

may mention in passing, that about this time the "primitive stripe" appears upon the oldest conical prominence, (Pl. 11, fig. 3, *b*;) next to the older depression of the embryonic disc, the cephalic hood; and that the albumen has nearly half filled the space underlying the embryo (Pl. 11, fig. 4a). A few more hours bring about a considerable change (Pl. 11, fig. 5, and 5a): the sides of the embryo are so approximated as to give it the shape of an inverted lyre. The oldest conical prominence has broadened considerably, and is folded under more suddenly; the depression (Pl. 11, fig. 5, *a*¹, fig. 5a, *a*¹) of that side is like a narrow, transverse furrow broadened at each end, and that on the opposite side (*a*²) has become also deeply lunate by the sharp downward folding of the middle line of the body.

At this time the "primitive stripe" (Pl. 11, fig. 4, *b*) extends along two thirds of the length of that portion of the embryo which is visible outwardly; and below it is represented by a sharp median ridge, (Pl. 11, fig. 5a, *b*; Pl. 9c, fig. 4a, *o*¹;) which does not belong to the same layer as the primitive stripe, (Pl. 11, fig. 5, *b*;) but is merely forced downwards by its encroachment. The primarily depressed end has become not only much more sunk towards the centre of the yolk mass, but is bent strongly upon itself (Pl. 11, fig. 5a, *a*¹; Pl. 9c, fig. 4, *c*¹) and rolled inwardly at the sides, (Pl. 9c, fig. 4a, *c*¹;) and that portion of the germinal layer which forms the depression now embraces it closely, (Pl. 9c, fig. 4, *a*²;) nearly as far up as the level of the exterior surface of the body; but at the opposite end the depression is not so deep, and consequently the upward folding is not as extensive (Pl. 9c, fig. 4, *a*²). At this age the embryo hangs over a vast albuminous mass, (Pl. 9c, fig. 4, *a*¹, and Pl. 11, fig. 5b, 5c,) occupying more than one half of the yolk sac, the remaining space of which contains the yolk. The changes which the dimensions of the yolk and of its membranes undergo in consequence of this infiltration of albumen will be fully described in another section.

The next stage in the development reveals which is the head, and which the posterior end, of the embryo. It thus appears that that part of the embryonic disc which is first depressed, (Pl. 11, fig. 1, *a*¹;) and which, in the last stage, hung so low below the rest of the body, (Pl. 11, fig. 5a, *a*¹; Pl. 9c, fig. 4, *c*¹;) is the head, for the development of the brain (Pl. 12, fig. 1a, *c*¹) is evidently going on here.¹ The fold of the amnios arising from this part is therefore the so-called "cephalic hood," and the other, at the opposite end, the "caudal hood." The amnios, folding backward and upward, and thus far closely following (Pl. 9c, fig. 4, *a*¹, *a*², *a*³;) the outer surface of the embryo, has now covered a considerable portion of the head and back,—inclosing the head as with a closely fitting cowl, (Pl. 12, fig. 1a, *a*²;) the thickness of which, in profile, resembles a narrow

¹ By mistake in lettering this plate, *c*¹ was inserted for *c*². A sharp pencil may easily correct this oversight.