

SCIENCE

VOL. LXV

APRIL 29, 1927

No. 1687

CONTENTS

<i>Archetypes and Symbolism</i> : PROFESSOR GEORGE L. STREETER	405
<i>How the Taxonomists may utilize the International Committee on Nomenclature</i> : DR. A. S. HITCHCOCK	412
<i>William S. Valiant</i> : ALBERT O. HAYES	415
Scientific Events:	
<i>The Establishment of an International Bureau of Meteorology; A Laboratory for the Study of Rocky Mountain Spotted Fever; Annual Meeting of the American Medical Association</i>	415
<i>Scientific Notes and News</i>	418
<i>University and Educational Notes</i>	422
Discussion and Correspondence:	
<i>Pressure Decomposition as a Source of Solar Energy</i> : DR. DONALD H. MENZEL. "Commensalism" of a Sea Anemone and a Sea Urchin: BENJAMIN KROPP. <i>Preservation of Natural Areas</i> : HENRY I. BALDWIN. <i>When is Mid-Winter</i> : CHARLES H. BRIGGS. <i>The Newton Bicentenary</i> : R. DE VILLAMIL	422
Scientific Books:	
<i>Springer's American Silurian Crinoids</i> : PROFESSOR CHARLES SCHUCHERT	425
Special Articles:	
<i>Properties of Substances in the Condensed State at the Absolute Zero of Temperature</i> : DR. R. D. KLEEMAN. <i>Profits derived from Segregating College Students on the Basis of Ability</i> : PROFESSOR H. W. MILLER. <i>On Valonia and Halicystis in Eastern America</i> : L. R. BLINKS	426
Societies and Academies:	
<i>The Cordilleran Section of the Geological Society of America; The Utah Academy of Sciences</i>	430
<i>Science News</i>	x

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKeen Cattell and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal.

Lancaster, Pa.

Garrison, N. Y.

Annual Subscription, \$6.00. Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

Entered as second-class matter July 18, 1923, at the Post Office at Lancaster, Pa., under the Act of March 8, 1879.

ARCHETYPES AND SYMBOLISM¹

It has been a custom in this association to grant an incoming president three great privileges: he is allowed to address you for more than twelve minutes; he is allowed to speak on any topic he chooses, and, thirdly, what he says is allowed to go without immediate contradiction and embarrassing discussion. Most of your preceding presidents have utilized this attractive opportunity for departing from the troublesome humdrum problems of the day and gaily sailing forth on a sea of generalities where there are no limiting shores or submerged rocks in the way of facts to annoy one. This precedent allures me and I propose to indulge just this once. The particular speculative cruise on which I would have you join me is indicated in the title, and it involves a discussion of a characteristic prevalent among writers and teachers—including teachers of anatomy. As I see it, teachers have a shameless yearning for the diagrammatic; the tendency to state things in a simple way, even when the things themselves are not simple; the tendency to supply sharp contours or classifications where the real margins are indistinct or the parts intimately blended. Apparently the impression is prevalent that there are simple laws and ground plans underlying all that we see about us, and for many years the investigator has been in hot pursuit after them. Our great heroes are those who succeed in cleverly expressing the complex phenomena of nature in the form of precisely stated laws, or archetypal patterns and we grade our heroes according to the length of time their laws or patterns endure. Let us consider the nature of this situation and see what is to be done about it.

If we stop and picture to ourselves some of the circumstances of the beginnings of our guild, the original utility of diagram and symbolism is plainly evident. It is difficult to see how civilization could have developed without them. As you all know, the origins of the medical and biological sciences are to be found in the ancient priestcrafts. Among the earliest civilizations, it was the priests who were the possessors of the truth. They fostered what there was of learning. Much of their information came to them through direct revelation—by virtue of their peculiar and magical understanding of the desires

¹ Presidential address, read before the American Association of Anatomists, at the Nashville meeting, April 14, 1927.

Marine Biological Laboratory Woods Hole, Mass.

INVESTIGATION Entire Year

Facilities for research in Zoology, Embryology, Physiology, and Botany. Fifty-two private laboratories \$100 each and ninety-four private laboratories \$200 each for not over three months. Fifty-six tables are available for beginners in research who desire to work under the direction of members of the staff. The fee for such a table is \$50.00.

INSTRUCTION June 28 to August 8, 1927

Courses of laboratory instruction with lectures are offered in Invertebrate Zoology, Protozoology, Embryology, Physiology, and Morphology and Taxonomy of the algae. Each course requires the full time of the student. Fee, \$75.00.

