

ed ventrally by a deep cleft through which appears on each side the third or oculomotor nerve. The latter takes origin from the grey matter lining the aqueduct and in its passage forwards through the crus cerebri traverses a mass of grey matter situated on each side of the mid line termed the red nucleus. The posterior longitudinal bundle which lies in contact with the grey matter lining the aqueduct can only be studied satisfactorily with the microscope; but it is important to note here that it connects together the nuclei of origin of the third, fourth and sixth cranial nerves, and thus coordinates the innervation of the ocular muscles. The fourth nerve also arises from the grey matter lining the aqueduct; but it pierces the roof of the fourth ventricle. It may be seen, however, at this stage as it proceeds forwards round the outer aspect of the crus cerebri.

The Hind Brain.

The hind brain consists of the pons, medulla and cerebellum. It is situated in the posterior cranial fossa and is roofed in by the tentorium cerebelli.

The cerebellum arises from the superficial stratum of transverse fibres of the pons, and forms the right and left lobes of the cerebellum, and forms the posterior half of the latter. The pons is one inch in extent from the upper border of the medulla. The upper border receives the two crura cerebri which are continuous with the medulla. The ventral surface of the pons is attached to the dorsum sellae of the sphenoid. It presents medially the basilar groove for the basilar artery, the ridge on each side of which is formed by the motor fibres as they run downwards from the crus cerebri to the medulla in the deeper strata of the pons. The dorsal surface of the pons forms the upper half of the floor of the fourth ventricle, and will therefore have to be studied later. On each side the transverse fibres of the pons converge slightly, and become continuous with the middle peduncle of the cerebellum, the point of junction being indicated by the exit of the fifth cranial nerve which emerges here, rather nearer the upper than the lower border of the pons.

The Medulla.

The medulla or bulb is rather conical in shape its upper broad end or base being next to the pons. Its lower end is continuous with the spinal cord at the foramen magnum. It measures one inch in length.

Its anterior aspect rests in the basilar groove on the occipital bone, and presents a mesial longitudinal groove on each side of which is an elongated projection, the pyramid, produced by the pyramidal motor fibres as they run downwards to the spinal cord. Ninety to ninety-five per cent of these fibres decussate at the lower end of the medulla to form the crossed pyramidal tracts of the spinal cord, the remainder being continued downwards as the direct pyramidal tract. This is termed the decussation of the pyramids, which, it may be noted, interrupts the lower end of the