

# SCIENCE

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## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

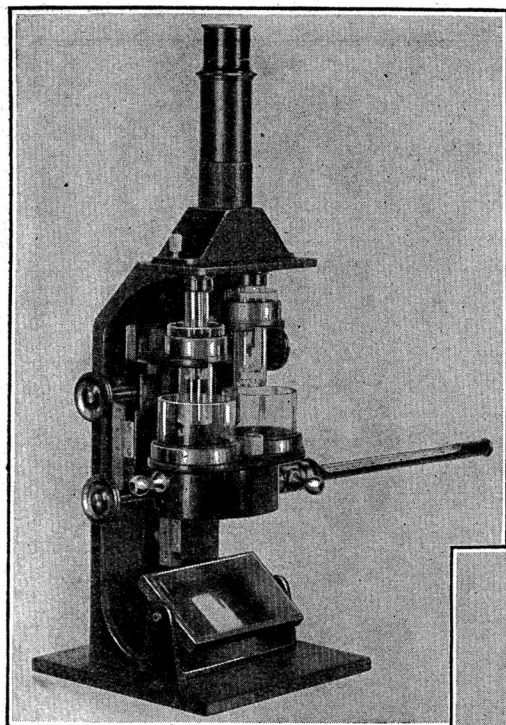
### ACCOUNTS OF THE SESSIONS OF SECTIONS AND SOCIETIES AT THE FIFTH NEW YORK MEETING

#### The Association Sections and the Associated and Invited Organizations

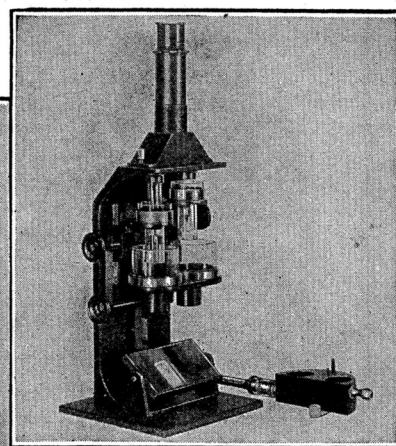
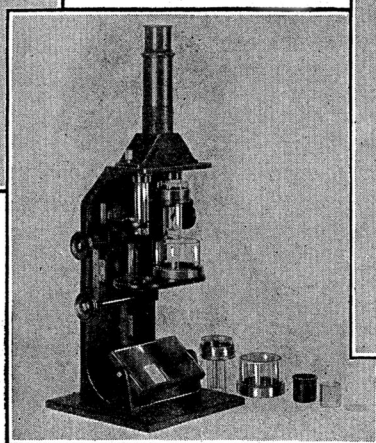
THE fifteen sections of the American Association were all represented in the great array of scientific sessions at the fifth New York meeting. In most instances one or more of the independent scientific organizations officially associated with each section met with the section at New York and, as is 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*, B. 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≈



**I**N 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.

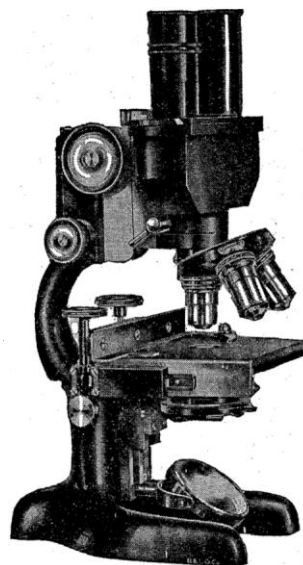
*Detailed information on this instrument and its uses will be sent on request.*

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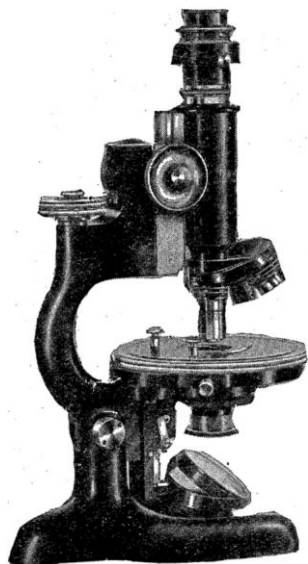
## The New FFSEA Microscope with a Binocular Eyepiece

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6. *Fixed tube length.*
7. *Interpupillary and one eyetube adjustment enables the user to set the instrument to conform with his visual requirements.*



## A New Microscope for Chemists



**T**HE base, pillar and arm of the New Chemical Microscope have been redesigned to give more room for the manipulation of specimens, in accordance with the suggestions of Drs. E. M. Chamot and C. W. Mason, of the laboratory of Chemical Microscopes, Dept. of Chemistry, Cornell University.

