

the eisodic and exodic nerves are contained in the same neurilemma), to the muscles, to be variously excited to contraction. How near is this to a circulation of nervous force !

You may destroy this arc by dividing it in any part of its course. I strip off this portion of skin of the foot and irritate the toe ; all reflex action is extinct. I now divide the femoral or lumbar nerve. There is again the absence of all reflex action. Lastly, I destroy the spinal centre ; the same result !

This is demonstration : and it is the demonstration of a totally new kind of anatomy. Such a diastaltic nervous arc had not been imagined even. Nevertheless, every act of ingestion and of egestion in the animal economy is a diastaltic spinal act, through such a nervous arc or such nervous arcs as this !

The spinal system is not only the nervous agent in the acts of ingestion and of egestion, but it presides over all the sphincters, and therefore over retention and exclusion : in this manner the iris and the eye-lid ; the larynx, the pharynx, and the cardia : the sphincters ani and vesicæ and vesiculæ seminalis, and of the Fallopian tubes and uterus, are under the constant influence of this system.

It is precisely on the muscular system thus subjected to the spinal, that the phenomena of convulsive diseases manifest themselves ; and thus the neck, the larynx, the respiratory muscles, the expulsors, &c., are each and all singled out and made the seat and agents of this class of diseases ; and hence laryngismus, dyspnœa, dysepnoœa, globus, emissiones seminis, urinæ, stercoris ; &c. &c.

I must here be allowed to state in the most pointed manner, that the principle of the diastaltic spinal system, or that of all the acts of ingestion and of expulsion in the animal economy is, of course, that of parturition or the expulsion of the fœtus ; and as a consequence or corollary, of the whole art of Obstetrics. This I pointed out on several occasions many years ago. More recently, Dr. Tyler Smith has, at my request, and under my direction, but with great originality and ability, pursued this subject. I cannot too strongly recommend his work to you. I am sorry that the dedication is not in the terms originally agreed upon between us.

The expulsion of the fœtus, the arrestation of uterine hæmorrhage, are both promoted by the usual excitants of reflex action.

From obstetrics, in which physiology and medicine meet—for parturition is, of course, a physiological act—I pass on to convulsive diseases, in which the phenomena are all pathological. Every convulsive phenomenon is the result of an excitation, direct or reflex, on the same diastaltic or spinal system !

These are vast generalizations. To single out one convulsive affection,