9 (152)

Reflex inhibition of the cardia in rabbits by stimulation of the central end of the vagus.

By **S. J. MELTZER** and **JOHN AUER.**

[*From the Rockefeller Institute for Medical Research.*]

At the last meeting of this Society[1] we reported that by stimulation of the central end of the vagus a tetanic contraction of the entire esophagus can be produced in dogs and cats but not in rabbits. We wish to report now that in continuation of these studies we found that *stimulation of the central end of the vagus causes a distinct inhibition of the cardia in rabbits.* The cardia of the rabbit is normally contracted in a moderate degree. Furthermore at each deglutition the peristaltic movements of the esophagus terminate in a characteristic contraction of the cardia — it sinks into the stomach. Finally after a stimulation of the peripheral end of the vagus the cardia contracts in the same characteristic way. We found that these three states of contraction can be definitely inhibited by a stimulation of the central end of the vagus. In the first place the cardia relaxes — bulges up during such stimulation. In the second place if deglutition occurs the cardia never contracts so long as the central end of the vagus is being stimulated. Finally the interruption of the stimulation of the peripheral end of the vagus does not bring on a contraction of the cardia if during this time a stimulation of the central end is going on.

10 (153)

Continuous anesthesia by subcutaneous injection of magnesium sulphate in nephrectomized animals.

By **D. R. LUCAS** and **S. J. MELTZER.**

[*From the Rockefeller Institute for Medical Research.*]

In the paper dealing with the anesthesia produced in animals by subcutaneous injection of magnesium salts Meltzer and Auer stated that animals which urinated frequently had the better chance for recovery, and that urination probably carries off some of the

[1] *Proceedings of this Society*, 1905–'06, iii, p. 74.