HOW TO ACQUIRE HEALTH, STRENGTH, AND MUSCLE,

lips is the orbicularis oris; it is employed in the act of kissing, and consists of a number of oircular bands that pass around the mouth. A similar circular muscle surrounds each of the eyes ; it is called the orbicularis palpebrae rum. The great muscle that forms the nap-of the neok is the trapezius ; it throws the head back ; it is opposed by the sternoeleidomastoid muscle, which bends the head forward on the ohest. When both sets of muscles act together, the head is kept firmly fixed, as in carrying burdens. There are many other muscles in the head and neck, but these are the most prominent, and can be traced in the majority of paintings or pieces of sculpture.

The muscles of the upper extremities are the deletoid, triangular shaped, and covering the shoulder ; it raises the arm from the side of the body to a horizontal position. The trapezius aids in carrying it up to the vertical line. The biceps, or large muscles on the front of the arm, flexes the fore-arm on the arm, and makes the preparation for striking a blow. The triceps extends the fore-arm on the arm ; it is on the back of the humerne, and is used in delivering a blow. The muscles of the fore-arm are all small, and do not give any special marks or contours, except in persons in whom the muscular sys-tem is exceedingly well developed. The muscles of the trunk are the pectoralis major and minor. They form the breasts, and taking their origin from the sternum and inner edges of the upper ribs, are inserted into the humerus ; they are employed in folding the arms across the chest. Opposed in action to the pectorals is the latissimus dorsi, which, arising from the lower two-thirds of the vertebral column, is inserted into the humerus, and throws the arms backward; they are greatly developed by the exercise of rowing. The muscle which extends from the lower part of the sternum to the pelvis is called the rectus abdominalis. As is the case with nearly all the muscles of which we have treated, it is one of a pair; with its fellow it forms the anterior wall of the abdomen ; it is divided transversely into three portions, the divisions being well marked only in very muscular individuals. The muscles which complete the walls of the abdominal cavity are the obliquus externa.

oblighns internue, and transversalis. The fibres of these muscles are arranged as their names indicate, so as to cross each other, and produce in their action an equable pressure on the organs contained in the abdominal cavity. In addition to these, there are a great number of small muscles in the back and between the ribs; the latter are called intercostals; they aid in carrying on respiration. The muscles of the lower extremities are: 1st. Those which form the buttocks; they are called the glutei muscles. They are arranged in three layers, viz : external, middle and internal. Though these muscles exist in the lower animals, they are developed to a far greater extent in man, giving to him the power of retaining the erect position. Opposed to the glutei are the iliac and psoas muscles, which arise from the abdominal surface of the vertebral column, and, passing over the public bone, are inserted into the femur. The great muscles of the thigh are the rectus famoris, which passes from the iliac. bone to the patella ; the vastus externus and vastus internus, which take their origin from the outer and inner surfaces of the femur, and are inserted into the patella; they extend the leg on the thigh. The muscle which runs obliquely across the from the iliac bone to the edge of the tibia, is called sartorius. or tailors' muscle, thigh, inner the sartorius. since it is employed in bringing the lower extremities into the position assumed by persons of that trade while at their work. The muscles that are inserted into the patela, are in reality attached to the tibia, for a strong ligament, about two inches in length, passes from the lower edge of the pateila, and is attached to a rough surface on the an-terior edge of the tibia. The largest muscle on the back of the thigh is the biceps; it flexes the leg on the thigh, and, since it takes its origin in part from the ischium, also aids in extending the thigh on the trunk. The muscles of the leg are the gastrocnemius, on the back of the leg, giving it its fullness; it extends the foot on the leg, and raises the body in walking. The tibialis antions, and other smaller muscles on the front of the leg, flex the foot on the leg and oppose the gastrocnemius. 13 2 1 4 1 1

THE END

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