

famous physician of all time, a veritable commonplace, to a local celebrity.

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URBANA, ILLINOIS

NOV. 27, 1924

### ANOTHER ADULT "HOWLER"

THAT ancient legend about the figures in Haeckel's "Anthropogeny" seems still to be extruding pseudopodia. Thus in the *Baptist Beacon* (April, 1924, p. 14), from a page-long letter of Professor George McCready Price, one learns that "the fraudulent photographs of imaginary embryos which were published by Ernest Haeckel . . . are still going the rounds of books published in the interest of the evolution propaganda."

Remarkable man, this Haeckel! Not only did he photograph imaginary embryos—he did it twenty years before any one else had photographed real ones!

E. T. BREWSTER

## LABORATORY APPARATUS AND METHODS

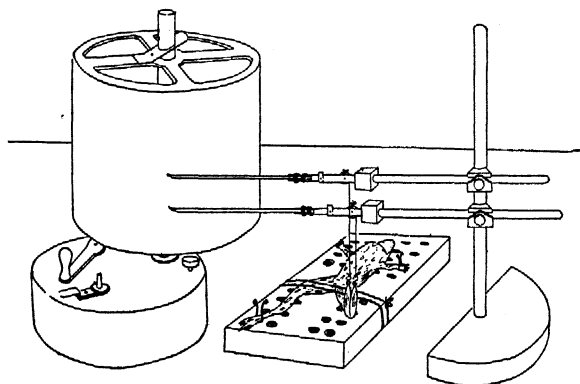
### RECIPROCAL INNERVATION IN THE FROG AS A LABORATORY EXPERIMENT

AFTER examining a number of laboratory textbooks in physiology, we noticed that there was no mention made of any experiment which would illustrate the phenomenon of reciprocal reaction of antagonistic muscles. Perhaps this is due to the fact that the authors considered this experiment too difficult for elementary students of physiology, or, perhaps, that suitable apparatus was not on hand for that purpose. The only place where we did find mention made of this experiment was in Porter's textbook.

In our laboratory this has been a routine experiment for several years, and since the students have obtained such good results, with ordinary laboratory apparatus, it has been suggested to us that this fact be called to the attention of other teachers of physiology.

The apparatus we use consists of two muscle levers (Harvard Apparatus type). To the pulleys of these levers are attached the tendons of the gastrocnemius and the tibialis anticus by means of pieces of thread. The after-loading screw of the lever to which the tibialis anticus is attached is raised in order to permit the lever to descend when this muscle relaxes. The frog is fastened on the frog board which is placed under these levers. The diagram shows the exact setup of the apparatus.

We are consistently obtaining many good tracings of the antagonistic action of these two muscles, show-



ing that the experiment may be successfully and easily performed with the type of apparatus found in many physiological laboratories.

Good results may be obtained by applying a small amount of dilute acetic acid on the perineum of the frog, by stimulating in the same region with a weak tetanizing current, or with single induction shocks. We have also obtained good results by pinching the toe of the opposite foot, and by stimulating the gastrocnemius directly with single induction shocks and with the tetanizing current.

This experiment is of such fundamental importance that it occurred to us that other teachers of physiology might be interested in introducing it to the students as a standard laboratory experiment. We believe that the student can gain much by actually observing this important fact for himself.

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## SCIENTIFIC BOOKS

*Dynamic Psychology, An Introduction to Modern Psychological Theory and Practice.* By DOM THOMAS VERNER MOORE, Ph.D., M.D. Monk of the Order of St. Benedict, professor of psychology, Catholic University of America, director of the Clinic for Mental and Nervous Diseases, Providence Hospital, Washington, D. C. Lippincott, Philadelphia, Chicago and London, 1924, pp. viii + 444.

APPROACHING the field from the points of view of physician, philosopher and psychologist working in both classroom and clinic, the author defines psychology as "the science of the human personality." His attitude on questions is a resultant of his historical knowledge of philosophy and psychology, his metaphysical dualism and practical knowledge of physiology, applied psychology and psychoanalytic method.

Among the strong points of the book may be listed the following: the treatment of the physiological and