

pears possible that when a minimal quantity of strychnine is employed the reactions described will be found to be confined to the ipsilateral hind leg. Together with the hind limb phenomena just described there is usually to be noted a rigidity affecting both forelimbs, which again strongly recalls the appearances of decerebrate rigidity.

The reactions above depicted do not appear to be due to an action of the strychnine on the spinal cord and bulb, since the symptoms are confined to the hind and forelimbs. Vigorous stimulation of other parts of the body, *i. e.*, the trunk and head elicits not the slightest indication of strychnine convulsions. There is no opisthotonus; the lower jaw is constantly relaxed and the mouth open.

Magnini and Beck and Bikeles had previously applied a solution of strychnine to the cerebellar cortex for the purpose of localization. The effects described by these authors were, however, of an indefinite character and involved widely-separated regions of the body. According to Luciani the reactions were in part due to diffusion of the drug to the medulla oblongata and the observations of the writers cited lend no support to the doctrine of cerebellar localization. In my experiments, on the contrary, precautions were taken to prevent spread of the drug to the medulla oblongata and the symptoms themselves were of a definite and restricted nature. My experiments are being continued on the cat and the method will be extended to the study of the cerebellum of the dog, monkey and other animals.

FREDERICK R MILLER

WESTERN UNIVERSITY MEDICAL SCHOOL,  
LONDON, CANADA,  
March 22, 1920

#### A LOGIC TEST

TO THE EDITOR OF SCIENCE: I have lately came upon what I regard as the very best Logic-Puzzle that I have ever met with; that it is good is proved by the fact that the people I have put it to have been somewhat equally divided as to whether they answer yes or no to the question involved. Moreover, it is an

actual case—a real advertisement of a clothing store that I had the good luck to find in a recent newspaper. This is it:

We have all known from our youth up that to err is human. If this is so, it must be that all of our competitors are thoroughly human.

The implication is, of course, that "our competitors" are people who make (in their cutting and fitting) plenty of errors, and the inference drawn is that this proves them to be human. Now this is either good reasoning or bad; which is it?

I should be extremely glad to receive answers to this question, and especially if they are accompanied with the grounds for the answer—yes or no.

CHRISTINE LADD-FRANKLIN

COLUMBIA UNIVERSITY,  
March 2, 1920

#### THE SITUATION OF SCIENTIFIC MEN IN RUSSIA

A RECENT letter to SCIENCE (March 26, 1920, p. 322) having brought up the question of "the situation of scientific men in Russia," with particular reference to Professor Pavlov, it seems fitting to publish the following letter from Professor Boris Babkin, who was for many years assistant to Professor Pavlov. We are all interested in the welfare of our scientific colleagues in Russia as well as in other countries, and this direct statement may throw some light on the situation.

H. GIDEON WELLS

THE OTHO A. SPRAGUE MEMORIAL INSTITUTE,  
CHICAGO, ILL.,  
April 5, 1920

Dec. 17, 1919.  
PHYSIOLOGICAL LABORATORY,  
UNIVERSITY OF ODESSA.

Dear Professor Wells,

I take advantage of my old acquaintance with you in E. Fischer's laboratory and beg you to assist me in the following matter.

The bolshevik revolution has brought Russia into such a state that not only has scientific work come to a standstill, but even our lives are in danger. Many professors have been put to death, many are in prison. I consider it necessary to continue my scientific activity. I therefore beg you to help me

to find a post in some physiological laboratory in the U. S. I do not know English well enough to give lectures just at present but in one to one and one half years I would be able to do so. But now I think I could be of use in some research institution.

I have a similar request to make to you on behalf of my friend Privat Dozent A. A. Kronforsky, lecturer on pathology and bacteriology at the University of Kieff, whom I can recommend most warmly. He would emigrate to America for the purpose of continuing his scientific work.

Please be so kind to direct your reply (if it is possible cable me) to British Consulat General in Odessa for Professor B. P. Babkin, Physiological Laboratory, University of Odessa.

With kind regards,

Yours sincerely,  
B. BABKIN

### QUOTATIONS

#### RESEARCH AND THE UNIVERSITIES

"IMITATION research" is the latest object of attack by the Carnegie Foundation for the Advancement of Teaching. "Much," declares the report "of that which has gone on in American universities under the name of research is in truth only an imitation." This is a strong statement. Most persons familiar with the facts, it is safe to say, will feel that it should be modified by striking out "much" and substituting "some." A favorite game with critics of university work has long been the quotation of subjects of doctoral theses. Even those who should know better are unable to resist the temptation of provoking a laugh at the expense of the scholar who labored to give to the world the boon of several hundred pages on "The Middle English Ideal of Personal Beauty," or "A Study of the Cogmonina of Soldiers in the Roman Legion," or "Plane Nets with Equal Invariants." The Carnegie report does not descend to this level, but it gives aid and comfort to such criticism by coupling its extreme statement about "imitation research" with advice to the universities "to take stock of themselves before appealing to the public for funds on an enormous scale."

That stock taking has already been done, and by an agency as pitiless as this world knows. The direction of our war effort was

committed in large measure to the college-trained man. He was, in many important positions, a person cursed with a Ph.D., the stigma that told of seminars and laboratories and—well, research. He came from everywhere, from the fresh-water institution of limited facilities as well as from the university of unrivalled resources. That he "made good" from the beginning is one of the commonplaces of the history of our war. He took hold of a situation as unacademic as the most skeptical of his critics could have imagined, and proceeded as if the war were nothing more baffling than a particularly unruly set of sophomores.

There was not a little running around in circles at Washington during the months following April, 1917, but the specialist, product of the American research methods, did not indulge in it.

The colleges are far from perfect. Many worthless law schools are doing a large business, as Dr. Pritchett's report observes, and it is to be hoped that the Foundation may be as successful in wiping them off the map as it has been with the same brand of medical school. But the public has never appreciated research work at its true value, and the rather sensational language of the report is likely to do more harm than good. We need more research work and not less—more of the kind actually prevailing in the mass of our universities.—*The New York Evening Post*.

### SCIENTIFIC BOOKS

*Inbreeding and Outbreeding, Their Genetic and Sociological Significance.* By EDWARD M. EAST AND DONALD F. JONES. Philadelphia and London, J. B. Lippincott Co., 1919. Pp. 285. 46 illustrations.

No better example than this book affords is likely to be found of the successful carrying out of the purpose of the series of "Monographs on Experimental Biology," which is stated by the general editors in these words: "Biology which not long ago was purely descriptive and speculative, has begun to adopt the methods of the exact sciences, recognizing