

literature. He and one or two others may be regarded as the pioneers of American neurology. His contributions to the therapeutics of nervous diseases are especially valuable. His work entitled "Opera Minora" contains a number of papers of great scientific and practical value. His pathological investigations into the nervous system were among the most important in the history of American neurology in the first ten years of the existence of this association.

J. J. PUTNAM.

L. C. GRAY,

C. K. MILLS.

THE FORMATION AND EXCRETION OF THE METAPLASM GRANULES OF THE NEURON.*

BY IRA VAN GIESON, M.D.

Dr. Van Gieson described the constituents of the ganglion cells and referred to the reticulum, which transmits the impulses and subserves the phenomena of retraction and extension of the neuron. The speaker said that when the food supply of the ganglion cell is diminished—as it is in alcoholism, in over-fatigue, etc.—we get an indication of it in an excretion of particles which escape from the cell, pass out of the lymph space and cluster about the blood vessels. These metaplastic elements are the results of over-fatigue—of a diminished food supply to the nerve cells. Dr. Van Gieson said that the chemic processes which accompanied this destructive metaplasia of ganglion cells must still be worked out. He had come to realize the fact that these nerve changes were not altogether of toxic origin, but that we must also take into consideration the quantitative and qualitative food supply of the cells.

Dr. Van Gieson thought that in amaurotic family idiocy there was an indication of a diminished food supply to the nerve cells. He agreed with Dr. Sachs that it was bad to make a distinction between arrested development and pathological processes. If we find a degenerative process in an adult, we call it by its proper name; in a child, we call it arrested development. One is the result of the other; degeneration is the result of arrested development. He suggested the name of chronic parenchymatous degeneration in infancy.

*Read at the twenty-fourth annual meeting of the American Neurological Association, May, 1898.

DISCUSSION.

Dr. Dercum inquired whether the process described by Dr. Van Gieson—the excretion by the nerve cell of these metaplastm granules—was not in a measure a normal process?

Dr. Sachs asked Dr. Van Gieson whether he thought it conceivable that the metaplastic changes he had described were due to a condition of starvation. If so, the question might arise whether the cell changes described in amaurotic family idiocy were primary or secondary, for children afflicted with that disease die in a state of marasmus.

Dr. J. J. Putnam thought that the explanation given by Dr. Van Gieson of the metaplastic changes in the nerve cells, as a result of interference with their nutrition, indicated that a much greater interdependence exists between the nerve tissues and other parts of the body than we now fully recognize. That such a thing is possible, and even probable, is evidenced by what we know of other conditions; for example, the influence exerted by the thyroid on the general nutrition of the body.

A CASE OF ERYTHROMELALGIA WITH MICROSCOPICAL
EXAMINATION OF TISSUE FROM AN AMPUTATED
TOE.*

By S. WEIR MITCHELL, M.D., LL.D., AND WM. G. SPILLER, M.D.

Drs. Mitchell and Spiller reported a case of erythromelalgia in which the signs of the disease were almost confined to one of the great toes. Amputation of the toe had been resorted to, although considerable doubt was felt as to the benefit to be derived from the operation. The nerves of the toe were intensely degenerated, and the vessels presented a high degree of arteriosclerosis. The amputated bones were larger than the corresponding ones in a normal adult male. The case reported by Auerbach and the one by Mitchell and Spiller are the only cases on record in which important pathological changes have been found, since the disease was first described in 1872. Drs. Mitchell and Spiller believed that involvement of the sensory fibres anywhere between the spinal cord—or possibly within the spinal cord—and the peripheral ramifications is capable, under certain circumstances, of causing erythromelalgia; though hysteria may present similar symptoms.

*Read at the twenty-four annual meeting of the American Neurological Association, May, 1898.