bar{a} \bar{a} \bar{a} \bar{a} \bar{a} |^2$, $\bar{b} \bar{V}$, change | \bar{I} , $\bar{A} \bar{L} \bar{L} \bar{L} \bar{G}$,
 $\bar{C} \bar{H} \bar{B} \bar{A} \bar{L} \bar{L} \bar{L} \bar{A} |^2$, $\bar{A} \bar{M} \bar{M} \bar{L} \bar{L} \bar{L} \bar{G}$,
 $\bar{C} \bar{I} \bar{H} \bar{B} \bar{G}'' \bar{G}'' \bar{G}'' \bar{G}'' \bar{G}'' \bar{A} |^2$, $\bar{A} \bar{M}$
 $\bar{g}'' \bar{g}'' \bar{g}'' \bar{g}'' \bar{b} \bar{h} \bar{i} \bar{c} \bar{g} \bar{L} \bar{L} \bar{m} \bar{m} \bar{a} |^2$, $\bar{A} \bar{M}$
 $\bar{M} \bar{D} \bar{A} \bar{A} \bar{L} \bar{L} \bar{A} \bar{A} \bar{A} \bar{B} \bar{B} |^2$, $\bar{A} \bar{I}'$
 $\bar{a} \bar{L} \bar{L} \bar{m} \bar{m} \bar{a} \bar{d} \bar{m} \bar{m} \bar{a} \bar{b} \bar{b} \bar{a} |^2$, $\bar{a} \bar{b}'$
 $\bar{H}' \bar{C}'$ right wrist \bar{C}' left wrist $\bar{I}' \bar{H}' \bar{C}'$ right wrist \bar{C}
 $\bar{b}' \bar{g}'$ uppermost, \bar{g}' uppermost, $\bar{b}' \bar{b}' \bar{g}'$ uppermost, \bar{c}
 left wrist $\bar{B}' \bar{B}' \bar{G}'$ right wrist \bar{G}' left wrist $\bar{B}' \bar{B}' \bar{G}'$
 uppermost, $\bar{h}' \bar{i}' \bar{c}'$ uppermost, \bar{c}' uppermost, $\bar{h}' \bar{i}' \bar{c}'$
 right wrist \bar{G}' left wrist \bar{C}' left wrist $\bar{I}' \bar{H}' \bar{C}'$ right wrist
 uppermost, \bar{c}' uppermost, \bar{g}' uppermost, $\bar{b}' \bar{b}' \bar{g}'$ uppermost,
 \bar{C}' left wrist $\bar{I}' \bar{H}' \bar{C}'$ right wrist \bar{C} left wrist $\bar{B}' \bar{B}' \bar{G}'$
 \bar{g}' uppermost, $\bar{b}' \bar{b}' \bar{g}'$ uppermost, \bar{c} uppermost, $\bar{h}' \bar{i}' \bar{c}'$
 right wrist \bar{G}' left wrist $\bar{B}' \bar{B}' \bar{G}'$ right wrist \bar{I} , $\bar{a} \bar{L} \bar{M}$
 uppermost, \bar{c}' uppermost, $\bar{h}' \bar{i}' \bar{c}'$ uppermost | \bar{I} , $\bar{a} \bar{L} \bar{M}$
 $\bar{M} \bar{L} \bar{L} \bar{G}$, $\bar{L} \bar{L} \bar{G}$, $\bar{L} \bar{G} \bar{L}$, $\bar{L} \bar{L} \bar{A}$
 $\bar{L} \bar{L} \bar{G}$, $\bar{L} \bar{L} \bar{L} \bar{m} \bar{L} \bar{m} \bar{a} \bar{L} \bar{m} \bar{a} \bar{L} \bar{L} \bar{A}$
 $\bar{I}' \bar{H}' \bar{C}' \bar{B}' \bar{G}' |^2$, $\bar{A} \bar{F} \bar{E} \bar{A} \bar{D} \bar{A} |^2$, \bar{I} .
 $\bar{g}' \bar{b}' \bar{c} \bar{h}' \bar{i}' |^2$, $\bar{a} \bar{a} \bar{d} \bar{a} \bar{e} \bar{f} |^2$, $\bar{c} |^1$.

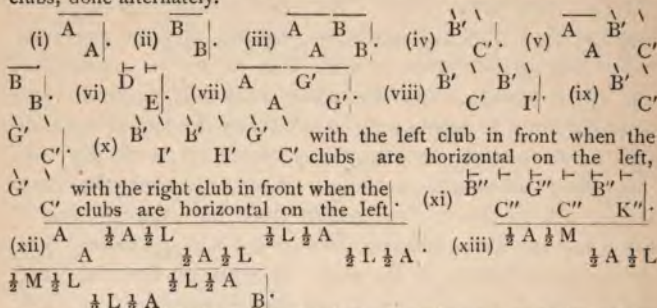
§ 93. *Heavy Clubs*.—It is often the ambition of beginners to swing very heavy clubs. We have already expressed our opinion that it is far better to attempt difficult exercises with clubs of moderate weight, than to try to accomplish one or two feats with very heavy clubs. If, however, you are ambitious to swing very heavy clubs, we would strongly urge upon you the necessity of proceeding cautiously, and increasing the weight gradually. Above all, remember that, if you are to derive any benefit from the exercise, and if the exercise is to produce any effect on spectators, you must remain master of the club; as soon as the club is so heavy that it gains the mastery and causes you to sway about on your feet and assume all sorts of ungainly attitudes, the exercise is doing you more harm than good, and is producing no effect.

