

Kingdom perceptible at an early stage of embryonic life, quite as obvious as those found at maturity, and as the phases of embryonic development furnish important indications for the natural classification of animals, we propose to give the outlines of Embryology, so far as it may have reference to Zoölogy.

293. In order to understand the successive steps of embryonic development, we must bear in mind that the whole animal body is formed of tissues, the elements of which are cells, (39.) These cells, however, are more or less diversified and modified, or even completely metamorphosed in the full grown animal; but, at the commencement of embryonic life, the whole embryo is composed of minute cells of nearly the same form and consistence, originating within the yolk, and constantly undergoing changes under the influence of life. New cells are successively formed, while others disappear, or are modified and so transformed as to become bones, muscles, nerves, &c.

294. We may form some idea of this singular process, by noticing how, in the healing of a wound, new substance is supplied by the transformation of blood. Similar changes take place in the embryo, during its early life; only, instead of being limited to some part of the body, they pervade the whole animal.

295. The changes commence, in most animals, soon after the eggs are laid, and are continued without interruption until the development of the young is completed; in others, birds for example, they proceed only to a certain extent, and are then suspended until incubation takes place. The yolk, which at first consists of a mass of uniform appearance, gradually assumes a diversified aspect. Some portions become more opaque and others more transparent; the germinal vesicle, which was in the midst of the yolk, rises to its upper part where the germ is to be formed. These early changes