

in alcohol. In this manner the topography and relations of the different membranes and layers can be made out quite easily, and, once familiar with the general structure of the eye of the Turtle, it is possible to dissect fresh specimens knowingly, and readily to detect any misplacements or distortions caused by the dissection. The outermost coat or covering of the eye is the conjunctiva (Pl. 22, fig. 8, a , a^1); that portion of it which lies exterior to the boundaries of the cornea (c^1) is a very thick, soft, and flabby membrane (a); but where it passes over the cornea it becomes very thin. Here it presses very closely upon the cornea, (c^1) and is changed in its nature to a very tender and friable membrane, (a^1) the conjunctiva of the cornea. The sclerotica (b , b , b^1 , c^1) totally envelops the eye, except where the optic nerve (h^1) enters. In front of the eye it forms the cornea, (c^1) a very tough, elastic, and transparent membrane, considerably thicker than the conjunctiva (a^1) which covers it. At the base of the iris, (e^1) the cornea suddenly thickens, and, passing backward all over the eye, constitutes the sclerotic coat, (b , b^1) which is a tough, dense, bluish membrane, much thicker than any other of the coats of the eye, and pressing pretty closely upon the choroidea (c); but it is not in actual contact with it, being separated from the same by a layer of black pigment (d). This pigment layer (d) extends from the edge of the cornea backward, over the whole eye, but disappears (d^1) at the point of entrance of the optic nerve (h^1). The choroidea (c , e^1)¹ is a very thin membrane, of uniform thickness throughout its whole extent, excepting where it passes along the optic nerve (h^1); there it thickens considerably (e^1). At its anterior border it begins again to thicken, just where the posterior edge (e^2) of the ciliary processes (e^2) terminates, and continues to increase in thickness until it reaches a point opposite the junction of the cornea (c^1) and sclerotica, (b) where it thins out as it plunges into the aqueous humor. Here it constitutes the membrana iridis, (e^1) a very spongy and loosely fibrous structure, resembling an irregular network. At this age, the iris (e^1) does not hang perpendicularly to the axis of the eye, but projects very obliquely forward, as it must necessarily do, because the crystalline lens presses upon it from behind, and forces it to slide over its convex surface, or rather that of the membrana pupillaris, (n) when contracting and expanding. Even in the adult, this peculiarity (see fig. 7) obtains to a slight extent. The ciliary processes (e^2 , e^3) extend from the free border of the iris (e^1) along its posterior surface, where it forms a thick posterior lining, and, thinning out rather abruptly about opposite the anterior edge (i^1) of the retina, continues for a short distance backward, and then terminates suddenly in a sharp edge, which may be easily separated from the choroidea, although

¹ In Pl. 22, fig. 8, the letter c^1 near h^1 should be e^1 .