Front swings, back twists proper, and hip twists are the circles most suitable for very heavy clubs. The various twists at arm's length can only be done with clubs of very moderate weight.

§ 94. *Cross Windmill Exercises*.—Exercises may be done consisting of outward circles with both clubs, or of inward circles with both clubs, in which the circles with the two clubs instead of being done simultaneously, as in alternate exercises, are done alternately. The effect of this is, as a little thought will show you, that the one club reaches its highest point at the same moment that the other reaches its lowest point, and that the two clubs always reach the horizontal position at the same time, and that, when the clubs are horizontal, they both point to the same side.

Exercises of this kind, which are known as "cross windmill" exercises, are difficult to do well, and are by no means so effective as those described in the preceding chapters. We shall not describe systematically the various cross windmill combinations that can be done, but shall content ourselves with giving a few examples of cross windmill exercises consisting of outward circles; these may readily be reversed, so that they will serve also as examples of cross windmill exercises consisting of inward circles. In the short notation a cross windmill exercise is indicated by placing the letters denoting the circles executed by the two clubs alternately; thus, $\begin{smallmatrix} A \\ A \end{smallmatrix}$ denotes a cross

windmill exercise consisting of outward front swings with the two clubs, done alternately.



§ 95. *Other Methods of Time-keeping.*—Exercises are sometimes done in which one club does two circles while the other does only one. These exercises are of great variety, but we have not found them very satisfactory. As a rule, in such exercises, a swing is done with the club doing the single circle, and two twists are done with the other club.

We have seen exercises in which the one club is moved quite slowly and the other very fast, so that three, four, or even more circles are done with the one club while one circle is done with the other.

§ 96. *Circles not Parallel to the Principal Plane.*—It is obvious that circles may be done in which the point of the club does not pursue a course approximately parallel to the principal plane; we cannot say, however, that we have found circles of this kind particularly pleasing. There is one matter, however, in connection with such circles which it may be worth while to mention.

Suppose you do inward cross front twists with the right club, with the hand some little way in front of the chest, and allow the point of the club to come forward as the club descends, and to pass to the rear as the club ascends, and gradually exaggerate this, at the same time carrying the hand a little to the right, you will at last be doing a circle in which the point of the club moves in a plane at right angles to the principal plane, descending in front of the latter plane and ascending behind it, the hand being close to the right shoulder. Now allow the point of the club to go further still to the right as it descends and to the left as it ascends, and so work round further and further; you will find that you are doing an outward back twist. We see, therefore, that the outward back twist and the inward cross front twist might be regarded as varieties of the same circle. In the same way, obviously, the inward back twist and the outward cross front twist might be regarded as varieties of the same circle.

The same sort of connection as exists between the back twist and the cross front twist exists between the following circles:—

(i) The front swing, the back swing, the cross swing over, and the cross swing under.

(ii) The front twist, the cross back twist over, the cross back twist under, and the cross inside twist.

(iii) The hip twist and the cross hip twist.

Recognition of the connection existing between these circles sometimes serves to suggest new exercises.

§ 97. *Miscellaneous Circles.*—Several circles may be done besides those dealt with in the preceding chapters. Some of these we may now mention; we shall, of course, deal with the right club.

(i) Begin with the arm straight and the hand in front of the right thigh, with the club pointing straight up; let the point of the club move to the right and pass between the arm and the body; do an outward twist, causing the club to ascend in front of the body, and return to your preparatory position. This circle might be regarded as a variety of K, and written K₁.

(ii) Begin as in the circle above described, but cause the club to ascend behind the back; so that, at the conclusion of the twist, you reach the preparatory position for the hip twist, or a somewhat similar position. This circle might be written $\frac{1}{2}$ K, $\frac{1}{2}$ L.

(iii) Begin nearly as if to do $\frac{1}{2}$ G, $\frac{1}{2}$ L, but keep the arm straight throughout, relaxing the grasp as the club ascends, instead of bending the elbow and bending the wrist up; then, just as the club completes its ascent, pass it between the arm and the body. This circle might be regarded as a variety of G, and written G₂.

(iv) Begin as if to do a hip twist, but as the club ascends straighten the arm, and pass the club between the arm and the body, as in the circle last described. This might be written $\frac{1}{2}$ L $\frac{1}{2}$ G₂.

The four circles we have described can only be done with somewhat short clubs; they may, of course, all be reversed.

(v) Circles may be done with the arm passed behind the neck, and the hand brought forward over the left shoulder; but they require exceptional length of arm and suppleness.

(vi) Circles are sometimes done with the hand passed between the legs either from front or rear, or *vice versa*; they are rather ungainly.

(vii) Circles are sometimes done in which the centre of gravity of the club is caused to remain stationary while the hand moves in a circle. In these circles the club looks as if it were revolving about an axle through its centre of gravity; they are difficult to do, and by no means ineffective.

