CURRENT LITERATURE

I. VISCERAL NEUROLOGY.

1. VEGETATIVE NERVOUS SYSTEM.

Spiller, William G. THE OCULOPUPILLARY FIBERS OF THE SYMPATHETIC SYSTEM; DIVISION OF THE FIRST THORACIC ROOT IN MAN. [American Journal of the Medical Sciences, March, 1920.]

Some knowledge has been obtained regarding the position of the oculopupillary fibers of the sympathetic system in the cervical cord, medulla oblongata and pons, but scarcely anything is known of these fibers in their relation to higher parts of the brain. A case of hemiplegia was observed by the author in which the Claude Bernard-Horner syndrome was present on the side of the hemiplegia. Experimental work of importance on the animal brain has been done by Karplus and Kreidl to determine the intracerebral position of the oculopupillary fibers which seems to have established a center for the oculopupillary function in the cerebral peduncle, but the position of the fibers above this region in the cerebrum is uncertain. Spiller has come to the conclusion that in man the oculopupillary fibers do not decussate, or at least in very slight degree, in the pons or below the pons in the medulla oblongata or cervical cord. In two cases of tubercle of one-half of the pons the oculopupillary symptoms were on the side of the lesion, and he has repeatedly seen oculopupillary paralysis of the sympathetic on the side of the lesion resulting from occlusion of the posterior inferior cerebellar artery. This occlusion produces softening in the lateral part of the medulla oblongata. He describes a case of tumor of the cord in which it was necessary to divide the first thoracic root to remove the tumor, and oculopupillary paralysis occurred. The case gave the opportunity to determine the innervation of the first thoracic root in the upper limb. So far as he is able to determine this is the first case in which the symptoms resulting from division of the first thoracic root alone in man is recorded.

Kotzareff, A. PARTIAL RESECTION OF THE CERVICAL SYMPATHETIC TRUNK FOR UNILATERAL HYPERHIDROSIS. [Schweizer Archiv f. Neurol. u. Psychiat., 1920, Vol. 6, No. 1, p. 171.]

An operation on the sympathetic for hyperhidrosis is here described. The patient was a woman, 46 years of age, who for three years had suffered from excessive sweating on the right side of the face and neck and on the right shoulder, breast, and arm. The spells occurred spon-

taneously or as result of nervous irritation. Sometimes they persisted for an entire day and the patient was obliged to change her clothes six or eight times during the day. The disturbance had proved refractory to treatment. An interesting fact observed by the patient was that when she perspired there was as great dilatation of the right pupil as when her physician used atropine. During these seizures she was obliged to desist from work. When the patient came to the observation of the author the only abnormal feature found was a small protrusion at the right sterno-cleido-mastoid region in the middle of the anterior boundary of the muscle. There was no muscular atrophy of the superior members, nor other symptoms characteristic of an organic disease of the central or peripheral nervous systems. An operation was performed under local anesthesia. An incision was made parallel to the anterior border of the sterno-cleido-mastoid muscle, and when the place was reached where normally the paraganglion of Luschka is situated it was found that this element was absent. From 1 to 2 cm. of the trunk of the sympathetic was resected and the wound was closed. In eight days after the operation the patient had perspired only for fifteen minutes. When pilocarpin was administered she perspired moderately over the entire body; atropin did not produce dilatation of the pupils. The patient left the hospital with a lesion of the right cervical sympathetic presenting the syndrome of Claude-Bernard-Horner which is met with in inferior radicular paralysis of the brachialplexus and in certain lesions of the cerebral hemispheres. She was entirely cured of the hyperhidrosis, but retained a partial paralysis of the cervical sympathetic with contraction of pupils, drooping of the upper eyelid and narrowing of the palpebral slit. Four similar operations have been described since the first surgical experiment on the great cervical sympathetic by Alexander in 1889, and the author in 1917 made a partial resection of the superior sympathetic ganglia in an infant aged 7 months for multiple and voluminous angiomas with compression and irritation of the two superior cervical ganglia. [J.]

Asher, L. CENTRAL PROPERTIES IN PERIPHERAL NERVES. [Schweizer Archiv f. Neurol. u. Psychiat., 1920, Vol. 6, No. 1, p. 168.]

Summation is one of those qualities which are regarded as characteristic of the central nervous system, distinguishing the latter from the peripheral nerves. Making use of a new method the author of this paper instituted experiments to determine whether peripheral nerves do not also manifest phenomena which are of essentially the same nature as the summation in the central nervous system. By researches made in association with Dr. Tischhauser, he was able to prove the existence of the so-called simultaneous summation in peripheral nerves. For demonstration two separate points of a peripheral nerve were brought under the influence of excitants which were below the threshold of stimulation if separately applied. In the muscles belonging to the nerve, contractions set in showing that excitations of the nerve had taken