

or young nerve cells (Fig. 641). The spongioblasts are at first connected to one another by filaments of the syncytium; in these, fibrils are developed, so that as the neuroglial cells become defined they exhibit their characteristic mature appearance with multiple processes proceeding from each cell. The germinal cells are large,

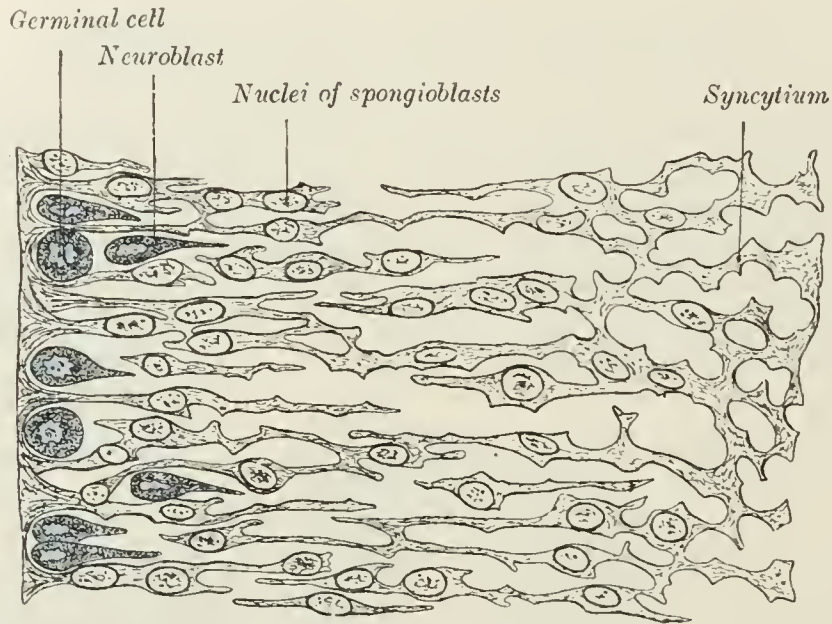
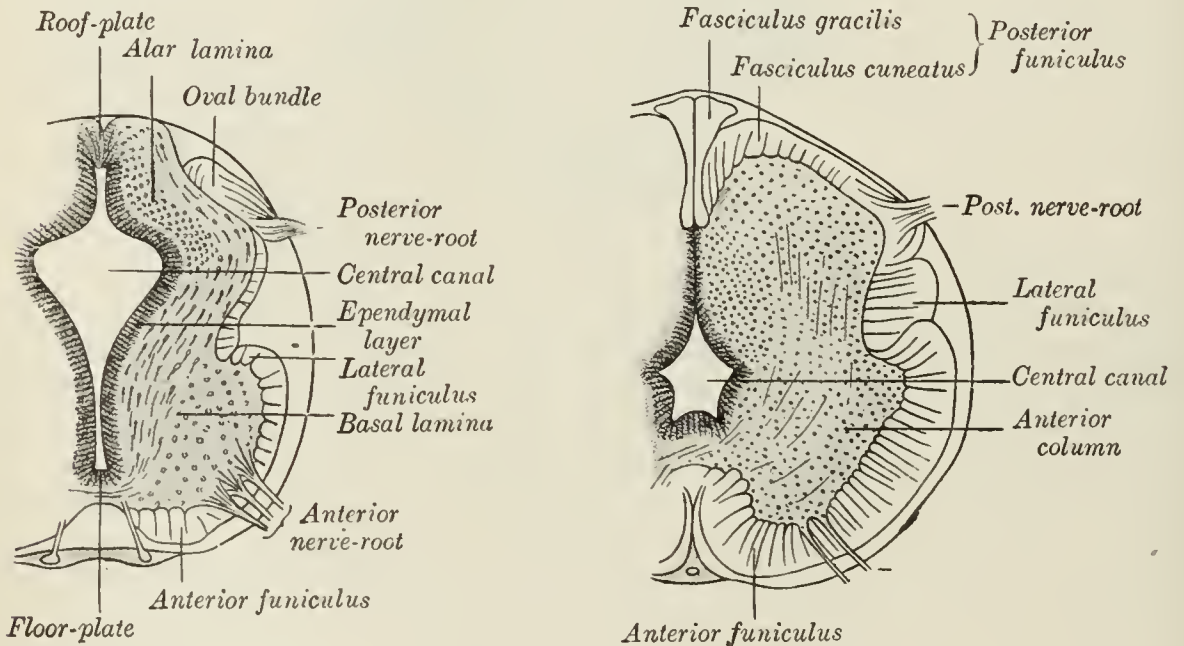


FIG. 641.—Transverse section of the medulla spinalis of a human embryo at the beginning of the fourth week. The left edge of the figure corresponds to the lining of the central canal. (His.)

round or oval, and first make their appearance between the ependymal cells on the sides of the central canal. They increase rapidly in number, so that by the fourth week they form an almost continuous layer on each side of the tube. No germinal cells are found in the roof- or floor-plates; the roof-plate retains, in certain



FIGS. 642, 643.—Transverse sections through the medullæ spinale of human embryos. (His.)  
 Fig. 642, aged about four and a half weeks. Fig. 643, aged about three months.

regions of the brain, its epithelial character; elsewhere, its cells become spongioblasts. By subdivision the germinal cells give rise to the neuroblasts or young nerve cells, which migrate outward from the sides of the central canal into the mantle layer and neural crest, and at the same time become pear-shaped; the