BIOLOGICAL SUPPLIES

For the classroom, museum or collector.

SUPPLY DEPARTMENT Open the Entire Year



First class preparations. Send for new (1926) Catalogue No. 1. Zoological and Embryological material, Life Histories and Habitat Groups.

Catalogue No. 2, Botanical material.

Catalogue No. 3, Microscopic slides.

Address all correspondence regarding material and catalogues to:

Supply Department,
GEO. M. GRAY,
Curator, Woods Hole, Mass.

The annual announcement will be sent on application to The Director, Marine Biological Laboratory, Woods Hole, Mass.

The Biological Laboratory

Cold Spring Harbor, Long Island, N. Y.

Investigation

Facilities for research in Physiology, Protozoology, Embryology and other branches of Zoology, and Botany. Fee for private room \$75.

Special equipment for mammalian work.

Opportunities for beginning investigators. Fee \$50.

Instruction

Six weeks, June 29th to August 9th. Courses in Field Zoology, Physiology, Experimental Surgery, Endocrinology, Field Botany and Plant Ecology. Tuition \$70.

Situated in a region rich in marine, fresh water, woodland and meadow life. One hour from the center of New York City. For information, address the Biological Laboratory, Cold Spring Harbor, Long Island, N. Y.

LIVING BULLFROGS

Safe delivery guaranteed

We are just recovering from the acute shortage due to the unprecedented drouths of 1924 and 1925. Be sure to reserve your next year's supply while in season, March, April or May. Correspondence solicited.

Also headquarters for living and preserved specimens of all types, microscopic slides, life histories, demonstrations, insect collections. We specialize in many important southern species not obtainable elsewhere.

All material guaranteed without reservations.

Southern Biological Supply Co., Inc.,
Natural History Building,
New Orleans, La.

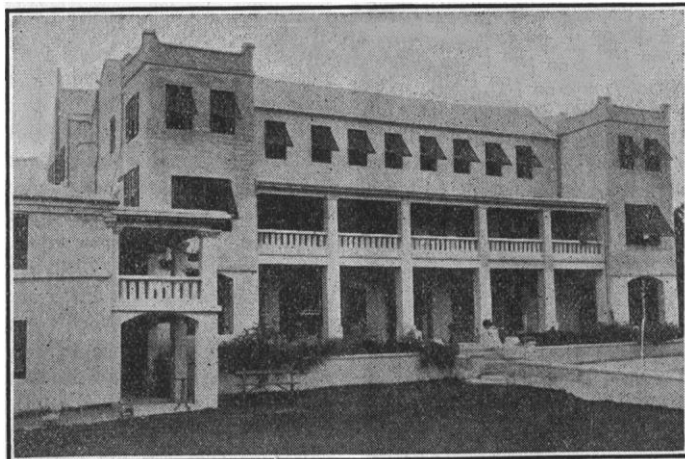
Access to
Four
Waters



Tennis
Court



Bathing



Aquarium and
site for new lab-
oratory twenty
minutes distant
by bicycle.



Row boats for
collecting can be
obtained from
the Hotel.

THE HARRINGTON HOUSE

Bailey's Bay, Bermuda

An ideal location for those engaged in research and biology.

A large room can be provided for laboratory purposes with running salt and fresh water.

Special rates given to groups of ten of those who wish to accomplish research



School of Medicine

NEW ADMISSION REQUIREMENTS

At least three years of approved college work including specified requirements in the sciences.

DEGREE OF B.S. IN MEDICAL SCIENCE

This degree may be awarded at the end of the third or fourth year to students fulfilling certain conditions including the preparation of a thesis.

DEGREE OF DOCTOR OF MEDICINE

Upon satisfactory completion of prescribed four-year course.

For catalogue and information, address
THE DEAN, Washington University
 School of Medicine, St. Louis,
 Missouri

Johns Hopkins University SCHOOL OF MEDICINE

The School of Medicine is an Integral Part of the University and is in the Closest Affiliation with the Johns Hopkins Hospital.

COURSES FOR GRADUATES

In addition to offering instruction to students enrolled as candidates for the degree of Doctor of Medicine, the School also offers Courses for Graduates in Medicine. In each of the clinical departments opportunity for advanced instruction will be offered to a small number of physicians, who must satisfy the head of the department in which they desire to study that they are likely to profit by it.

Students will not be accepted for a period shorter than three academic quarters of eight weeks each, and it is desirable that four quarters of instruction be taken. The courses are not planned for purposes of review but for broad preparation in one of the lines of medical practice or research. The opportunities offered will consist in clinical work in the dispensary, ward-rounds, laboratory training, and special clinical studies.

