

EXPLANATION OF PLATE III.

Fig. 12. Diagrams intended to represent the structure of a ganoid brain as seen in longitudinal mesial section and in transverse sections through several parts. The letters as in Fig. 7.

Fig. 13. Diagrams representing the cross-section of the prothalamus of Myzonts (*M*) and Selachians and of the hemispheres of Batrachians. The prothalamus of the adult Myzont is closed above, as in the embryo Selachian (*ES*). In the adult Selachian, by a deposition of matter the single cavity is filled up, excepting two lateral canals which converge backward to meet opposite the optic foramen, and diverge forward to enter the olfactory crura through the small hemispheres. In Ganoids, as seen in Fig. 11, the prothalamus is open above. Likewise in many, if not all, Teleosts, in which, however, the optic nerves form no chiasma. In Batrachians, as in the Dipnoans, the place of the prothalamus is taken by a pair of true hemispheres, each containing a lateral ventricle.

Fig. 14. Anterior part of prothalamus of a perch (*Perca flavescens*), with the olfactory lobe and nerve, and the small foramen of Monro. (The dotted line makes the ventricle larger than it is really.) Enlarged ten diameters. The existence of the foramen in some Teleosts was ascertained after the paper was read. See page 184.

Fig. 15. Diagrams, slightly altered from Huxley, to indicate the typical structure of the brain in Batrachians, Reptiles, Birds and Mammals. The upper is a horizontal, the lower a vertical section. See page 175.