

fore part of the sclerotic coat. Three of these are marked A, B, and C, in the figure; and the edge of the fourth is seen behind and above B. These *straight muscles*, as they are called, surround the optic nerve and the eye-ball, forming four longitudinal bands; one (A) being situated above for the purpose of turning the eye upwards; a second (C,) situated below, for turning it downwards; and the two others, on either side, for performing its lateral motions to the right or left. The cavity of the orbits being considerably larger than the eye-ball, the intervening space, especially at the back part, is filled up by fat, which serves as a soft cushion for its protection, and for enabling it to roll freely in all directions.

Besides these straight muscles, there are also two others (s and i) termed the *oblique muscles*, which give the eye-ball a certain degree of rotation on its axis. When these act in conjunction, they draw the eye forwards, and serve as antagonists to the combined power of the straight muscles. The upper oblique muscle (s) is remarkable for the artificial manner in which its tendon passes through a cartilaginous pulley (P) in the margin of the orbit, and then turns back again to be inserted into the eye-ball, so that the effect produced by the action of the muscle is a motion in a direction exactly the reverse of that in which its fibres contract. This mechanism, simple as it is, affords one of the most palpable instances that can be adduced of express contrivance; for in no other situation could the muscle have been so conveniently lodged as within the eye-ball; and in no other way could its tendon have been made to pull in a direction contrary to that of the muscle, than by the interposition of a pulley, turning the tendons completely round.

The fore-part of the globe of the eye, which is of a white colour, is connected with the surrounding integuments by a membrane, termed the *Conjunctiva*.* This membrane, on

* An abundant supply of nerves has been bestowed on this membrane for the purpose of conferring upon it that exquisite degree of sensibility which