

unite to form the cavity of the body, is very unlike in different animals; and these several modes

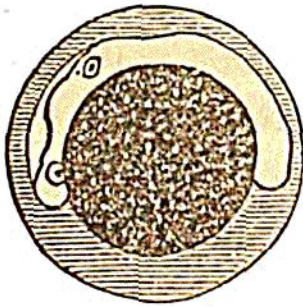


Fig. 109.

are of high importance in classification. Among the Vertebrates, the embryo lies with its face or ventral surface towards the yolk, (Fig. 109.) and thus the suture, or line at which the edges of the germ unite to enclose the yolk, and which in the mammals forms the navel, is found in front. Another suture is found along

the back, arising from the actual folding upwards of the upper surface of the germ, to form the dorsal cavity.

304. The embryo in the Articulata, on the contrary, lies with its back upon the yolk, as seen in the following figure,



Fig. 110.

which represents an embryo of Podurella; consequently the yolk enters the body on that side; and the suture, which in the vertebrates is found on the belly, is here found on the back. In the Cephalopoda the yolk communicates with the lower side of the body, as in Vertebrates, but there is no dorsal cavity formed in them.

In the other Mollusks, as also in the Worms, there is this peculiarity, that the whole yolk is changed at the beginning into the substance of the embryo; whilst in Vertebrates, and the higher Articulates and Mollusks, a part of it is reserved, till a later period, to be used for the nourishment of the embryo. Among Radiata, the germ is formed around the yolk, and seems to surround the whole of it, from the first.*

305. The development of the embryo of the vertebrated animals may be best observed in the eggs of fishes. Being

* These facts show plainly that the circumstance of embryos arising from the whole or a part of the yolk is of no systematic importance.