316. As a general fact, it should be further stated, that the envelopes which protect the egg, and also the embryo, are the more numerous and complicated as animals belong to a higher class, and produce a smaller number of eggs. This is particularly evident when contrasting the innumerable eggs of fishes, discharged almost without protection

engaging itself from the yolk, a fold rising around the body from the upper layer of the germ, so as to present, in a longitudinal section, two prominent walls, (Fig. 124, xx.) These walls, converging from all sides upwards, ris; gradually till they unite above the middle of the back, (Fig. 125.) When the junction is effected, which in the hen's egg takes place in the course of the fourth day, a cavity is formed between the back of the embryo (Fig. 126, e) and the new membrane, whose walls are called the annios. This cavity becomes filled with a peculiar liquid, the amniotic water.

315 c. Soon after the embryo has been enclosed in the amnios, a shallow pouch forms from the mucous layer, below the posterior extremity of the embryo, between the tail and the vitelline mass. This pouch, at first a simple little sinus, (Fig. 125, a,) grows larger and larger, till it forms an extensive sac, the allantois, turning backwards and upwards, so as completely to separate the two plates of the amnios, (Fig. 126, a,) and finally enclosing the whole embryo, with its

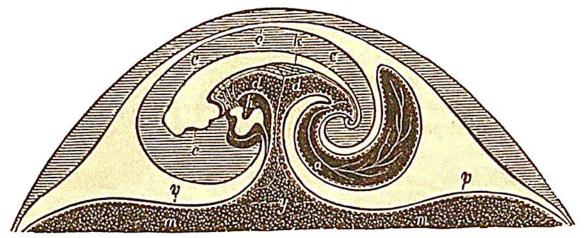


Fig. 126.

amnios, in another large sac. The tubular part of this sac, which is nearest the embryo, is at last transformed into the urinary bladder. The heart (h) is already very large, with mniute arterial threads