sickness. He developed violent tetanic paroxysms from which he died in a few hours. His body was covered with marks due to the hypodermic injections of morphia.

Similar cases are reported in the *British Medical Journal* for November, 1879, and for July, 1892, and in the *Lancet* for 1867, Vol. II., p. 26.

MEIROWITZ.

The Doctrine of the Neurons and the Discharge Theory. By Prof. Bechterew. (*Neurol. Centralbl.*, 1896. Nos. 2 and 3). The

transmission of the nerve impulses from one nerve element to the other, has been explained by Golgi, in assuming the existence of anastomoses between the ramifications of various neurons. In opposition to this anastomosis theory, Forel, His, Ramon y Cajal and others put up the contact theory, explaining this transmission by contiguity of the end ramifications of one element with those of the other. The newest theory is the discharge-theory of Bechterew:

“The end ramifications of the one nerve element do not come in direct contact with those of the other, but come only near each other at varying distance. The transmission of the nerve impulse from one element to the other, takes place by a difference in the tension of the energy between these two elements, which causes a discharge from one neuron to the other. This discharge may be compared to that taking place in a series of Leyden jars, which are discharged one after the other, and one into the other. The greater or lesser proximity of the nerve endings of one neuron to the processes or the body of the other, will evidently cause a greater or lesser resistance to the transmission of the nerve stimulation from the one neuron to the other. The resistance to the conduction will further depend upon the number of the nerve elements required to compose the corresponding conducting paths.”

The nerve elements are everywhere equal in their essential properties. We must ask, therefore, by what we should explain the qualitative difference of the sensations to be received by us (tactile, temperature, pain sensations, and those of taste, smell, hearing and seeing). B. comes to the conclusion that this qualitative difference of our sensations is not to be explained by the unessential varieties in the structure of our centres, but that it is in direct relation with the difference in the character of the nerve-stimulations at the periphery (skin, retina, labyrinth, etc.), and with the so caused peculiarities of the nerve-current.

The arguments which the author produces in support of his theory, must be read in the original.

ONUF.