(viii) Movements are sometimes done in which the point of the club, instead of moving in a vertical, or approximately vertical, plane, moves in a horizontal plane; for example, with the arm held straight out to the right, you may cause the point of the club to describe a circle in a horizontal plane either immediately above or immediately below the arm.

§ 98. *Exercises with Reverse Grasp, Finger Twists, and Snake Twists.*—Instead of grasping the club in the ordinary manner, you may grasp it,

like an oar, with your little finger towards the point; with this grasp, which is called the reverse grasp, you may do all the circles described in the earlier chapters of the book, but most of them look rather clumsy.

Twists with light clubs are also sometimes done with the knob of the club held between the fingers and thumb, so that the club is not, properly speaking, grasped at all. These twists, which are called finger twists, are, however, rather juggling feats than athletic exercises.

There are, however, some rather peculiar and effective movements known as snake twists, in which the reverse grasp is employed and finger twists are made use of; as an example of these, we may describe the following exercise, which consists of four outward circles with the right club. The upper arm is horizontal throughout the movement. It will be convenient to describe the exercise circle by circle.

1st Circle.—Begin with the ordinary grasp and do an outward back twist at arm's length, allowing the club, however, to slip in the hand, so that, when the twist is complete, the knob of the club is in the palm of the hand, and the forefinger lies along the club, the wrist being considerably bent over.

2nd Circle.—Begin another back twist at arm's length, allowing the club to slip further in the hand till, when the club completes its descent, you have the reverse grasp of the club; then, keeping the arm straight and gradually straightening the wrist and turning it slightly in so as to bring the back of the hand up, cause the club to continue the back twist till it is horizontal in its ascent, when the club should come in contact with the forearm; then cause the club to complete its ascent by bending the elbow and carrying the hand downwards, keeping the upper arm horizontal, and the club in contact with the forearm.

3rd Circle.—Keep the club in contact with the forearm and the upper arm horizontal, and cause the point of the club to move to the right and descend by bending the elbow and bringing the hand to the armpit; by the time the hand is close to the armpit the club is horizontal on the right; then cause the club to continue its descent by unbending the elbow and raising the hand, till, when the club finishes its descent, the hand is straight above the elbow and the club is in contact with the inside of the forearm; then cause the club to ascend by straightening the arm, keeping the club in contact with the forearm and turning the wrist a little in, till, when the club is horizontal in its ascent, the arm is straight, the point of the club is close to the armpit, and the back of the hand is turned upwards and a little to the front. From this point continue the movement of the point of the club, till the club completes its ascent, by bending the elbow and bringing the hand towards the armpit. The position of the club shortly after it passes the horizontal in its ascent in this circle is shown in fig. 28.

4th Circle.—Continue the movement of the hand towards the armpit, keeping the club in contact with the forearm till the club reaches the horizontal in its descent; then straighten the arm till, when the club completes its descent, the hand is straight above the elbow, and when the club is horizontal in its ascent, the arm is straight; then allow the

club to leave the forearm and complete its ascent with the arm straight, at the same time allowing the club to slip in the hand, so that, when the circle is complete, the knob of the club is in the palm of the hand, so that you can resume the ordinary grasp of the club as you begin another circle.

The exercise we have described consists of back twists and front twists of modified character; it may be reversed, and two exactly similar exercises, one being the reverse of the other, may be done with the shoulders full left, the modified front twists and back twists being replaced by modified cross inside twists and cross front twists.

Other similar exercises may be devised, and very effective exercise may be done consisting of such exercises with both clubs. Some exercises of the kind will be found in the addendum.

§ 99. *Turning on the Feet.*—You may, as you swing the clubs, turn sharply on the feet, to the right or left about, so as to face straight to the rear. You may turn, without checking the movement of the clubs, either when both clubs point straight up or straight down; or, if you are doing windmill exercises, when one club points straight up and the other straight down. If you turn thus without checking the movement of the clubs you will find that, if you were doing outward circles with the one club before you turned, you will be doing an inward circle with that club after the turn, and *vice versa*. Turning, therefore, affords a means of changing with both clubs without checking the movement of the clubs at all.

The turn itself may be done in several ways. You may turn to the right about either on the right foot or the left, swinging the other leg round as you turn; or you may prepare for a turn to the right about by crossing the legs with the left leg in front and then turn on both toes; or you may turn on both toes without shifting the feet, so that after the turn you stand with the legs crossed. Turns to the left about may, of course, be done in corresponding ways.

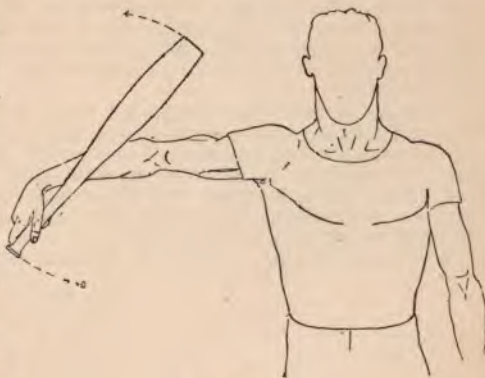


FIG. 28.

