

are overlooked. The names of such investigators as Apathy, Bechterew, Beevor, Berkeley, Bolk, Dieters, Dejerine, Dogiel, Edinger, Ferrier, Flechsig, Forel, Gehuchten, Golgi, Gowers, Gudden, Held, Heule, Hewetson, His, Horsley, Kolliker, Lenhossék, Lugaro, Marchi, Monakow, Ramon y Cajal, Retzius, Nisse, Waldeyer, Weigert, and such like noted investigators, receive a large share of the author's attention and study. It may be said of the work, what can be said of very few works, that the best has been garnered from all fields.

That the neuron theory has not yet been accepted by all is true, but that it must be accepted by all is equally true. The present work of Dr. Barker's will do much to place this difficult subject in its true light, and establish the correct views and remove the incorrect conceptions that have grown up around this recent view of the construction of the nervous system. The author has a brief in his hand, and he holds it throughout with great vigor.

The nervous system consists of an enormous number of neurons. These are the essential elements. The lymphatics, blood vessels and neuroglia all play an important but an entirely secondary part. It is the neurons alone that conduct nervous energy. This view has done away with the older one of a diffuse nervous network.

The evidence in favor of the neuron theory, derived from the study of degenerations and by differential staining, is well stated, and affords unanswerable proof of its soundness. From these researches we come to regard each unit, or neuron, as being an independent part of the nervous system; and that disease or injury of one portion of the neuron causes disease and degeneration in its other portions. Throughout the work the idea is steadily and clearly held up before the reader of the cerebro-spinal and spino-neural sets of neurons. The upper motor neuron has its origin in the brain cortex, and thence by means of its axons passes down to the anterior coruna of the cord, where it ends without actual junction with the cells of the coruna. The lower motor neurons are the cells of these coruna, and their axons continuing to their ending in a muscle fibre, or gland, or vessel. On the other hand, the sensory neurons come from the periphery as general or special sensation, and pass centrally to the ganglia in connection with the cord, medulla, or brain; and from these a new set of neurons proceed to the ultimate centre. The nerve currents, sensory or motor, pass from one neuron to another as a chain, and not laterally. Then come the neurons that in the centres associate the lower neurons into a composite system, and establish endless associations and reflexes.

An unusually able section of the work deals with the neuron