and this, the positive action, is finished when the hand has reached the legs, and comes between these limbs at full stretch. It is then carried up along the body to the chin, and the stroke renewed. The left hand is formed into a scoop, turned outward by the wrist at right angles to the fore-arm. The left arm, with the elbow bent, is then directed outward, and makes a straight pulling (not circular nor swinging) stroke to the left hip. When one arm is performing the negative the other is at the positive part of the stroke. The action of the legs should be long and vigorous, and they should never cross each other, but should work in unison with the arms and shoulders. The left knee is brought up in front of the body, with the foot in front of and at right angles to the body. Put the foot in a line with the front of the leg, and bring it round to meet the other in a line with the body. Meanwhile stretch the right or lower leg as far away as possible from the body toward the back and then bring it down to meet the other by a powerful plain stroke. The legs are then returned upward to the body, the heels touching, the knees apart, the toes of the left foot forward and of the right foot downward. To learn this graceful and useful side stroke some persons need long and steady practice ; others acquire it comparatively quickly. The swimmer steers with his left or right hand and arm as the direction de­mands. The head and neck must be held in one position, not raised nor turned at any part of the stroke. Bear­ings should be taken from what can be seen in the line of vision away from and in front of the body, and only very seldom indeed should the head be turned to look in ad­vance. Breath is inhaled as the under hand is pulling downward, and exhalation should take place while the mouth is immersed, which is when the uppermost hand is performing the stroke along the body.

The coincident movement of arms and legs may be thus described. As the legs are bent up to the body the upper or left hand has been stretched in front and the right or lower arm has just finished the pull. As the top arm pulls downward the legs are opened wide and almost in the same motion swung round and closed. It will be apparent that the legs are returned upward with knees bent as the downward pull is being performed with the lower arm. No effort is to be made to sink the head, neither is it to be held up in any way. The turn of the body by the power of the strokes will be quite enough to allow of the lips being sufficiently clear of the water for the purpose of inspiration. There should be no sudden pull at any part whatever of this complete stroke.

The *Overhand Stroke,* when properly practised and acquired, is the most useful and easy of all styles of swimming. Beginners, however, should beware of acquir­ing it before they are thorough adepts with the side stroke, otherwise they lose all power of speed and good appear­ance. Harry Gurr is sometimes said to have been the inventor of this stroke in 1863, but Harry Gardener, in August of the year previous, when he won the 500 yards championship in Manchester, used the overhand or over- arm stroke. The only movements of the side stroke which differ from those of the overhand are those of the left or upper arm and hand. By carrying this arm in the air a lengthened reach is obtained above the surface. As in the side stroke, the head lies as far as possible into the water, the body, legs, and feet in a straight line level with and close to the surface. The left arm is carried forward and stretched as far as possible out of the water in a line with the face and in advance of the head. The arm and hand re-enter the water, and are pulled through it with the strongest propelling stroke. The limb out of water should be carried through the air quietly, gracefully, and evenly till dipped for the stroke, not swung uselessly

round from the shoulder in a half circle. The left arm and hand being in the air, the head lies deeper in the water than in the side stroke, and it is reduced in weight. The legs work simultaneously with the left arm ; that is, they are drawn up as this arm reaches in front, and are at their nearest wide stretch by the time it is in position for the pull ; they are then pulled strongly together as the upper arm is performing its strong movement. At no time when the upper arm is being carried forward above the water should the hand be higher than a very few (say about three) inches above the surface. The elbow alone is elevated, and is the highest part of the arm. In fact, the hand is so close to the surface that, on being lifted upward after the delivery of the stroke, the wrist has to be bent ; otherwise the fingers would actually touch the water. Once, however, the hand comes opposite the eyes it is straightened in a line with the fore-arm and in this position carried to the dipping point. Breathing is regu­lated in precisely the same way as when swimming by means of the side stroke.

*Touching and Turning. —*The methods of "touch and turn ” were brought into vogue by the now numerous swimming races in baths. Whether the baths be long or short, from 10 to 15 feet in the push-off is gained at each end of every length by all com­petitors. Assuming that the swimmer is using the side or over­hand stroke and going on the right side, the method to be adopted is as follows. When within 3 feet of the end wall of the bath the left or upper hand quits its propelling movement, and reaches in front of the head till it touches the wall just above water-mark. The palm of the hand is then placed horizontally on the wall, the fingers to the right, which is the direction to which one is turning ; the little finger is uppermost and thumb undermost. The knees are bent, and the body, now close to the wall, is turned to the right on its own axis by the left hand, after which the feet press against the wall under the hand. As in diving and plunging, the body, arms, and hands are in a straight line, and the head between the biceps, all under water. The thighs are doubled up under the loins, the calves of the legs touching the back of the thighs, and the soles of the feet pressing hard against the wall. A strong push-off is made by the feet and legs, and the swimmer resumes his ordinary stroke and course for a new length.

*Ocean Swimming.—*Persons having from any cause to swim in the heavy rolling breakers of mid ocean should use the side stroke when available. No attempt should be made to breast or mount the waves. By taking their direction a side-stroke swimmer is carried an unexpectedly long distance. The large dangerous rollers come almost in regular succession after an interval of small waves. The swimmer soon notices them, fills his lungs, swims into them, ducking the head, and quickly emerges when the wave has passed. Then a fresh supply of breath is inhaled.

*Plunging.—*In this the performer enters the water in somewhat the same manner as when diving (see below), but at a flat angle, and from the moment of doing so makes no active muscular movement whatever of any part of the body under water. Plunging came into vogue as the most graceful and practical method of starting in swimming races. From 3 to 5 feet above the water-level makes the best springing point, whether from bank, board, or rock. The knees should be kept together and slightly bent, with the weight on the balls of the feet and the lungs fully charged. The spring forward at the signal to start is given with all muscular power available. A swing of the arms from behind is taken, and, as the feet quit their support, the arms are swung forward so as to rise up to and straight beyond the head. The body is shot into mid-air as far as possible, and, before touching the water, the head falls between the arms till the chin just touches the chest and the ear grazes the inside of the biceps. The body now glides gracefully and almost noiselessly into the water, with the chest slightly hollowed, the shoulders contracted, and the arms rigidly braced out straight. The hands are now laid flat and the thumbs locked, while the hips and ankles are kept in one rigid straight line, with the soles of the feet turned upward and level with the surface, the toes pointing straight behind. The forward motion from the spring continues as long as the body will float and the air in the lungs can be held, when the feet, followed by the arms, begin to sink, and the plunger ends his performance by merely raising his head. Adepts in this branch have saved themselves from a sinking vessel by a long plunge from the ship’s side, and so by one effort have got clear out of the vortex that is caused by her settling down and sinking.

*Diving.—*The rule in diving, as distinguished from plunging, is most explicit. In diving alone are the limbs allowed to make muscular movements under water. When properly performed it is a most graceful feat to the eye, and a good swimmer is, as a rule,