

varied in situation and severity, and also with a continuation of the ocular symptoms. Her sleep was disturbed and unrefreshing, and her appetite capricious; but upon the whole, fair. To a moderate degree the menses were painful, though regular in their appearance. The action of the heart was excitable and irregular, and the vaso-motor reflex exceedingly sensitive. She was recommended to take rest, both mental and physical, to undergo a careful system of passive exercise, to use general faradization, to have highly nonrishing and simple diet, to keep the bowels regular, and to use light sedatives and tonics, and when they appeared necessary, stimulants.

At the end of a year or eighteen months, she had gained some twenty-five pounds in weight, but with scarcely any perceptible increase in strength, or diminution in the excitability of the vascular system. The slightest exertion of the mind or body, or occurrence of emotional excitement, would cause irregular action of the vascular system, and throw her into a state of trepidation, highly uncomfortable. She ate well, appeared to digest well, and as has been already stated, gained considerably in weight, but she had not gained in strength. I was fully aware of her hysterical condition, and of the possibility of my being deceived as to her real condition. I knew very well that there is a difference, often very hard to detect, between real exhaustion, and that which is merely apparent, as is so often seen in cases of hysteria. I hence took every pains to satisfy myself in regard to this point; her lack of nerve power was real, but, under the circumstances, how could it be accounted for? She ate well, digested well, gained in flesh, then why not in strength? After a careful study of her case, I came to the conclusion, it was one of those cases, such as I have often met with, in which there is a defect in the process of assimilation itself, a sort of paresis had fallen upon the intimate process of nutrition, as it is accomplished between the tissues and blood. Food was taken and digested, and as a result the blood was rich in nutritive materials, which were appropriated by the lower tissues, but to a very imperfect degree by the higher tissues, such as the nervous, and this is what I can call by no better name than *assimilative neurasthenia*.

mentioned, neurasthenia often plays a conspicuous part. If these observations are well founded, it is of the highest importance that you understand clearly as possible the nature of this disorder and its appropriate management.

In the present course of instruction, however, all I can do is to give you a brief account of its phenomena and underlying conditions, its relations, and treatment, and leave you to apply the doctrines I have placed before you, in your own observations when you meet with the disease. In my next lecture, I will give some account of the hygienic and medicinal treatment of neurasthenia.

## ART. II.—MICROSCOPIC STUDIES ON THE CENTRAL NERVOUS SYSTEM OF REPTILES AND BATRACHIANS.

BY JOHN J. MASON, M. D.

### ARTICLE I.—THE SPINAL CORD OF THE FROG—*RANA PIPIENS*, *RANA HALECINA*.

IT is not intended in these articles to give, in detail, an anatomical description of the nervous system of this class of animals. So far as the anourous group of batrachians is concerned, one could hardly effect such a purpose better than by translating the works of either Reissner \* or Stieda,† which together with those of Wyman‡ and Ecker§ are in the hands of most comparative anatomists. Only in writing of species, the nervous system of which may not previously have been

\**Der Bau des Centralen Nervensystems der Ungeschwänzten Batrachier.* Dorpat, 1864.

†*Studien ueber das Central Nervensystem der Wirbelthiere.* Leipzig, 1870.

‡*Anatomy of the Nervous System of Rana pipiens.* Washington, 1853.

§*Icones Physiologicae*, 1851–59. Liepzig. "Die Anatomie des Frosches des physiologischen Thieres, ist für den Physiologen, kaum minder wichtig, als die Anatomie des Menschen."