

taking a view of the interior (Pl. 22, fig. 9, *b*) of this body, that its lower floor is folded inward and upward so as to occupy the larger part of the space included within its superior arch. At this time, the inferior side of the optic lobes has a very thick wall, and is very much compressed; it descends far down between the eyes, (Pl. 22, fig. 9, *c*,) and has a very narrow space between its opposite walls. The extreme anterior end of the brain, the hemispheres, (Pl. 22, fig. 9, *b'*,) has very thick walls and a broad cavity. The two opposite halves of the end of the hemispheres are not intimately soldered together in one continuous layer, but merely touch each other. The superior or rather external edges of these two halves are folded inward, (fig. 9, *b''*,) so as partially to divide the cavity of the hemispheres. This is the first indication of the development of the two olfactory nerves. Next, the superior wall of the optic lobes begins to bulge out between the eyes, (Pl. 15, fig. 13,) and forms a continuation (Pl. 24, fig. 11) of the crest of the corpora quadrigemina, but at a much lower level. The hemispheres are more prominent than before, and encroach upon the anterior portion of the optic lobes, overlapping them at the sides and above.

The hemispheres continue for a while to go on enlarging rapidly, (Pl. 23, fig. 1, *a*, fig. 1a, *a*,) and encroaching upon the optic lobes (fig. 1, *k*, fig. 1a, *k*). This causes the head to bulge very much just above the eyes, (Pl. 14, fig. 1; Pl. 15, fig. 12, fig. 12a,) and renders it angular in outline. From the hemispheres to the tip of the head, (Pl. 23, fig. 1, *c* to *c'*,) the brain becomes very much narrowed, and tubular in form, assuming the character of an olfactory nerve, with a suddenly expanded terminal portion, (fig. 1, *c'*,) the Schneiderian membrane. In consequence of the bulging of the hemispheres, the anterior part of the brain does not trend at right angles to the spinal marrow, but forms an arch, which, however, may be said, in general terms, to run at right angles with the axis of the body. The olfactory nerves, (Pl. 23, fig. 1, *c* to *c'*,) in this case, meet the hemispheres (fig. 1, *a*, fig. 1a, *a*) nearly at right angles. As yet the olfactory nerves are quite short and thick. The folds of the two halves of these nerves, mentioned above, (Pl. 22, fig. 9, *b'*, *b''*,) are here closed, (Pl. 23, fig. 1a, *c*,) and form two distinct olfactory tubes. This inward folding of the anterior part of the brain is continued backward to the hemispheres, along the median line, so as to divide them into two equal portions, one on the right, (Pl. 23, fig. 1a, *a*,) and another on the left (fig. 1, *a*). The infolding edges of the hemispheres (fig. 1a, *m*) are not closed over at this time, but leave a large aperture on that face of each half which is next to the median line. The superior side of the optic lobes, (fig. 1, *k*, fig. 1a, *k*,) where they meet the hemispheres, becomes transversely folded downward and backward, so as to form a small, rounded mass, (fig. 1, *d*, fig. 1a, *d*,) attached by a broad base to the superior portion of the