The academic year begins the Tuesday nearest October 1 (October 4, 1927), and students may be admitted at the beginning of any academic quarter. The charge for tuition is \$50 a quarter, payable in advance.

Inquiries should be addressed to the Executive Secretary of the School of Medicine, Johns Hopkins University, Washington and Monument Streets, Baltimore, Maryland.

School of Tropical Medicine

of the

University of Porto Rico

under the auspices of
COLUMBIA UNIVERSITY

San Juan, P. R.

An institution for the study of tropical diseases and their prevention.

New building containing well equipped laboratories and library. Clinical facilities in general and special hospitals. Field work in cooperation with Insular Department of Health.

Courses in bacteriology, mycology, parasitology, pathology, food chemistry, public health and transmissible diseases, open to graduates in medicine and others having equivalent preparation. Number of students limited.

First term of second session begins Oct. 1, 1927; second term, Feb. 1, 1928. Special students and investigators admitted at other times as space and circumstances permit. In all cases arrangement in advance is advised.

For further information apply to

Director
 School of Tropical Medicine
 San Juan, Porto Rico.

BOSTON UNIVERSITY SCHOOL OF MEDICINE

ORGANIZED IN 1873

ANNOUNCEMENT

may be obtained by application to

THE REGISTRAR

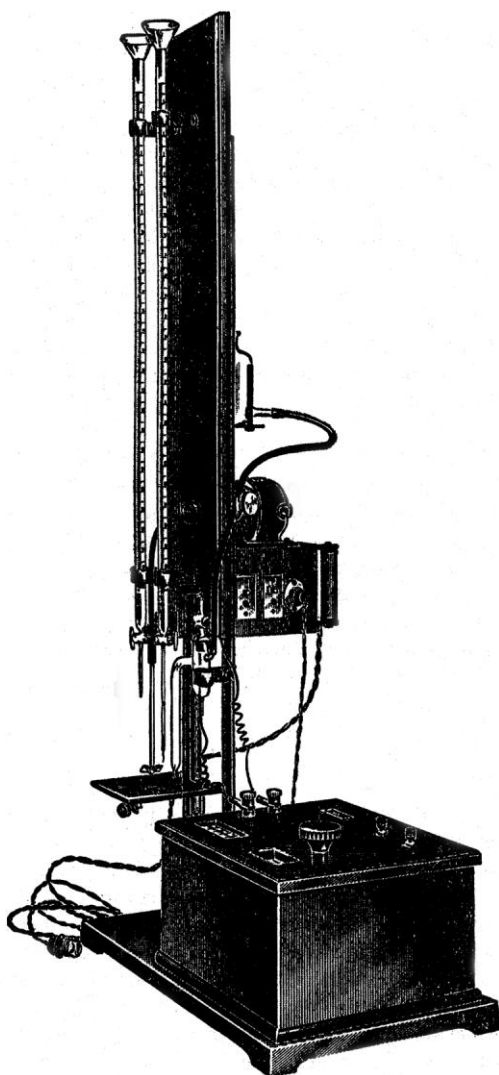
80 East Concord Street,

Boston,

Massachusetts

EPPLEY

ELECTROMETRIC TITRATION APPARATUS



Adapted to the determination of end-points either by observing a sudden deflection of the galvanometer as in the titration of dichromate with ferrous sulfate, or by plotting readings proportional to electromotive force against volume of reagent.

FEATURES

Leeds & Northrup Co. portable lamp and scale galvanometer of the suspended coil type with a sensitivity of 40 megohms.

Potentiometer with precision of 1 millivolt; long slide wire for ease of reading and accuracy.

Stirrer on direct flexible shaft drive; speed controlled by rheostat and reducible to 2 revolutions a second.

Portable calomel electrode designed to permit flushing and refilling without removing from apparatus.

Of most simple and compact design; convenient operation.

Furnished for 110 v. A. C. or D. C.,
220 v. A. C. or D. C.

*Cat. No. 350 Eppley Electrometric
Titration*

Apparatus, complete, including:

- 3 Platinum Electrodes
- 1 Calomel Electrode, portable, filled,
ready for use
- 1 Hildebrand Hydrogen Electrode
- 1 liter saturated KCL solution

Price \$250.00, f. o. b. Newport

Send for bulletin

THE EPPLEY LABORATORY

Makers of the Eppley Standard Cells
NEWPORT, R. I., U. S. A.