

From the same illustration the anatomical basis of reflex action can be readily understood. It is only necessary to have one sensory neurone arborising, as represented in this figure, around a single motor neurone to complete the circuit, for the sensory axone begins in the periphery, as for example, the skin, while the motor ends in a muscle. Nothing can be simpler, and if, as some believe, a third subordinate neurone, is interposed between the arborisation of the afferent axone and the dendrites of the motor neurone, there is still no great complexity in the concept.

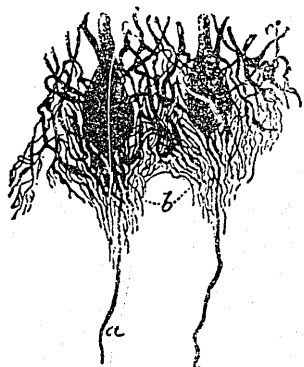


FIG. 6. Arborizations forming a basket or basket-work about two Purkinje cells of the cerebellar cortex. (From Schäfer after Ramón y Cajal). a, axone; b, basket-work.

On the left we have represented a normal nerve fibre; in the middle, one in which the medullary sheath has been converted into fat which has run together in masses; and in the third a portion of this fat has been absorbed. At a later stage, though not represented here, the axis cylinder and even the outermost sheath would also disappear.

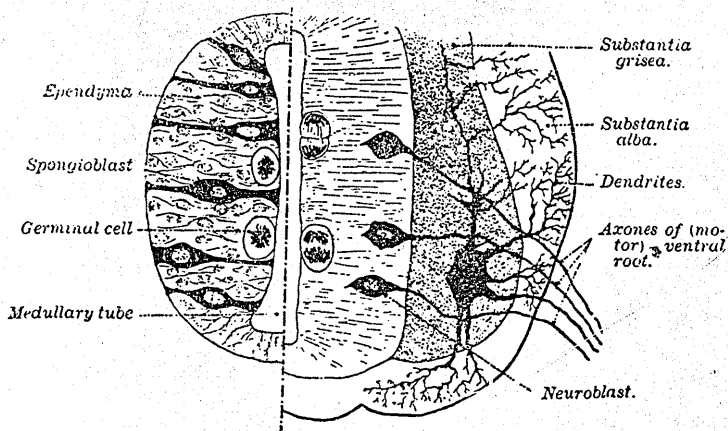


FIG. 7. A transverse section of the spinal cord of the chick. Right side, from a five day chick; left side from a two day chick (after J. Kollmann).

In figure 10 we get an illustration of the results of the use of the Marchi method; a series of transverse sections from successive segments of the spinal cord, from the 7th thoracic to the 5th sacral, being represented. It will be noticed that certain regions of the sections are marked off