SPECIAL ISSUE CONTAINING ACCOUNTS OF THE SESSIONS OF SECTIONS AND SOCIETIES AT THE FIFTH NEW YORK MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE AND ASSOCIATED SOCIETIES.
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SCIENCE

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THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

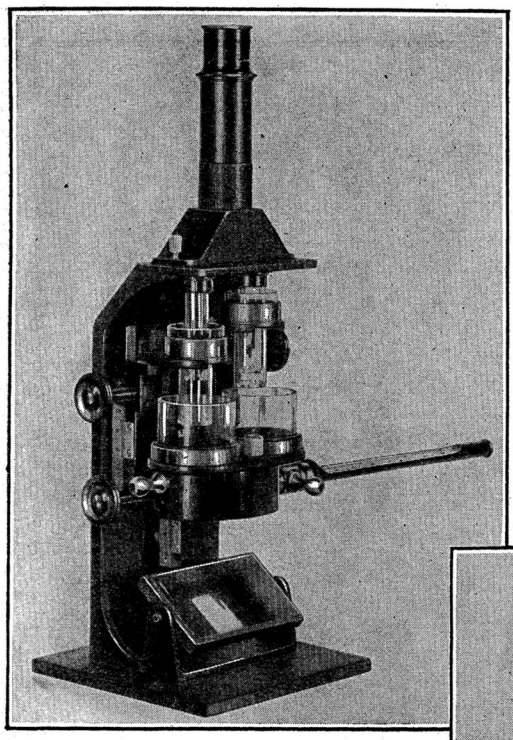
ACCOUNTS OF THE SESSIONS OF SECTIONS AND SOCIETIES AT THE FIFTH NEW YORK MEETING

The Association Sections and the Associated and Invited Organizations

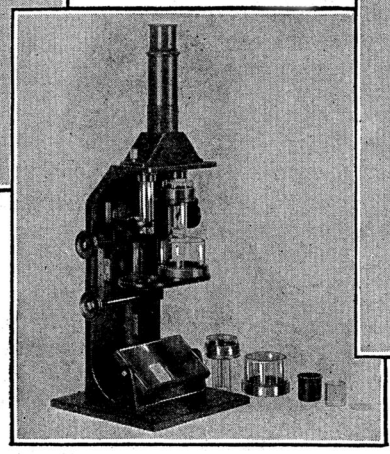
THE fifteen sections of the American Association were all represented in the great array of scientific sessions at the fifth New York meeting. In most instances one or more of the independent scientific organizations officially associated with each section met with the section at New York and, as is required by the laws of the American Association in such cases, the scientific programs for the respective fields of science of the sections were mainly those of the associated organizations in those fields. Several other independent scientific organizations, not officially associated with the American Association, also took part in the meeting, by invitation. The following list shows the names of all these organizations, arranged according to the association sections to which they are most closely related. Some of the organizations are related to more than one section and some are related to all sections—that is, to the American Association as a whole. For convenience of reference, the name of the president (or chairman) and that of the secretary of each organization are shown in this list, the officers named being those for the meeting here reported. Organizations whose names are followed by a cross or by one or two asterisks are officially associated with the American Association. Names marked by one or two asterisks are those of associated organizations that are also officially affiliated with the association. These have representation in the association council and in its section committees, those shown with a single asterisk having one council representative, while those shown with two asterisks have two representatives.

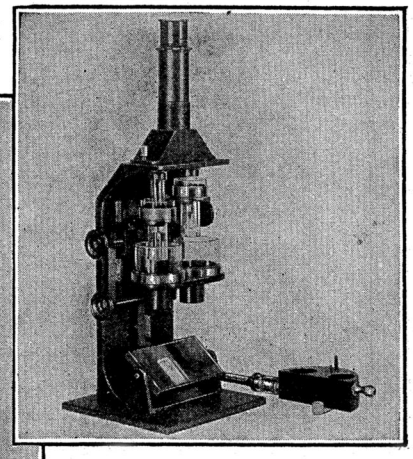
SECTION A (MATHEMATICS). *Chairman,* Raymond C. Archibald; *secretary,* Charles N. Moore, University of Cincinnati.

Related to Section A. (1) American Mathematical Society:** *President,* Virgil Snyder; *secretary,* R. G. D. Richardson, Brown University. (2) Mathematical Association of America:** *President,* Walter B. Ford; *secretary,* W. D. Cairns, Oberlin College.



