brane, absent probably at the foramen of Majendie and the two foramina of Luschka and perforated in a peculiar manner by all the bloodvessels as they enter or leave the nervous system. In the perivascular spaces, the pia apparently enters as a mesothelial lining of the outer surface of the space; a variable distance from the exterior these cells become unrecognizable and are apparently lacking, replaced by neuroglia elements. The inner walls of these perivascular spaces seem likewise covered for a certain distance by the mesothelial cells, reflected with the vessels from the arachnoid covering of these vascular channels as they traverse the subarachnoid spaces.

The **Cranial Pia Mater** (*pia mater encephali; pia of the brain*) invests the entire surface of the brain, dips between the cerebral gyri and cerebellar laminæ, and is invaginated to form the tela chorioidea of the third ventricle, and the choroid plexuses of the lateral and third ventricles (pages 840 and 841); as it passes over the roof of the fourth ventricle, it forms the tela chorioidea and the choroid plexuses of this ventricle. On the cerebellum the membrane is more delicate; the vessels from its deep surface are shorter, and its relations to the cortex are not so intimate.

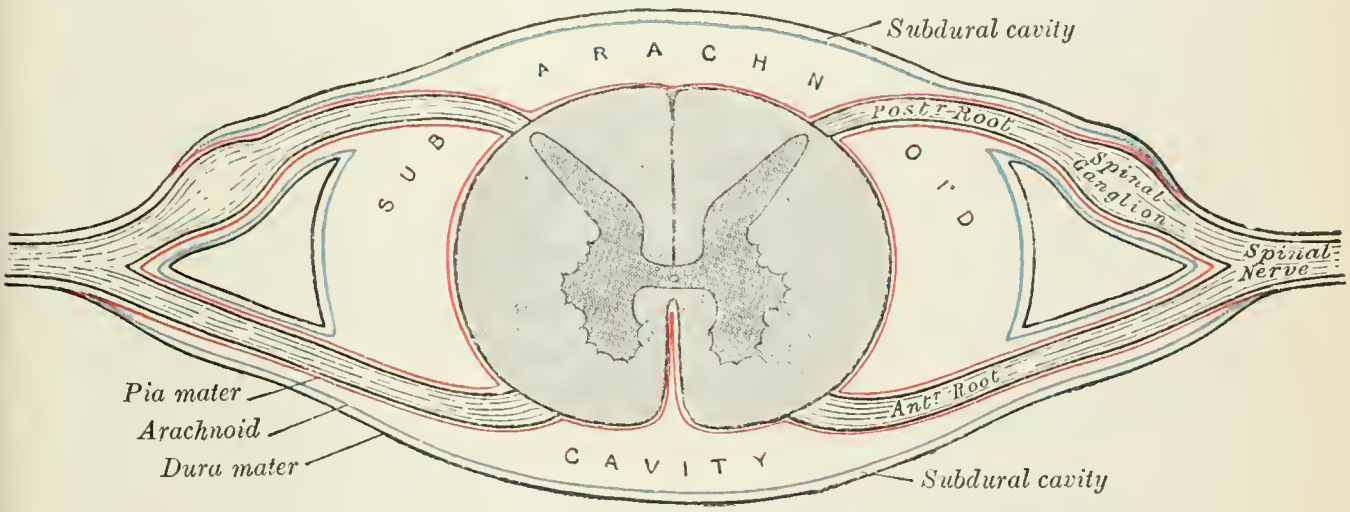

FIG. 770.—Diagrammatic transverse section of the medulla spinalis and its membranes.

The **Spinal Pia Mater** (*pia mater spinalis; pia of the cord*) (Figs. 767, 770) is thicker, firmer, and less vascular than the cranial pia mater: this is due to the fact that it consists of two layers, the outer or additional one being composed of bundles of connective-tissue fibers, arranged for the most part longitudinally. Between the layers are cleft-like spaces which communicate with the subarachnoid cavity, and a number of bloodvessels which are enclosed in perivascular lymphatic sheaths. The spinal pia mater covers the entire surface of the medulla spinalis, and is very intimately adherent to it; in front it sends a process backward into the anterior fissure. A longitudinal fibrous band, called the **linea splendens**, extends along the middle line of the anterior surface; and a somewhat similar band, the **ligamentum denticulatum**, is situated on either side. Below the conus medullaris, the pia mater is continued as a long, slender filament (**filum terminale**), which descends through the center of the mass of nerves forming the cauda equina. It blends with the dura mater at the level of the lower border of the second sacral vertebra, and extends downward as far as the base of the coccyx, where it fuses with the periosteum. It assists in maintaining the medulla spinalis in its position during the movements of the trunk, and is, from this circumstance, called the **central ligament** of the medulla spinalis.

The pia mater forms sheaths for the cranial and spinal nerves; these sheaths are closely connected with the nerves, and blend with their common membranous investments.