§ 100. *Throwing the Clubs.*—Hitherto we have dealt exclusively with exercises in which the grasp of the club is retained throughout. Exercises may also be done in which the club is let go, allowed to turn once, twice, or more, in the air and caught again. These exercises are of endless variety, but belong rather to the domain of juggling than of athletics. We may, however, give a short account of some of the simpler movements of this kind. As usual, we shall deal with the right club exclusively.

(i) Do an outward front swing, and as the club approaches the horizontal in its ascent let it go, allow it to make one revolution in the air, and catch it again; this throw, which we will call the "outward throw," is shown in fig. 29, where the path pursued in the air by the knob of the club is indicated by a dotted line. After an outward throw you may catch the club with the right hand and do *a* or *c*, or, if you catch the club with the back of the hand to the rear, *e*, *f*, *h*, *i*, or *k*; or you may catch the club with the left hand and do *A*, *B*, or *D*;

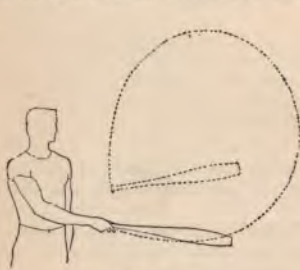


FIG. 29.

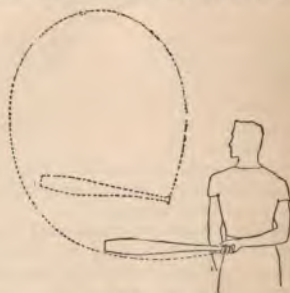


FIG. 30.

or, if you catch the club with the back of the hand to the front, *G*. An outward throw may be done not only as the club ascends in *A*, but also as it ascends in *E* or *F*. Another method of catching the club after an outward throw is described later.

(ii) Do an inward front swing, and as the club approaches the horizontal in its ascent let it go, allow it to make one revolution in the air, and catch it again; we will call this the "inward throw." After an inward throw you may catch the club with the right hand and do *A*, *B*, or *D*; or, if you catch the club with the back of the hand to the front, *G*; or you may catch the club with the left hand and do *a* or *c*, or, if you catch the club with the back of the hand to the rear, *e*, *f*, *h*, *i*, or *k*. An inward throw may be done not only after *a*, but also after *d* or $\frac{1}{2} l \frac{1}{2} a$.

(iii) Begin to do $\frac{1}{2} A \frac{1}{2} L$, and as the club begins to ascend let the hand pass well across the body and let the club go, allow it to make

one revolution in the air, and catch it again. This throw, which we will call the "back throw," is shown in fig. 30, where the course pursued in the air by the knob of the club is indicated by a dotted line. After the back throw, you may bring the right hand to the front of the body while the club is in the air, catch it with the right hand and do *a*, *c*, *e*, *f*, *h*, *i*, or *k*, as after an outward throw; or you may catch the club with the left hand and do *A*, *B*, *D*, or *G*, as after an outward throw. You may also keep the hand in the position shown in fig. 30, catch the club with the hand in that position, and do $\frac{1}{2} / \frac{1}{2} a$. A similar catch may be done after an outward throw.

(iv) You may do throws similar to those already described, allowing the club to perform two revolutions in the air before catching it; these throws may be called the "double outward throw," the "double inward throw," and the "double back throw," respectively.

(v) Begin as if you were going to do an outward throw; but when you let the club go, cause it, as it performs its revolution, to rise high and pass across the body from left to right, so that, when you catch it, it is above and to the right of the right shoulder; this throw, which we will call the "outward throw over," is shown in fig. 31, where the course pursued by the knob of the club and the course pursued by the point of the club are indicated by dotted lines. In an outward throw over the club performs about a revolution and a quarter in the course of the movement. You may catch the club with the right hand and do *A*, *B*, *D*, or *G*, or with the left hand and do *a*, *c*, *e*, *f*, *h*, *i*, or *k*. An outward throw over may be done after *E* or *F*, as well as after *A*.



FIG. 31.

(vi) You may, obviously, do an inward throw over corresponding to the outward throw over, just as the inward throw corresponds to the outward throw. This throw may be done after *a*, *d*, or $\frac{1}{2} / \frac{1}{2} a$.

(vii) You may also do a back throw over; you begin as if to do a back throw, but, when you let the club go, you cause it to pursue a path similar to that pursued by the club in the outward throw over.

(viii) You may double the outward throw over, the inward throw over, and the back throw over in the same way that you can double

the outward throw, inward throw, and back throw; you have merely to cause the club to describe two revolutions and a quarter while it is in the air, instead of one revolution and a quarter.

Many other throws are possible; and probably, if the subject were thoroughly worked out, the names we have employed for the throws we have mentioned would be found inconvenient and would require modification.

§ 101. *Exercises for both Clubs introducing Throws.*—An endless variety of exercises may be devised involving throws. We give below a few easy exercises by way of specimens. These exercises involve frequent changes and frequent alterations in time keeping, so that the descriptions must be read with great care. Where a circle is followed by a throw you, of course, only carry the circle far enough to enable you to throw the club; so also when a throw is followed by a circle, you start from the point the club has already reached in its descent when it is caught, and complete the circle from that point. In exercises involving throws the shoulders can hardly be kept strictly in position, owing to the necessity of watching the clubs while they are in the air; we have therefore, in the exercises we give, refrained from indicating the position of the shoulders.

