

the axis of the eye, has a symmetrical, oval outline, the anterior and posterior surface being of equal curvatures. The membrana pupillaris (n , n^1) presses pretty closely upon the anterior surface of the crystalline lens, (l) being kept in its place by its attachment (at n^1) to the free portion of the capsule of the lens, and extends behind the free edge of the iris nearly half-way (n^1) to its base. It is nearly as thick as the conjunctiva, (a^1) and has something of the same brittle, soft, inelastic, dense nature. By these properties it is easily distinguished from any other membrane near it. Under the influence of alcohol it retains its shape and smoothness, whilst the membrana hyaloidea becomes very much shrunk and shrivelled. The membrana pupillaris does not disappear in the adult, and very probably remains through life, since it was found in the eye of a specimen of *Trachemys scabra* which was about twenty years old. In this case the membrane was double, (Pl. 22, fig. 7, n , n^1) and very thick. The vitreous humor, at the time the Turtle is hatched, is so soft and so little consistent that it may be poured out of the eye almost as easily as if it were water.

The Ear. The earliest indications of the presence of the ears that have been observed are two cup-shaped depressions, (Pl. 12, fig. 8, 9, 9a, l) one on each side of the base of the head, in the musculo-cutaneous layer, and a narrow band or projection running from the median line of the under-side of the medulla oblongata to the bottom of each cup. The cup, or meatus auditorius, gradually broadens at its mouth, (Pl. 12, fig. 6, l) and grows narrow at the bottom (Pl. 18a, fig. 13, l) till it assumes a very broad trumpet shape, (Pl. 24, fig. 7, l) which it retains, with slight modifications, for the rest of its life. Eventually the mouth of the meatus becomes covered by a thin, transparent membrane, (Pl. 18a, fig. 1,) the membrana tympani, which finally assumes an opaque and dense nature in the adult, and is covered by the still denser and tough epidermis. The narrow band, the auditory nerve, (Pl. 12, fig. 9a, p. 548,) which passes from the brain to the meatus, becomes in the end very broad, (Pl. 23, fig. 1, l , fig. 1a, l , fig. 2, l) and is situated higher up on the side of the medulla oblongata; and, finally, by the time the Turtle is hatched, its end expands into a large, convoluted, hollow hernia, (Pl. 23, fig. 7, and wood-cut 7, c'' , p. 577) which fills a considerable portion of the vestibule. Each convolution, of which there are three, is very broad, and opens widely into the main cavity, the alveus of the hernia. The pia mater extends as a sheath (w-c. 7, f) from the brain all over the auditory nerve, and its expansion (w-c. 7, f') in the vestibulum. The vestibule (w-c. 6, e) is very high, reaching from below the level of the medulla oblongata (w-c. 6, e , c') to a point as high as the posterior end (w-c. 6, u'') of the corpora quadrigemina; and antero-posteriorly, from the anterior wall of the fourth ventricle (w-c. 3, i , w-c. 7, e , c') backward to the posterior end (w-c. 6, a) of the cerebellum.