The Ear. Soon after the ear has begun to develop, (Pl. 12, fig. 6,) the cells (Pl. 21, fig. 27) of the cup-shaped tympanic cavity are identical, in every respect, with those of the eye (fig. 28).

The Intestine. A short time before the Turtle is hatched, the mucous layer of the œsophagus is composed of two layers of cells. The superficial ones (Pl. 21, fig. 1, fig. 5, *a*, fig. 6) are simply irregularly oval, or round, and have faint, granular contents. Their free surfaces are furnished with numerous vibratile cilia. By the application of water, the single mesoblast, and the single, double, or triple entoblast are brought out, (fig. 7, and 8,) and the mesoblast of the columnar cells may be recognized through the superior layer (fig. 8). The inferior layer (fig. 5, *b*) consists of long, cylindrical cells, (fig. 2, fig. 5, *b*,) with scattered granular contents, and a single, homogeneous, hyaline mesoblast, situated near the broader end. Whilst in place, these cells are prismatic from mutual pressure, but being set free, they assume an irregular, club-shaped or spindle form (fig. 2). The superficial epithelial cells (fig. 14e) of the stomach, when seen endwise, appear sharply polygonal, of moderate size, and filled by densely packed granules, which almost obscure the large, single, oval mesoblast (fig. 14d). When seen in profile, they are deeper than broad (fig. 14c). By the action of water, these cells swell, and the granules are scattered (fig. 14f, 14g) so as to expose the dark, granulated mesoblast. By rolling these cells along the field of the microscope when they are very much swollen by water, it may very readily be seen that the mesoblast is attached to the wall of the cell (fig. 14g, *a*). By careful manipulation it was ascertained that the vibratile cilia on these cells are not scattered promiscuously all over the free surface, but form a crown to each one (fig. 3, and 4) along the line, where each cell touches its neighbor. The elongated cells of the thick intestine are arranged end to end, in three layers (fig. 34). They contain numerous, minute granules, and, when seen endwise, appear sharply polygonal (fig. 34a). If slightly acted upon by water, the large mesoblast is brought out quite clearly.

The glands of the stomach appear as more or less elongated openings on the inner surface of the mucous membrane (fig. 14, *a*, 14a, 14b, 15, 15a). Around each opening a dark ring may be seen; every ring touching its neighbor: this is the outline of the gland seen through the thickness of the epithelium. By plunging the microscope deeper, toward the outer surface of the stomach, the elongated, oval cells (fig. 15, 15a, *b*, 16a) of the glands may be seen radiating from around the central cavity. Each gland is about four times as deep as broad, and consists of but one layer of cells (fig. 16b). These cells, in a view of the exterior surface of the gland, are irregularly polygonal; they contain a few scattered granules, and each a large, round, dark mesoblast in the