- (i) $\begin{matrix} A, & \text{outward throw, } a, & \text{change, } B \\ B & & B \end{matrix}$ $\left| \begin{matrix} B \\ A \text{ outward throw, } a \end{matrix} \right|$. In this exer-

cise begin $\begin{matrix} A \\ B \end{matrix}$, and, as the right club ascends in A, do the outward throw, catch the club, and do a ; doing a second B with the left club in the mean time; then change with the right club and do the corresponding series of movements on the other side.

- (ii) $\begin{matrix} a \\ \frac{1}{2} A \frac{1}{2} L, \text{ back throw} \end{matrix}$ $\begin{matrix} a, & \text{change, } A \\ a & b \end{matrix}$ $\left| \begin{matrix} B \\ \end{matrix} \right|$. Begin the windmill

exercise $\begin{matrix} a \\ \frac{1}{2} A \frac{1}{2} L, \end{matrix}$ $\begin{matrix} a \\ \end{matrix}$; as the left club ascends in $\frac{1}{2} A \frac{1}{2} L$, do the back throw; by the time you let the club go, the right club should be horizontal in its descent in the second a ; continue the second a with the right club, causing the right club to ascend behind the left while the latter is in the air; then when you catch the left club change with the right and do $\begin{matrix} A \\ a \end{matrix}$ $\begin{matrix} B \\ b \end{matrix}$; then do the corresponding exercise on the other side.

(iii) An exercise similar to (ii) may be done omitting $\begin{matrix} A \\ a \end{matrix}$ $\begin{matrix} B \\ b \end{matrix}$; you proceed as in (ii) till you catch the left club, and then immediately proceed with $\frac{1}{2} A \frac{1}{2} L$, back throw; &c.

(iv) $\begin{matrix} a, & \text{inward throw} \\ A, & \text{outward throw} \end{matrix}$ $\left| \begin{matrix} \\ \end{matrix} \right|$. In this the clubs remain apparently parallel throughout.

(v) $\begin{matrix} \frac{1}{2} a \frac{1}{2} l \frac{1}{2} l \frac{1}{2} a, & \text{inward throw} \\ \frac{1}{2} A \frac{1}{2} L \frac{1}{2} L \frac{1}{2} a, & \text{outward throw} \end{matrix}$ $\left| \begin{matrix} \\ \end{matrix} \right|$. This resembles the last exercise and is perhaps easier.

(vi) a , inward throw, B||
 A , outward throw, a ||.

(vii) a^V , inward throw, $A \frac{1}{2} A \frac{1}{2} L$, back throw, a^b ||. In this you do the second a right, rather fast, causing the right arm to descend behind the left club while it is in the air; when you catch the left club the right club should be horizontal in its ascent, so that you proceed in windmill time with $A \frac{1}{2} A \frac{1}{2} L$; when you let the left club go in the back throw, the right club is already horizontal in its descent in a ; you cause the right club to ascend in that circle behind the left, while the latter is in the air, and as soon as you catch the left club you do a^b , when you are ready to do the corresponding exercise on the other side. A similar exercise may be done leaving out A^b , so that when you catch the left club, after the inward throw, you pass it behind the back in $\frac{1}{2} A \frac{1}{2} L$ immediately.

(viii) a , outward throw over, $A \frac{1}{2} A \frac{1}{2} L$, back throw, a^b , change ||. In this you must keep the right club going rather fast while the left club is in the air in the outward throw over, and you will find that when you catch the latter, the right club is already horizontal in its ascent in the second a , so that you can break at once into windmill time; the rest of the movement resembles the first part of (ii), except that you change with the right club rather sooner, so as to proceed with A , instead of a .

(ix) a , outward throw over, $A \frac{1}{2} A \frac{1}{2} L$, a^b back throw over, B, a inward throw||. After the first throw you can, as in the last exercise, break at once into windmill time; when you catch the club after the second throw, the clubs should be again parallel.

(x) a^V , double inward throw, $A \frac{1}{2} A \frac{1}{2} L$, back throw, a^b ||.

ADDENDUM.

§ 102. *Twists with the hand at the height of the hip.*—In Chapter II. mention is made of forms of the back twist (B; see § 13, p. 17), the cross front twist (C; see § 14, pp. 19, 20), the front twist (G; see § 18, p. 25), and the cross back twist under (I; see § 20, p. 27), in which the hand, instead of being held at the height of the shoulders as in the usual forms of these twists, is held at the height of the hip. In B, and G, with the right club the hand is held close to the right hip. In C, and I, with the right club the hand is held close to the left hip.

In the present paragraph we propose to deal with exercises consisting of consecutive outward circles with one club introducing these twists. These exercises may, of course, readily be reversed. As usual, we shall confine ourselves to exercises with the right club.

In describing an exercise consisting of consecutive circles with one club, it is sufficient in ordinary cases to mention the circles that are to be executed in order, without indicating the manner in which each circle must be modified in order to connect it with the preceding and succeeding circle.

