Periscope.

ANATOMY AND PHYSIOLOGY.


Working upon the brain of the fetal cat, the author succeeded in demonstrating fine nerve fibers coursing with the vessels of the pia mater, twisting about them, and terminating upon them in plexiform manner.

In his paper he considers the subject under the following heads:

1. "The character of the structures from which the nerves in question rise." 2. "The size of the vessels in association with which the nerves have been found." 3. "The character of the nerve fibers." 4. "The mode of termination of the nerves in the vessels, and in the pia mater." 5. "The presence of ganglion cells in the stems of the innervating trunks, and the character of these cells."

Of the first, he has not been able to get a very good idea.

2. The size of the vessels in association with the nerves was from 10 to 20 micra. The nerves themselves bore direct relation to the size of the vessels, the larger being about 2 micra in diameter, the individual branches measuring about 0.5 micron.

3. The nerve fibers are interrupted at intervals by nuclear bodies. The nerves have sheaths showing connective tissue corpuscles in the larger branches, and hyaline in the smaller ones.

4. The nerves terminate, both in the pia mater, and on the vessels, in a plexus, whose ultimate ramifications end in points so fine that their exact nature cannot be made out.

5. The ganglion cells occurring on the nerve trunks are unipolar and from 1 to 2.5 micra in diameter. They have a well marked nucleus and nucleolus.

His specimens were prepared by Sihler's hematoxylin method. The article is illustrated.

Allen.


Fraenkel reports a case of psammoma of the spinal cord, extending from the tenth thoracic to the first lumbar segment. The tumor seemed to arise from the posterior part of the cord. The twelfth segment was entirely destroyed and the first lumbar was not intact. The patellar reflex could not be obtained, but a tap on the patellar tendon caused reflex movement of the adductors.

About one hundred cases of complete, and about ten of partial, supralumbar lesion of the spinal cord have been reported, in which flaccid paraplegia existed, although the pyramidal tracts were degenerated and the lumbar cord and peripheral motor nerves were not diseased. Fraenkel believes, therefore, that the patellar reflex is lost in every case of complete supralumbar lesion, but he does not believe that