

the eye the same appearance.) Upon closer examination of the layers of cells within this space, we find that the subsidiary layer (Pl. 9d, fig. 1,  $o^1$ ; Pl. 9e, fig. 5,  $o^1$ ) has undergone a change, both in the closer aggregation and further self-division of its cells, so that it approaches in intimate structure that portion of its expansion (Pl. 9d, fig. 1,  $n$ ; Pl. 9e, fig. 5,  $n$ ) which lines the lower arch of the embryo. The exterior edge of this layer is thickened below, (Pl. 9e, fig. 5,  $i^1$ ) so as to present a projecting annular ridge all round. Beyond this, again, the subsidiary layer remains as heretofore.

Another embryo, (Pl. 12, fig. 2,) although two days younger than the last, is considerably more advanced in its development. The amnios is much more closed over, ( $a^1$ ,  $a^2$ ) and the head more sunk towards the centre of the yolk mass. The spinal marrow, for some distance behind the head, has become a closed tube by the uniting of its upward folding edges, (Pl. 9e, fig. 6,  $e$ ) and its wall ( $e'$ ) has increased in thickness. At the posterior third of the body it still remains open, and gradually loses its distinctness from the portion of the germinal layer which extends beyond. That portion of the germinal layer which lies on each side of the part of the spinal marrow that is closed over rests at a lower level than in the last, younger, stage which we have just described, and is considerably increased in thickness, ( $p$ ) but thins out towards its periphery, till, at its second duplicature ( $a^2$ ) in the amniotic portion, it suddenly becomes exceedingly tenuous ( $a$ ); and so it remains wherever it may be found beyond the embryonic region.

The figure we have last referred to (Pl. 9e, fig. 6) represents a transverse section of the body at the anterior edge of its posterior third, along a line just behind the point (Pl. 12, fig. 2,  $a^1$ ) where the amnios is still open. It will be noticed here that the vertebral layer (Pl. 9e, fig. 6,  $f^1$ ,  $f^2$ ) is much thinner than in the section of a younger embryo made at the middle region. In the latter case the dorsal vertebræ were already marked out, (Pl. 9d, fig. 1,  $f$ ; Pl. 9e, fig. 5,  $f$ ; Pl. 12, fig. 1,  $f$ , fig. 1a,  $f$ ;) and so they are in this embryo at the same place, and also much farther backwards; but, as we have shown in very young stages that the vertebral layer grows thinner backwards, so here the same obtains. The posterior ends of the spinal and vertebral layers appear to expand into broad, spatulate figures (Pl. 12, fig. 2); but this is not so much a peculiarity of these strata alone, as a feature arising from the manner of their partial connection with the respective layers from which they take their origin. In both cases, as development defines the position and shape of each, the posterior expansions pass gradually farther and farther backwards (Pl. 12, fig. 3, 3a, 3b, 4, 7, 11, 12, 13). The chorda dorsalis (Pl. 9e, fig. 6,  $g$ ) is large and well marked, appearing darker than the vertebral layer on each side of it, on account of the increased transpar-