Exercises introducing twists with the hand at the height of the hip cannot, however, in many cases be satisfactorily described in this way, as will appear from an example.

Do the exercise A C A. You will observe that the first circle is not a complete front swing, but is more approximately three-quarters of a front swing and one-quarter of a cross front twist; so the second circle is not a complete cross front twist, but is more approximately three-quarters of a cross front twist and one-quarter of a front swing. You will observe also that during the last quarter of the first circle and the first three-quarters of the second circle the hand is stationary.

Now do the exercise several times in succession, each time, however, holding the hand a little lower while it is stationary than the time before; till at last the hand, while it is stationary, is in front of the left hip. You have now replaced C by C_h, and the exercise might be written A C_h A. But you will observe that the first circle now practically consists of half a front swing and half a cross front twist with the hand at the height of the hip, and that the second circle consists similarly of half C_h and half A. Accordingly it is much better, instead of writing the exercise A C_h A, to write it $\frac{1}{2}$ A $\frac{1}{2}$ C_h $\frac{1}{2}$ C_h $\frac{1}{2}$ A A.

To put it otherwise, it is much better to regard the exercise not as introducing C_h in its complete form, but as introducing two circles, $\frac{1}{2}$ A $\frac{1}{2}$ C_h, $\frac{1}{2}$ C_h $\frac{1}{2}$ A, each of which is made up of part of C_h and part of A.

Many other circles somewhat similar to $\frac{1}{2} A \frac{1}{2} C$, and $\frac{1}{2} C, \frac{1}{2} A$ may be done; among these the following may be mentioned:—

(i) $\frac{1}{2} A \frac{1}{2} G$. This is very like $\frac{1}{2} A \frac{1}{2} C$, but you check the movement of the hand rather sooner, and do the second half of the circle with the hand in front of the right hip.

(ii) $\frac{1}{2} G, \frac{1}{2} A$. This requires no explanation.

(iii) $\frac{1}{2} A, \frac{1}{2} I$. In this circle you do the descending half of A ; then, as the club begins to ascend, you carry the point of the club to the rear and bring the hand to the left of the left hip, so that, at the conclusion of the circle, the club is in the preparatory position for I . Fig. 26 (i) shows the left club in a position it would pass through in the course of its ascent in this circle.

(iv) $\frac{1}{2} I, \frac{1}{2} A$. You begin in the preparatory position for I , do the descending half of that circle, then allow the point of the club to come to the front, and do the ascending half of A .

(v, vi) $\frac{1}{2} C, \frac{1}{2} I$, $\frac{1}{2} I, \frac{1}{2} C$. It is sufficiently obvious how these circles should be done.

The following are a few examples of exercises for one club, and of combined exercises, introducing the circles we have discussed in the present paragraph. The circles in question are, however, usually and most effectively employed in conjunction with the circles discussed in Chapter V.

I. Exercises for one club.

- (i) $\frac{1}{2} A \frac{1}{2} C$, $\frac{1}{2} C, \frac{1}{2} A$. (ii) $\frac{1}{2} A \frac{1}{2} C$, $C, \frac{1}{2} C, \frac{1}{2} A$.
 (iii) $\frac{1}{2} A \frac{1}{2} G$, $C, \frac{1}{2} C, \frac{1}{2} A$. (iv) $\frac{1}{2} A \frac{1}{2} I$, $\frac{1}{2} I, \frac{1}{2} C, \frac{1}{2} C, \frac{1}{2} A$.
 (v) $B \frac{1}{2} A \frac{1}{2} G$, $C, \frac{1}{2} C, \frac{1}{2} I$, $\frac{1}{2} I, \frac{1}{2} C, \frac{1}{2} C, \frac{1}{2} A \frac{1}{2} C$.

II. Exercises for both clubs.

(A) *Alternate Exercises*.—(i) $\frac{1}{2} A \frac{1}{2} C$, $\frac{1}{2} C, \frac{1}{2} A$. This must be led up to with some such movement as $\frac{1}{2} A \frac{1}{2} C$, I . (ii) $\frac{1}{2} A \frac{1}{2} C$, $C, \frac{1}{2} C, \frac{1}{2} A$, $\frac{1}{2} G, \frac{1}{2} G, \frac{1}{2} A \frac{1}{2} V$. (iii) $\frac{1}{2} A \frac{1}{2} I$, $\frac{1}{2} I, \frac{1}{2} C, \frac{1}{2} C, \frac{1}{2} A \frac{1}{2} V$. In this exercise, the wrists cross with the right wrist uppermost as the clubs begin to ascend in $\frac{1}{2} A \frac{1}{2} G$, $\frac{1}{2} I, \frac{1}{2} C$.

(B) *Parallel Exercises*.—(i) $\frac{1}{2} A \frac{1}{2} G$, $\frac{1}{2} G, \frac{1}{2} A$, $\frac{1}{2} a \frac{1}{2} c$, $\frac{1}{2} c, \frac{1}{2} a$. (ii) $\frac{1}{2} A \frac{1}{2} B$, $\frac{1}{2} a \frac{1}{2} b$, $\frac{1}{2} B, \frac{1}{2} G$, $\frac{1}{2} C, \frac{1}{2} I$, $\frac{1}{2} I, \frac{1}{2} A$, $\frac{1}{2} i, \frac{1}{2} c$, $\frac{1}{2} c, \frac{1}{2} b$, $\frac{1}{2} b, \frac{1}{2} a$.

