

Soon after hatching, this Turtle discharged from its intestines a glutinous matter with green blood discs, (Pl. 19, fig. 35,) more or less broken up, and also bodies which appear to be crystals of uric acid (fig. 35a, *a, b, c, d, e*).

Each of the lungs (Pl. 25, fig. 3a, *t'*) occupies as yet a small space, close upon the back of the liver (*r, r*) and of the heart. The surface of the lungs is quite dark with pigment cells. The cells (Pl. 19, fig. 31, *a, b*) of the liver are similar to those of the last phase. The cells (Pl. 19, fig. 29, 29a) of the gall cyst are broad, long, and columnar, each containing a single large mesoblast. The wall of the cyst consists of only a single layer of these cells, which, seen in the direction of their length, appear polygonal. The contents of the gall cyst (Pl. 19, fig. 33, 34) are, in a great measure, minute, dark granules, with bodies that appear to be the different stages of growth of blood corpuscles. The Wolffian bodies and kidneys (Pl. 25, fig. 3a, *g*, fig. 7, 7a) are quite broad and short, with blunt ends; the former are about equal in size to the latter. The kidneys (fig. 7, *b, 7a, b*) are supplied with numerous bloodvessels. The generative organs (fig. 7, *n*) are much broader and shorter than when we first noticed them, and do not equal the length of the kidneys. The cells (Pl. 19, fig. 30) of the female generative organ, the ovary, (Pl. 25, fig. 7, *n*), are moderately large and sharply polygonal, and each cell contains a large, granulated mesoblast.

The bloodvessels of the omphalo-mesenteric system occupy the whole yolk sac, in the form of close meshes, (Pl. 18, fig. 4,) encased in a thick, tenacious layer of albuminous substance, containing innumerable yolk cells of various sizes (fig. 4a). These anastomosing vessels belong to the return currents, and have quite thick walls, (fig. 4a,) which form a striking contrast with the excessively thin walls of the efferent vessels (fig. 2) of the superficial portion of the vascular area. The superior retractor muscle of the head has afforded excellent material to show the serial arrangement of granular bodies in the formation of muscular fibrillæ (Pl. 19, fig. 27, 27a). The central cartilage cells (Pl. 22, fig. 5, 6, 6a, 6b) of the clavicle are widely separated from each other, and, judging from the branching nature of their contents, have begun to form a deposit of lime. The lower jaw (Pl. 9e, fig. 11, 11a) has a considerable amount of lime deposited in its peripheric parts, especially along its upper edge. Upon making an oblique section of its length, (through $\ast-\ast$ fig. 11a,) a row of small cavities (fig. 11, *b*, fig. 11a, *b*) are seen proceeding from the upper side of the cavity (fig. 11, *a*, 11a, *a*) in which the maxillary nerve runs; and each little cavity is filled by a prolongation of the maxillary nerve. One would suppose that these cavities were the future sockets of teeth, did we not know that Turtles possess nothing of the kind. However, we cannot doubt that they are typical tendencies toward the development of dental organs of mastication. The suture of the branches of the