Determining the Hydrogen Ion Concentration





IN accordance with the suggestions of Dr. A. Baird Hastings, of the University of Chicago, Bausch & Lomb have designed this new colorimeter for the determination of pH.

It can be used with two cups in each optical axis as in the original Gillespie technique or with three cups as in the newer Hastings method. A single rack and pinion operates both the larger cylindrical cups and the substage cups, maintaining them at the same relative depths. The upper flare-top cups are controlled independently of each other and of the cups on the stage by separate racks and pinions. When used with two cups in each axis, the unknown with the indicator is placed in the upper left-hand flare-top cup; and the acid and alkali forms of the indicator in the right-hand cups, the acid in the upper flare-top cup and the alkali in the lower large cylindrical cup. Movement of the flare-top cups gives all color variations within the range of the indicator used.

In Dr. Hastings' method, the substage cups are used either with or without the constant temperature device. In this technique the acid and alkali forms of the indicator are placed in the right-hand cups as in the two-cup technique, but the unknown with the indicator is placed in the left-hand substage cup, and the unknown without indicator in the right-hand substage cup, the left-hand large cylindrical cup being filled with distilled water.

Detailed information on this instrument and its uses will be sent on request.

Bausch & Lomb Optical Company

632 St. Paul St. **Rochester, N. Y.**

NEW SCIENTIFIC BOOKS

The Macmillan Company, New York

LIFE IN INLAND WATERS. Kathleen E. Carpenter. pp. xviii + 267. 12 plates and 94 figures. $4.50.

The adaptation of form to function and the development of special modes of reproduction and special physiological characters in relation to characters of environment, as illustrated by freshwater animals, are here described. The proximity of most people to fresh water make this study more convenient than marine biology.

Macmillan and Company, Limited, London

LIFE AND WORK OF SIR NORMAN LOCKYER. T. Mary Lockyer and W. L. Lockyer, assisted by a number of others. pp. xii + 474. 17 illustrations. $7.25.

The authors feel that any account of the life and work of Sir Norman Lockyer is not merely a record of past events, but an interpretation of a phase in the history of science of vital importance at the present day.

McGraw-Hill Book Company, New York

INORGANIC CHEMICAL TECHNOLOGY. W. L. Badger and E. M. Baker. pp. viii + 228. $2.50.

A text-book written for the benefit of the student of chemical engineering, who has had no practical experience, rather than for the industrial chemist. Current American practice in the technology of the heavy chemical industries is described. Only inorganic materials are discussed in the book.

John Wiley & Sons, Incorporated, New York

VOLUMETRIC ANALYSIS. I. M. Kolthoff and Ing. H. Menzel. Translated from the German edition by N. Howell Furman. pp. xvii + 289. $3.00.

This is the first volume and deals with the theoretical principles of volumetric analysis. The authors plan to later issue a second volume that will treat of the practical side of the subject.

Paul B. Hoeber, Incorporated, New York

HANDBOOK OF MICROSCOPICAL TECHNIQUE. Edited by C. E. McClung. pp. xiv + 495. 43 illustrations. $8.00.

For the practical use of workers in both plant and animal tissues. The book not only outlines the various methods of procedure, but tells the reason for each step and shows how the steps concerned are highly interdependent.

Alfred A. Knopf, New York

THE HISTORY OF BIOLOGY. Erik Nordenskiöld. pp. xv + 629 + xv. 32 illustrations. $6.00.

This book, here presented in English, is based on a course of lectures given at the University of Helsingfors, Finland, during the academic year, 1916-17. A picture is presented of the development of biological science throughout the ages in conjunction with the development of culture.

D. Van Nostrand Company, Inc., New York

INTRODUCTION TO THEORETICAL PHYSICS. Leigh Page. pp. x + 587. $6.50.

The treatment is sufficiently detailed so that the reader is able to follow the development step by step, and illustration problems are dispersed throughout to make the principles clearer. The five main divisions are: Dynamics, Hydrodynamics, Thermodynamics and the Kinetic Theory of Gases, Electro-Magnetism and Optics and Spectroscopy.

VIBRATION PROBLEMS IN ENGINEERING. S. Timoshenko. pp. vi + 351. 165 figures. $4.50.

The fundamentals of the theory of vibration are set forth, and their application to the solution of technical problems is illustrated by various examples, taken, in many cases, from actual experience with vibration of machines and structures in service.