§ 103. *Snake Twists*.—In the present paragraph we shall, after some preliminary explanations, give a few examples of combined exercises introducing snake twists.

In § 98 we described an exercise consisting of four consecutive circles

for one club. The first of these circles is an outward back twist at arm's-length slightly modified, so that it is unnecessary to employ a special letter to denote it. The other three circles may be denoted by the letters R, S, and T, so that the whole exercise may be written $B'' R S T$. The reverse of the exercise is, of course, written $t s r b''$.

If you turn the shoulders full left and hold the right arm out to the left, you may do an exercise with the right club consisting of inward circles in which the movements of the club and arm are almost precisely similar to those in $B'' R S T$.

The exercise begins with c'' slightly modified, and may be written $c'' u v w$. This may be reversed, and the reverse form, consisting of course of outward circles, may be written $\bar{W} \bar{V} \bar{U} \bar{C}''$.

The following are combined exercises introducing the above-mentioned twists:—

(A) *Alternate Exercises*.—(i) $\begin{array}{cccc} \bar{A} & \bar{A} & \bar{A} & \bar{A} \\ B'' & R & S & T \end{array} \begin{array}{c} \bar{A} \\ B'' \end{array}$. (ii) $\begin{array}{cccc} \bar{B}' & \bar{B}' & \bar{B}' & \bar{B}' \\ B'' & R & S & T \end{array}$.
 (iii) $\begin{array}{cccc} \bar{A} & \bar{C}'' & \bar{C}' & \bar{C}' \\ B & B'' & R & S \end{array} \begin{array}{c} \bar{C}' \\ T \end{array}$. (iv) $\begin{array}{cccc} \bar{A} & \bar{H} & \bar{C}'' & \bar{C}'' \\ B'' & R & S & T \end{array} \begin{array}{c} \bar{C}'' \\ B'' \end{array}$. (v) $\begin{array}{cc} \bar{A} & \bar{I} \\ B & R \end{array} \begin{array}{c} \bar{C}'' \\ S \end{array}$
 $\begin{array}{c} \bar{K}'' \\ T \end{array} \begin{array}{c} \bar{C}'' \\ B'' \end{array}$. (vi) $\begin{array}{cccc} \frac{1}{2} \bar{A} & \frac{1}{2} \bar{L} & \frac{1}{2} \bar{L} & \frac{1}{2} \bar{A} \\ B'' & R & S & T \end{array} \begin{array}{c} \bar{C}'' \\ T \end{array}$. (vii) $\begin{array}{cccc} \frac{1}{2} \bar{A} & \frac{1}{2} \bar{M} & \frac{1}{2} \bar{M} & \frac{1}{2} \bar{L} \\ B'' & R & S & T \end{array}$
 $\begin{array}{c} \frac{1}{2} \bar{L} & \frac{1}{2} \bar{A} \\ S & T \end{array} \begin{array}{c} \bar{C}' \\ T \end{array}$. (viii) $\begin{array}{cccc} B'' & R & S & T \\ B'' & R & S & T \end{array}$. (ix) $\begin{array}{cccc} \bar{A} & \bar{B}'' & \bar{B}'' & \bar{B}'' \\ A & W & V & U \end{array} \begin{array}{c} \bar{B}'' \\ C \end{array}$. (x) $\begin{array}{cc} \bar{A} & \bar{B}'' \\ A & W \end{array} \begin{array}{c} \bar{R} \\ V \end{array}$
 $\begin{array}{c} \bar{S} \\ U \end{array} \begin{array}{c} \bar{T} \\ C'' \end{array}$.

(B) *Parallel Exercises*.—(i) $\begin{array}{cccc} \bar{A} & \bar{B}'' & \bar{B}'' & \bar{B}'' \\ t & s & r & b'' \end{array}$. (ii) $\begin{array}{cccc} \bar{G}' & \bar{B}' & \bar{G}' & \bar{B}' \\ t & s & r & b'' \end{array}$.
 (iii) $\begin{array}{cccc} \bar{K}'' & \bar{C}'' & \bar{K}'' & \bar{C}'' \\ t & s & r & b'' \end{array}$. (iv) $\begin{array}{cccc} \frac{1}{2} \bar{A} & \frac{1}{2} \bar{L} & \frac{1}{2} \bar{L} & \frac{1}{2} \bar{A} \\ t & s & r & b'' \end{array} \begin{array}{c} \frac{1}{2} \bar{A} \\ \frac{1}{2} \bar{L} \end{array} \begin{array}{c} \frac{1}{2} \bar{L} \\ \frac{1}{2} \bar{A} \end{array}$.
 (v) $\begin{array}{cccc} \frac{1}{2} \bar{A} & \frac{1}{2} \bar{M} & \frac{1}{2} \bar{M} & \frac{1}{2} \bar{L} \\ t & s & r & b'' \end{array} \begin{array}{c} \frac{1}{2} \bar{L} \\ \frac{1}{2} \bar{A} \end{array} \begin{array}{c} \bar{C} \\ b'' \end{array}$. (vi) $\begin{array}{cccc} \bar{W} & \bar{V} & \bar{U} & \bar{C}'' \\ t & s & r & b'' \end{array}$.

