

presents two swellings or enlargements, an upper or cervical, and a lower or lumbar (Fig. 663).

The **cervical enlargement** is the more pronounced, and corresponds with the attachments of the large nerves which supply the upper limbs. It extends from about the third cervical to the second thoracic vertebra, its maximum circumference (about 38 mm.) being on a level with the attachment of the sixth pair of cervical nerves.

The **lumbar enlargement** gives attachment to the nerves which supply the lower limbs. It commences about the level of the ninth thoracic vertebra, and reaches its maximum circumference, of about 33 mm., opposite the last thoracic vertebra, below which it tapers rapidly into the conus medullaris.

Fissures and Sulci (Fig. 664).—An anterior median fissure and a posterior median sulcus incompletely divide the medulla spinalis into two symmetrical parts, which are joined across the middle line by a commissural band of nervous matter.

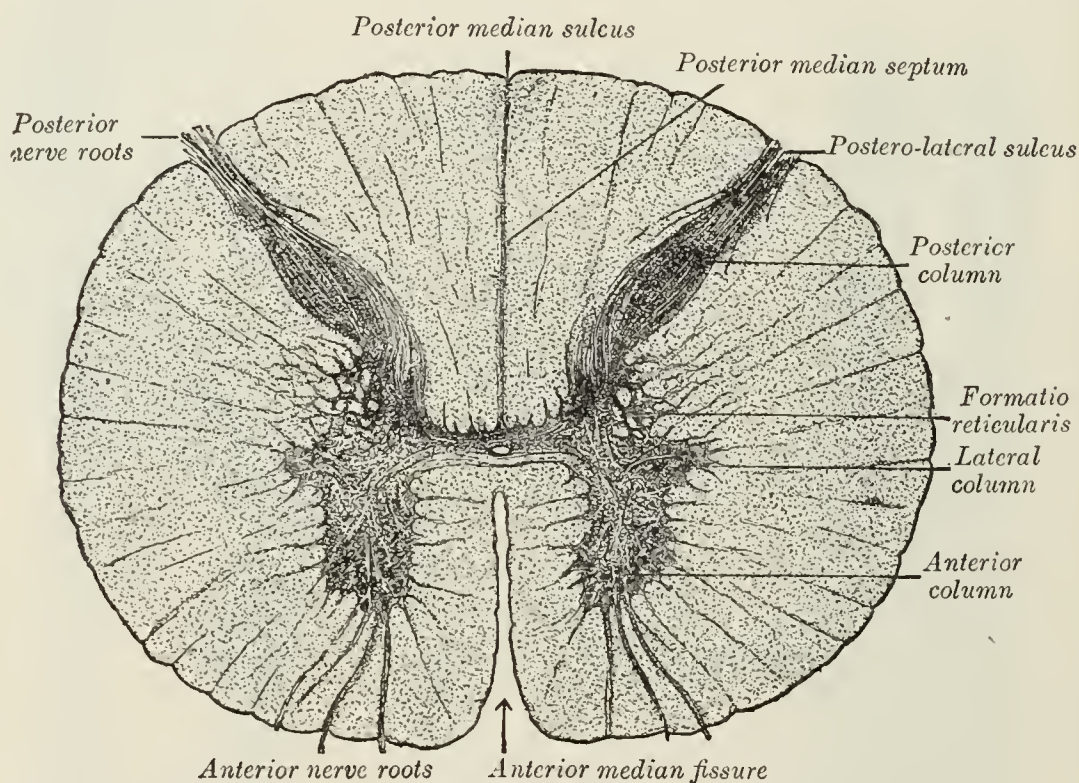


FIG. 664.—Transverse section of the medulla spinalis in the mid-thoracic region.

The **Anterior Median Fissure** (*fissura mediana anterior*) has an average depth of about 3 mm., but this is increased in the lower part of the medulla spinalis. It contains a double fold of pia mater, and its floor is formed by a transverse band of white substance, the **anterior white commissure**, which is perforated by blood-vessels on their way to or from the central part of the medulla spinalis.

The **Posterior Median Sulcus** (*sulcus medianus posterior*) is very shallow; from it a septum of neuroglia reaches rather more than half-way into the substance of the medulla spinalis; this septum varies in depth from 4 to 6 mm., but diminishes considerably in the lower part of the medulla spinalis.

On either side of the posterior median sulcus, and at a short distance from it, the posterior nerve roots are attached along a vertical furrow named the **postero-lateral sulcus**. The portion of the medulla spinalis which lies between this and the posterior median sulcus is named the **posterior funiculus**. In the cervical and upper thoracic regions this funiculus presents a longitudinal furrow, the **postero-intermediate sulcus**; this marks the position of a septum which extends into the posterior funiculus and subdivides it into two fasciculi—a medial, named the **fasciculus gracilis** (*tract of Goll*); and a lateral, the **fasciculus cuneatus** (*tract of Burdach*)