

and firm, closely adhering, membranous envelope, consisting of dense areolar tissue; this sheath is continuous with the perineurium of the nerves, and sends numerous processes into the interior to support the bloodvessels supplying the substance of the ganglion.

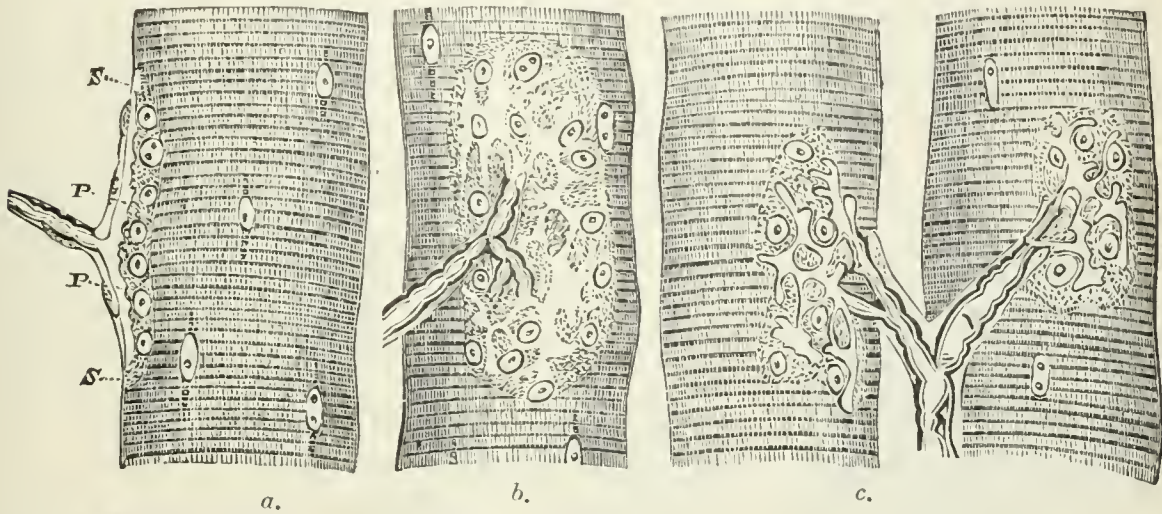


FIG. 637.—Muscular fibers of *Lacerta viridis* with the terminations of nerves. *a.* Seen in profile. *P, P.* The nerve end-plates. *S, S.* The base of the plate, consisting of a granular mass with nuclei. *b.* The same as seen in looking at a perfectly fresh fiber, the nervous ends being probably still excitable. (The forms of the variously divided plate can hardly be represented in a woodcut by sufficiently delicate and pale contours to reproduce correctly what is seen in nature.) *c.* The same as seen two hours after death from poisoning by curare.

In structure all ganglia are essentially similar, consisting of the same structural elements—viz., nerve cells and nerve fibers. Each nerve cell has a nucleated sheath which is continuous with the neurolemma of the nerve fiber with which the cell is connected. The nerve cells in the ganglia of the spinal nerves (Fig. 638) are pyriform in shape, and have each a single process. A short distance from the cell and while still within the ganglion this process divides in a T-shaped manner, one limb of the cross-bar turning into the medulla spinalis, the other limb passing out-

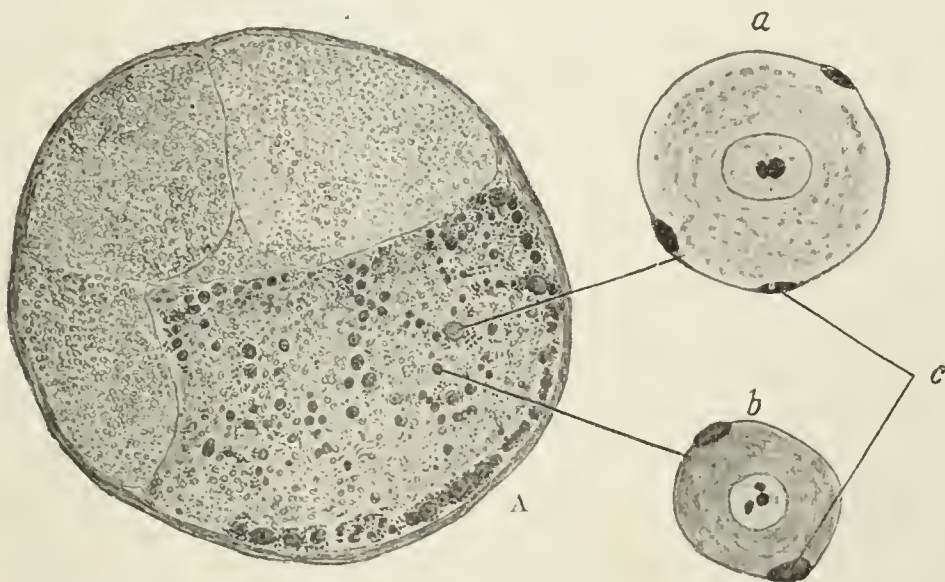


FIG. 638.—Transverse section of spinal ganglion of rabbit. *A.* Ganglion.  $\times 30$ . *a.* Large clear nerve cell. *b.* Small deeply staining nerve cell. *c.* Nuclei of capsule.  $\times 250$ . The lines in the center point to the corresponding cells in the ganglion.

ward to the periphery. In the sympathetic ganglia (Fig. 639) the nerve cells are multipolar and each has one axis-cylinder process and several dendrons; the axon emerges from the ganglion as a non-medullated nerve fiber. Similar cells are found in the ganglia connected with the trigeminal nerve, and these ganglia are therefore