

The Nervous System and its Constituent Neurons.—

Designed for the use of practitioners of Medicine and of students of Medicine and Psychology. By Lewellys F. Barker, M.B., Tor., Associate Professor of Anatomy in the Johns Hopkins University and Assistant Resident Pathologist to the Johns Hopkins Hospital. With two colored plates and six hundred and seventy-six illustrations in the text. New York, D. Appleton & Co., 1899.

This is undoubtedly one of the most valuable contributions to neurology which has appeared during the century, containing as it does all the recent advances, sifted and comprehensively arranged, in one neat volume, covering some eleven hundred pages. Readers of the New York Medical Journal will be familiar with some of the contents of this work, notably the introductory chapters. These articles appeared at intervals during two years from 1897. The bulk of the book, however, is new material. "In the first part of the volume the newer conceptions of the histology of the central and peripheral nervous organs are reviewed. In the succeeding chapters the attempt has been made to apply the neuron conception—that is the cell doctrine—as consistently as possible in the explanation and description of the complex architectonics of the nervous system."

The subject matter is included in six sections. The first five cover some three hundred pages, and include the history of the development of the neuron conception, giving the work of His, Golgi Farel, Ramon J. Cajal and others; the vital staining of nerve elements, etc.

The external and internal forms of neurons and their histogenetic relation and the neurons as the unit in physiological and pathological processes are discussed in the second to fourth sections. The bulk of the book, some 800 pages, is devoted to a consideration of the grouping and chaining together of neurons in a complex nervous system like that of man and mammals. In this section there are five subsections: first, neurons connecting the sense organs of the body with the central nervous system; the neurons within the central nervous system connecting the end station of the axones of the peripheral centripetal neurons with other portions of the central nervous system and neurons which in turn connect the end station of the latter with still higher portions of the central system; neurons connecting the central nervous system with the voluntary muscles of the body; neurons within the central nervous system which enter into conductive relation with the lower motor neurons and throw the latter under the influence of other centres, Projection commissural and association neurons of the telencephalon. One can gain an idea of the scope of the work from the above headings.

In these chapters an immense amount of work by numerous investigators is represented which the author has introduced with his own, and arranged and classified it so that an intelligent conception can be gained of the complicated distribution of the nerve fibres throughout the body. To better understand the descriptions,