

is the infundibulum (*inf.*), and is seen to be quite separate from the lobes of the racemose pituitary body (*py.*), the upper part of which becomes the permanent engrafted pouch.

The notochord (*nc.*) is seen running up for some distance into the thin, median part of the post-clinoid (*p.cl.*); there it is somewhat bent forward, and it is covered at its fore end with a sheath of thickening cartilage. This section being near the middle, shows the distance between the investing mass and the "intertrabecular" bar. There is here a membranous space below the pituitary body, not yet floored with cartilage.

Only the lower part of the hind-brain (C 3) is figured, and this is shown running, after it has formed its downward flexure, into the myelon (*my.*). The notochord is seen to become larger as it enters the vertebral column.

Horizontal Sections of the Head.

In this series the head was sliced from above downwards; by this means the fore part was displayed in deeper and deeper regions in a regular manner, but, on account of the mesocephalic flexure, the hind part of the head was cut across from side to side almost at a right angle to its axis.

First Section.—Part of the brain is shown in this section (Pl. VIII. fig. 1). The fore-brain is cut through where the "rhinencephala" (C 1*b*) are budding out, and the mid-brain (C 2) where it is passing into the hind-brain, behind the folded part.

The recesses in which the olfactory lobes lie are the same as those which became cribriform, first in cartilage and then in bone, in the Mammalian skull. The chondrocranium is cut through along its sphenoidal alæ, the orbito-sphenoid passing directly into the alisphenoids (*o.s., al.s.*). Between these walls and the eyeball (*e.*) the upper orbital muscles and nerves are seen.

Second Section.—A little deeper down (Pl. VIII. fig. 2) the olfactory nerves are seen giving off branches to the nasal mucous membrane; the orbito-sphenoidal cartilages (*o.s.*) are converging below, and the alisphenoidal part (*al.s.*) is here thin and wavy. These run into the top of the post-clinoid walls (*p.cl.*) at its sides; this is cut through at its top, and does not show the middle part.

Third Section.—Here (Pl. VIII. fig. 3) the nasal cavity is cut across, and the olfactory nerves are seen to be highly subdivided as they enter the cavity on each side.

The septum nasi, and alæ (*s.n., al.sp.*) are cut through, and the orbito-sphenoids (*o.s.*) are seen to their base, where they arise from the lateral elements of the orbital septum (trabeculæ). The alisphenoids (*al.s.*) are in two parts at this level; they bound the recess into which the infundibulum grows to meet the pituitary body, and in the fore part of which the optic nerves (2) pass out to the orbit, and their upper lobe is seen to articulate with the post-clinoid wall (*p.cl.*) at its outer edges, as the front part of these