

Periscope.

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ANATOMY AND PHYSIOLOGY.

168. NOTE ON "THORNS" AND A THEORY OF THE CONSTITUTION OF GREY MATTER. A. Hill (Brain, 20, 1897, p. 131).

"Granules," or if one prefers Cajal's term, "thorns," have been supposed to be dots of naked protoplasm, by means of which the dendrites establish connections with the terminal end brushes of nerve fibres. The author here presents a brief note, in which he states that they are universally present but exist in a variety of forms, four of which he details. He believes them to be structures imperfectly revealed by any of our known methods. The great variation in form leads him to the belief that a "thorn" is really the cell end of an unstainable nerve filament surrounded by a film of staining cell plasma." The author's brief notes with reference to the nervous mechanism are of interest in view of Apáthy's recent observations respecting the continuity of fibrils and their arrangement. JELLIFFE.

169. ACTION DE LA LUMIÈRE COLORÉE SUR LA RETINE. (Action of Colored Lights on the Retina). E. Pergens (Annales de la Soc. Royale des Science Médicales et Nat. de Bruxelles, 1897, 6, p. 1).

The results of the author's studies on the action of monochromatic lights on the movements of pigment and the morphologic-histo-chemical changes in the nervous cells of the retina were substantially as follows:—

The migration of pigment is at its maximum for the blue, at a minimum for red. Thus it is not the intensity of the light which causes this migration, as physics show, that red light is more intense than blue.

When a single eye is illuminated the pigment in the retina of the closed eye also migrates, varying with the character of the light. The contraction of the cones following the action of the various spectral portions of light varies. The quantity of the nuclei contained in the rods and cones diminishes under the action of the rays of the spectrum but not in a degree corresponding with the luminosity. This decrease is at its maximum for the red, and at a minimum for the green.

Basophil structures in the cells were more acted upon than acidophil or neutrophil portions. The action of the X rays was negative.

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