

4275

**Tonus Changes in the Gall Bladder Induced by Faradic Stimulation.**

C. L. BIRCH AND E. A. BOYDEN.

*From the Departments of Medicine and Anatomy, University of Illinois, Chicago.*

In previous publications it has been shown that a stimulus that usually causes contraction of the human gall bladder may sometimes induce the reverse effect.<sup>1, 2</sup> This has led us to believe that evacuation of the gall bladder is regulated in part by a reflex mechanism, and that from the standpoint of biliary stasis the reflex control may be more important than any other. Accordingly we have undertaken to ascertain whether reflex inhibition of the gall bladder musculature can be induced by stimulating the intramural portion of the common bile duct with a weak faradic current. Preliminary observations show that if such a current is applied when the gall bladder is under contraction (either spontaneous or after ingestion of egg yolk) tonus diminishes and the column of iodized oil in the gall bladder drops. This work is being supplemented by further experiments dealing with other sensory areas and degrees of stimulation, and with the gall bladder in different initial states of tonus.

4276

**Nature of Local Immunity in Lungs of Rabbits Immunized Against Pneumococci.\***

G. W. STUPPY, P. R. CANNON AND I. S. FALK.

*From the Department of Hygiene and Bacteriology and the Department of Pathology, University of Chicago.*

In a series of experiments designed to study the pathogenesis of experimental pneumococcus pneumonia in rabbits by the method employed by Lamar and Meltzer,<sup>1</sup> Winternitz and Hirschfelder<sup>2</sup> and

<sup>1</sup> Boyden, E. A., and Parmacek, L., *PROC. SOC. EXP. BIOL. AND MED.*, 1928, **xxv**, 462.

<sup>2</sup> Boyden, E. A., and Saunders, A. M., *Ibid.*, 1928, **xxv**, 458.

\* This is a preliminary report on one of a series of studies on respiratory diseases carried out in connection with the Influenza Commission, established and financially aided by the Metropolitan Life Insurance Company of New York.

<sup>1</sup> Lamar, R. V., and Meltzer, S. J., *J. Exp. Med.*, 1912, **xv**, 133.

<sup>2</sup> Winternitz, M. D., and Hirschfelder, H. D., *J. Exp. Med.*, 1913, **xvii**, 657.