2. That injury to spermatozoa capable of fertilizing ova may cause the development of monsters from the ova thus fertilized.

47 (139). "**A vago-esophageal reflex**": **S. J. MELTZER** and **JOHN AUER.**

The general knowledge of the contractions of the esophagus is confined to the peristaltic movements, that is, the consecutive contractions of the successive parts of the esophagus following a normal deglutition, or, as it was described by Meltzer at a previous meeting of this society, after an injection of liquid or insufflation of air directly into the esophagus. A simultaneous contraction of the entire esophagus can be produced only by stimulating the peripheral end of the vagus when cut in the neck.

The authors discovered that in dogs a tetanic contraction of the entire esophagus can be caused also by reflex ways. When the vagus is cut in any part of the neck, an electric stimulation of its central end causes a prompt longitudinal and circular contraction of the entire esophagus, which lasts as long as the stimulation continues. Particulars and other interesting facts connected with this observation will be reported later.

48 (140). "**Ion protein compounds,**" with exhibition of products: **WILLIAM J. GIES.**

About five years ago the author found that "when the electric current is passed through neutral or alkaline mucoid solutions (consisting of sodium or calcium salts of mucoids) turbidity results within a short time, and flocks eventually form and can be filtered off." This observation was included in a preliminary report of work then in progress.[1] About the same time Huiskamp had been making similar observations in connection with salts of nucleoprotein from thymus.[2] Shortly afterward, in preparing material for work in another connection,[3] the author precipitated from an alkaline solution (Na_2CO_3) of mucoid, with the aid of acetone

[1] Mead and Gies: *American Journal of Physiology*, 1902, vi (*Proc. Amer. Physiol. Soc.*, 1901, p. xxviii); also Gies and collaborators: Biochemical Researches, 1903, i, p. 53.

[2] Huiskamp: *Zeitschrift für physiologische Chemie*, 1901–'02, xxxiv, p. 32.

[3] Gies: *Loc. cit.*, 1903, viii (*Proc. Amer. Physiol. Soc.*, 1902, p. xliii); Biochemical Researches, p. 54.