In Fig. 2 is shown the result of exciting the central end of the dorsal vagus with the faradic current. The respirations, which were recorded in the usual manner, become deeper during the stimulation, and some imperfect attempts at vomiting occur, but complete vomiting does not take place until after the excitation. Powerful vomiting sometimes, however, appears during the actual course of the stimulation. The respiratory excursions are considerably more extensive after, than before, the period of vomiting.

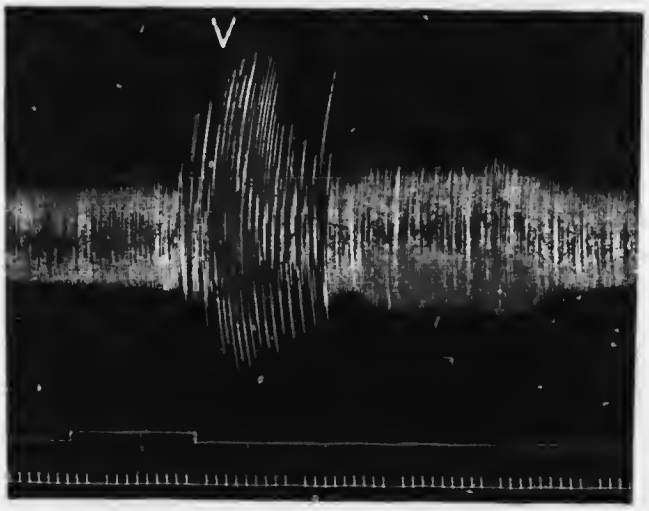

Fig. 2. Effect of stimulating dorsal vagus. Vomiting occurs at V. Distance of secondary 10 cm. Time in seconds.

Frequently the nerves must be subjected to several excitations before vomiting is elicited, and in these cases a deepening of the respirations is often the only visible evidence of the stimulation. This is seen in Fig. 3, from a later part of the same experiment shown in Fig. 2, after the irritability of the nerves has become somewhat reduced. In other cases a few vomiting movements take place as a result of the first stimulation, whilst a succeeding brief excitation suffices to provoke powerful vomiting.

It was next necessary to ascertain by which vagus trunk in the neck the impulses travel respectively from the dorsal and ventral vagal branches at the lower end of the œsophagus.