

optic lobes. This new body is the pineal gland, and bears a very large proportion to the bulk of the whole brain, when compared with its size in the adult (Pl. 25, fig. 13, *pg*).

That part of the brain which lies close behind the corpora quadrigemina, (Pl. 23, fig. 1, *b*, fig. 1a, *b*,) and extends at right angles to them, becomes at this time more prominent (fig. 1, *c*, fig. 1a, *c*) than the region posterior to it (fig. 1, *o*¹, fig. 1a, *o*¹). This, unquestionably, is the cerebellum, since just behind it we find that part of the spinal marrow, the medulla oblongata, from which the auditory nerve (fig. 1, *l*, fig. 1a, *l*) arises. The medulla oblongata (fig. 1, *o*¹, fig. 1a, *o*¹) bends downward and forward so as to run nearly in the same direction with the cerebellum (*c*). The cavities of the corpora quadrigemina, (fig. 1a, *b*,) of the cerebellum, (*c*,) and of the medulla oblongata, (*o*¹,) open widely into each other; but between the two lobes of the hemispheres (fig. 1, *a*, fig. 1a, *a*) and the optic thalami (fig. 1, *k*, fig. 1a, *k*) there is no communication whatsoever, nor between the latter and the corpora quadrigemina (fig. 1, *b*, fig. 1a, *b*). The optic thalami (fig. 1a, *k*) remain adherent to each other at the lower border by means of a thin commissure, which is continuous with the floor of the fourth ventricle, (*o*,) and also with that between the anterior border of the corpora quadrigemina (*b*). The floor of the fourth ventricle, (fig. 1a, *o*,) which was formerly spoken of as the lower floor of the corpora quadrigemina, and pointed out as folding upward and nearly filling the latter, (Pl. 22, fig. 9, *b*,) has become depressed, so as to leave a very large cavity in the corpora quadrigemina. Presently the olfactory nerve elongates, (Pl. 23, fig. 2, *c*, *c*¹, fig. 2b, *c*, *c*¹,) and swells at its base, (fig. 2, *c*, fig. 2b, *c*,) indicating the first step in the development of the olfactory bulb. The Schneiderian membranes (fig. 2, *c*¹, fig. 2a, *c*¹, fig. 2b, *c*¹, fig. 2c, *c*¹) are separated by a cartilaginous partition (fig. 2c, *c*¹). The hemispheres (fig. 2, *a*, fig. 2a, *a*, fig. 2b, *a*) increase in size in a much greater proportion than the other lobes, and gradually rise until they are on the same level with the corpora quadrigemina. The crura cerebri (Pl. 23, fig. 2d, *r*) arise by a thickening of the lower wall of each hemisphere along its whole length, close to the median line of the brain. The aperture (fig. 2b, *m*) next to the median line becomes very much reduced in size. The pineal gland (fig. 2a, *d*, fig. 2b, *d*) is about two thirds covered by the hemispheres, (fig. 2, *a*, fig. 2a, *a*, fig. 2b, *a*,) which overlap it at the sides. This body is not solid throughout, but has a slight excavation on its posterior face, in open communication with the cavity of the corpora quadrigemina (fig. 2, 2a, 2b, *b*). The optic thalami, (fig. 2, *k*, fig. 2b, *k*,) in consequence of the encroachment of the hemispheres, (*a*,) have become totally confined to the lower side of the brain. In the brain of the Turtle, at this age at least, and even in the last phase, (Pl. 23, fig. 1, 1a,) it