

Nerve Fibers.—These fill up a large part of the intervals between the cells, and may be medullated or non-medullated—the latter comprising the axons of the smallest pyramidal cells and the cells of Golgi. In their direction the fibers may be either tangential or radial. The *tangential fibers* run parallel to the surface of the hemisphere, intersecting the radial fibers at a right angle. They constitute several strata, of which the following are the more important: (1) a stratum of white fibers covering the superficial aspect of the molecular layer (*plexus of Exner*); (2) the band of Bechterew, in the outer part of the layer of small pyramidal cells; (3) the band of Gennari

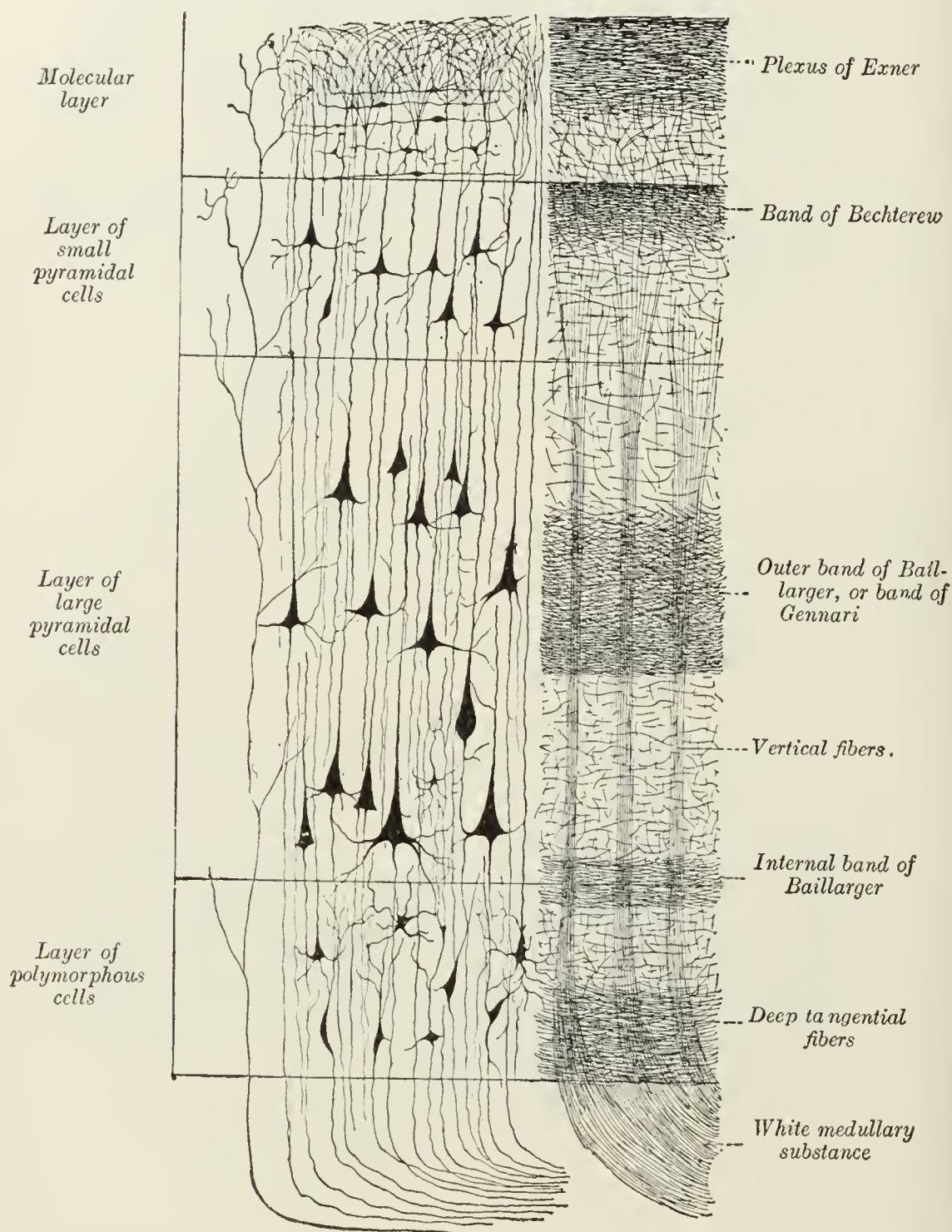


FIG. 754.—Cerebral cortex. (Poirier.) To the left, the groups of cells; to the right, the systems of fibers. Quite to the left of the figure a sensory nerve fiber is shown.

or external band of Baillarger, running through the layer of large pyramidal cells; (4) the internal band of Baillarger, between the layer of large pyramidal cells and the polymorphous layer; (5) the deep tangential fibers, in the lower part of the polymorphous layer. The tangential fibers consist of (a) the collaterals of the pyramidal and polymorphous cells and of the cells of Martinotti; (b) the branching axons of Golgi's cells; (c) the collaterals and terminal arborizations of the projection, commissural, or association fibers. *The radial fibers.*—Some of these, viz., the axons of the pyramidal and polymorphous cells, descend into the central white matter, while others,