

SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE
OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE.

FRIDAY, OCTOBER 6, 1905.

CONTENTS.

<i>Contributions of Pharmacology to Physiology:</i>	
PROFESSOR HANS MEYER.....	417
<i>The Geographical Distribution of the Student Body at a Number of American Universities:</i>	
PROFESSOR RUDOLF TOMBO.....	424
<i>Scientific Books:—</i>	
<i>Le Dantec's Traité de biologie:</i> PROFESSOR ARTHUR O. LOVEJOY.....	428
<i>Scientific Journals and Articles.....</i>	429
<i>Societies and Academies:—</i>	
<i>The American Mathematical Society:</i> PROFESSOR F. N. COLE.....	430
<i>Discussion and Correspondence:—</i>	
<i>The Probable Origin of Certain Birds:</i> PROFESSOR J. A. ALLEN.....	431
<i>Special Articles:—</i>	
<i>Battery Resistance by Mance's Method:</i> PROFESSOR ARTHUR W. SMITH. <i>Organisms on the Surface of Grain, with Special Reference to Bacillus Coli:</i> DR. HAVEN METCALF.....	434
<i>The International Catalogue of Scientific Literature:</i> PROFESSOR A. LIVERSIDGE.....	441
<i>Inauguration of the Magnetic Survey of the North Pacific Ocean:</i> DR. L. A. BAUER.....	443
<i>Experimental Studies in Yellow Fever and Malaria at Vera Cruz.....</i>	443
<i>Scientific Notes and News.....</i>	444
<i>University and Educational News.....</i>	448

MSS. intended for publication and books, etc., intended for review should be sent to the Editor of SCIENCE, Garrison-on-Hudson, N. Y.

CONTRIBUTIONS OF PHARMACOLOGY TO PHYSIOLOGY.¹

LADIES AND GENTLEMEN: Before I enter upon the task for which I ask your kind

¹ Being the first of the Herter lectures delivered at the Johns Hopkins Medical School, October 5, 1905.

attention, I desire to express my hearty thanks for the great honor you have extended to me in inviting me to deliver the Herter lectures. The honor I accept, not so much for myself as for the science which I represent.

Experimental pharmacology is a science with essentially theoretical aims—a part of general biology, in which there is nowhere shown a greater interest than in America. I take especial pleasure in asserting that in this land of varied successes the understanding of abstract problems and of purely theoretical work thrives and ever grows, always extending to wider circles, filled with a scientific idealism which invites the most splendid and admirable sacrifices, spiritual and material. Your famous university and, indeed, these lectures themselves owe their origin to such idealistic impulses. And this gives me the courage and the desire to talk to you of the significance and value of pharmacology.

It is, then, not necessary for me to claim your attention for the practical results or for their value to the practising physician; not, however, that I undervalue this important side of pharmacology. But may I not hope at this place to be able to attain my purpose most easily, if I beg your attention to the biological results which we owe to pharmacological investigations?

For the explanation and analysis of physiological function, apart from comparative physiology, stimulation and extirpation of certain organs or parts of organs serve as general methods. Experimental physiology employed to this end mechanical