(C) *Windmill Exercises*.—(i) $\begin{array}{cccc} B'' & R & S & T \\ a & b & c' & c' \end{array}$. (ii) $\begin{array}{cc} B'' & R \\ b' & b' \end{array}$
 $\begin{array}{cc} S & T \\ b' & b' \end{array}$. (iii) $\begin{array}{cccc} \bar{B} & \bar{R} & \bar{S} & \bar{T} \\ c'' & c'' & k'' & c'' \end{array}$. (iv) $\begin{array}{cc} \bar{W} & \bar{V} \\ b'' & b'' \end{array}$
 $\begin{array}{cc} \bar{U} & \bar{C}'' \\ g'' & b'' \end{array}$. (v) $\begin{array}{cccc} \bar{B}'' & \bar{R} & \bar{S} & \bar{T} \\ c'' & u & v & w \end{array}$.

TABLES AND INDEX.

THE systematic plan upon which the book is arranged renders a full index unnecessary. We append tables showing the letters we use to denote the various circles, the meaning of the symbols we employ, and the differences between our nomenclature and that adopted by Mr. E. F. Lemaire in his work on clubs; and a short index to the technical terms we make use of.

I.—TABLE SHOWING THE LETTERS DENOTING THE VARIOUS CIRCLES—CAPITALS DENOTE OUTWARD CIRCLES, SMALL LETTERS DENOTE INWARD CIRCLES.

A, <i>a</i> denote Front Swings.	G, <i>g</i> denote Front Twists.
B, <i>b</i> „ Back Twists.	H, <i>h</i> „ Cross Back Twists Over.
C, <i>c</i> „ Cross Front Twists.	I, <i>i</i> „ Cross Back Twists Under.
D, <i>d</i> „ Back Swings.	K, <i>k</i> „ Cross Inside Twists.
E, <i>e</i> „ Cross Swings Over.	L, <i>l</i> „ Hip Twists.
F, <i>f</i> „ Cross Swings Under.	M, <i>m</i> „ Cross Hip Twists.

II.—TABLE OF SYMBOLS INDICATING THE POSITION OF THE SHOULDERS. (SEE §§ 3, 9.)

— denotes Shoulders Square.	
\ denotes Shoulders Half Right.	/ denotes Shoulders Half Left.
└ „ Shoulders Full Right.	┘ „ Shoulders Full Left.

III.—TABLE OF SYMBOLS PLACED AFTER A GROUP OF LETTERS DENOTING AN EXERCISE, TO INDICATE THE NUMBER OF TIMES THE EXERCISE IS TO BE DONE. (SEE § 58.)

	signifies repeat the exercise as often as you please.
1, 2, 3, . . .	signify do the exercise once, twice, thrice . . .
	signifies do the exercise on the other side, and repeat the exercise right and left alternately as often as you please.
1, 2, 3, . . .	signify do the exercise once, twice, thrice . . . on each side

IV.—TABLE OF SYMBOLS SHOWING WHICH CLUB PASSES IN FRONT OF THE OTHER WHEN THE CLUBS CROSS IN ALTERNATE COMBINATIONS. (SEE §§ 48, 49.)

∨ placed after the letter denoting a circle with either club, signifies that that club passes in front, when the clubs are crossed and pointing downwards.

∧ placed after the letter denoting a circle with either club, signifies that that club passes in front, when the clubs are crossed and pointing upwards.

V.—TABLE OF COMPARISON BETWEEN THE NOMENCLATURE EMPLOYED BY THE AUTHORS AND BY E. F. LEMAIRE RESPECTIVELY.

Terms employed by
E. F. LEMAIRE.

Equivalent terms employed by
THE AUTHORS.

Ordinary
Reverse
Front Circle
Back Circle
Side Wrist Circle
Front Wrist Circle
Lower Back Circle

Outward.
Inward.
Front Swing.
Back Twist Proper.
Back Twist at arm's length.
Cross Front Twist.
Hip Twist.

INDEX TO TECHNICAL TERMS.

Backwards	\$ 4	Out, Turning wrist.	\$ 5
Behind	\$ 4	Outward	\$ 8
Bending Wrist, up or over	\$ 5	Over, Bending wrist	\$ 5
Carry	\$ 6	Principal plane	\$ 3
Change	\$ 91	Rear	\$ 4
Circle	\$ 7	Reverse	§§ 34, 35, 60
Forwards	\$ 4	Right	\$ 4
Front	\$ 4	Shoulders square, or half or full right or left	\$ 3
Full Right or Left	\$ 3	Square, Shoulders	\$ 3
Half Right or Left	\$ 3	Swing	\$ 7
In, Bending wrist	\$ 5	Twist	\$ 7
In front of	\$ 4	Up, Bending wrist	\$ 5
Inward	\$ 8		
Left	\$ 4		



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