time bringing up the forearm and hands to the front of the chest with the palms of the hands downwards near to the surface of the water, the fingers being extended and closed and the forefingers and thumbs nearly touching. The hands are then pushed forward in front of the body to the full extent of the arms, the palms of the hands are turned slightly outwards, and the arms swept round until in a right angle with the shoulders, when the elbows are dropped and the hands come up in front of the chest for the next stroke. The arms should not be kept rigid, but allowed to work gracefully. As the arms are swept backwards the legs are drawn up, the knees being turned out­ward to the right and left and the heels nearly touching. The legs are then kicked outward and swept round as the arms are being pushed forward to their fullest extent, a “ flip ” being given with each of the feet, which must be kept loose at the ankles and in the same position as when standing. All beginners have the great fault of trying to make the limbs too rigid, thereby causing stiff­ness and possibly cramp. Another difficulty with them is the question of breathing, but if the learner will remember to inhale when making each backward sweep of the arms, much of the difficulty usually experienced at the start will be overcome. Expiration should be carried out during the other portion of each stroke. The important thing is to keep the body as level along the surface as possible, and at the same time get regular and natural breathing. The holding of the breath for two or three strokes will exhaust the beginner more than anything else.

A knowledge of the *back stroke* can easily be acquired by those who are able to swim on the breast, for the leg action is very similar and the principles relating to the use of the arms are almost the same. The arms, instead of being moved through the water, are lifted in the air and carried out to beyond the head with the palms upwards. The palms are then slightly turned and the arms swept round. Just as this action is being made the legs are drawn up as in the breast stroke, the body being allowed to travel on with the force of the kick as the arms are extended beyond the head. The great difficulty that a back swimmer has to contend with in open water is that of steering, and the best way to overcome it is to take an object for a guide before starting and hold the head slightly to the side so as to steer by it.

At one time the *side stroke* was the great racing stroke; the body being placed on the side, the upper arm worked from the head to the upper side of the body, the lower arm taken down­wards through the water to the underside of the body and a scissor-like kick made with the legs; but this has now been generally given up in favour of the *over-arm, trudgen* and *crawl strokes.*

In the *over-arm* stroke the body is usually turned on the right side., At the start the lower arm is pulled downwards towards the hips, the fingers being kept closed and the hand flat, so as to present a large surface to the water. When the stroke is finished the hand is turned quickly palm upwards, so that together with the lower part of the arm it cuts the water sideways, the arm being almost bent double. Then, as it is shot forward, the hand is gradually turned from palm upwards to palm downwards, until, when it arrives at its position beyond the head, it is ready for the next stroke. The recovery and the pull ought to be effected as quickly as possible. The upper arm stroke is started when the downward stroke of the under or right arm is finished. It is started in front of the forehead, the arm being slightly bent and the fingers pointing downwards. The hand is pulled past the face and chest with the arm bent at right angles and swept back in front of the body, the arm gradu­ally straightening as it leaves the water opposite the hip. When the hand is opposite the hip it should be brought quickly out of the water and sent forward for the next stroke. When the upper arm is opposite the shoulder in its pull through the water the legs are kicked wide apart and closed again at the moment when the hand leaves the water. The kick is completed and the legs straightened before the left hand is replaced ready for the next stroke. As the legs are opened the upper leg is kicked forward with the knee slightly bent, and the foot kept in its ordinary position. The lower leg is bent double until the heel approaches the thigh, which is brought backwards slightly. In the actual kick the upper leg is sent forward, and as it is straightened vigorously the under leg from the knee downward comes' forward to meet it with a vicious kick; the swirl of the feet and closing of the legs drives the body forward. This is what has come to be known in Great Britain as the “ Northern Kick,” by reason of its first being introduced by Lancashire swimmers.

The *trudgen stroke, more* commonly known as the *trudgeon stroke,* and on the continent oí Europe as *Spanish swimming,* was first made prominent in England in 1873 by a swimmer named J. Trudgen, who stated that he had acquired a knowledge of it while in South America. It was, however, known to Clias, a writer on swimming, who described it in 1825 as “ The Thrust.” Trudgen’s speed was so great for his time that swimmers quickly copied his style, and it is from this stroke that the *crawl stroke* has been developed. When swimming Trudgen kept on the chest and lifted the upper part of his body at each stroke out of the water, and at each swing of the arms pulled himself forward, a considerable swirl of the water occurring as each movement was finished. The arms were brought forward sideways, each completing a circle on each side of the body, and the head kept completely above water. Those who copied Trudgen soon found it was less laborious and equally as fast to use a double over-arm stroke with the head and chest well down, and thus have the body supported by the water, using the ordinary over- arm leg kick. At first it was considered a stroke only useful for short distances and for water polo where speed is essential, but the idea was quickly dispelled, and several men, as well as women, have swum as far as fifteen miles with this stroke.

The *crawl stroke* is, like the *trudgen,* an adaptation from native swimmers. It was not generally known in Great Britain until 1902, when Mr Richard Cavill came from Australia to compete in the English championships, but it is said to be common with natives of the South Sea Islands, and from there introduced into Australia about the year 1900. From thence it came to Europe, and there Mr C. Μ. Daniels, the American amateur champion, made so excellent a study of it that he not only so greatly increased his own pace as to be able to win the English championship, and beat the world’s record for a hundred yards, but also introduced various improvements upon it. This stroke is distinct from any other form of swimming: the legs from the knee upwards are kept in line with the body and almost closed; there is no opening of the legs or drawing up of the knees as for the breast, back and side strokes. The swimmer lies ∩at upon his breast on the surface, the lower part of the legs from the knee downward are alternately lifted above the surface up to the middle of the calf and then they are struck down upon the water with the instep with all force possible. This striking is done from an upward to a downward direction, one leg at a time. The arms are used somewhat similarly as in the trudgen stroke, they are bent at the elbows, dipped in just beyond the head and drawn smartly backwards till they come out of the water at the hips. The right arm is dipped in when the left foot strikes downward and vice versa. The result of this movement is that when one or the other of the limbs is pulling or propelling the body through the water at the same moment another limb is being recovered for the next stroke, most of the limbs are recovered through the air, fewer dead or retarding points are produced than in any other stroke, and less resistance is caused in the line of progress. In performing any other stroke most of the limbs are recovered through the water.

One of the most useful accomplishments for a swimmer is that of *floating,* but curiously enough many of them cannot acquire a knowledge of it. It is purely a matter of buoyancy, and requires constant practice before one can become perfect in it. In learning to float the beginner experiences great diffi­culty in overcoming the tendency of the legs to sink, and if after frequent trials they are still found to sink he should get some one to hold them up or else place them on the steps or behind the rail of the bath, and thus assisted learn to balance the body on