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The polarizer and analyzer which enable a saving of time, labor and reagents in both organic and inorganic work have been greatly improved.

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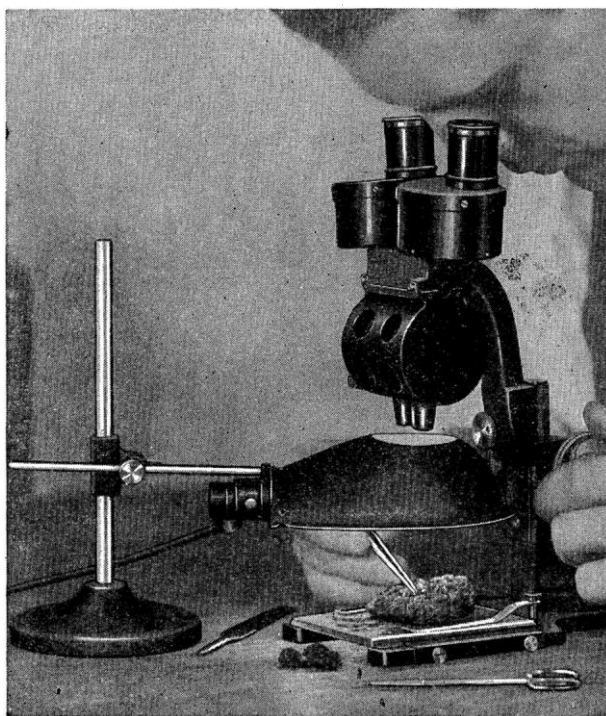
## For Wide Field Microscopy

A NEW wide field microscope lamp has been designed for the complete illumination of opaque objects upon the stage of a low power microscope. Even though the specimen be deep and cup-like, with many irregularities, this lamp with its ellipsoidal reflecting surfaces, throws light into every corner and recess, eliminating all shadows.

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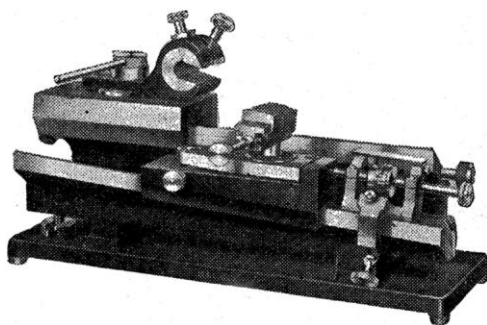
Because of its extremely wide field the AKW is suitable for a wide variety of uses.

By simply rotating the drum, three sets of paired objectives can be instantly swung into parfocal position. The image being neither inverted nor reversed, the long working distance and the stereoscopic vision make the AKW particularly advantageous in dissecting work.



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THE Thomson-Jeffery Microtome, so-called after its designers, Prof. R. B. Thomson, of the University of Toronto, and Dr. E. C. Jeffery, of Harvard University, is of unusually sturdy construction especially designed for wood sectioning though adapted for general botanical work. Being of the inclined plane type, it has the advantage of positive and precise feed.

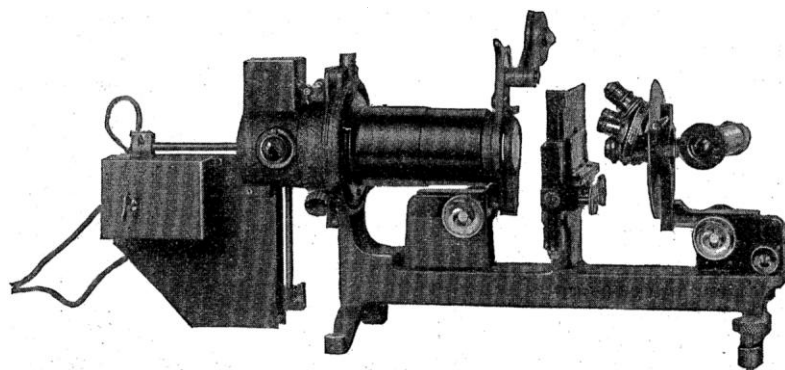


The object holder moves at an angle of  $3^{\circ} 26'$  to the plane of the knife holder and is adjustable to any angle on the ball and socket principle. The feeding mechanism is operated by a graduated micrometer screw and can be set to raise the specimen one micron or more. The range of movement of the knife block is 12 inches. The knife holder, knife block and feeding mechanism are mounted on V-type slides which give accurate and positive motion.

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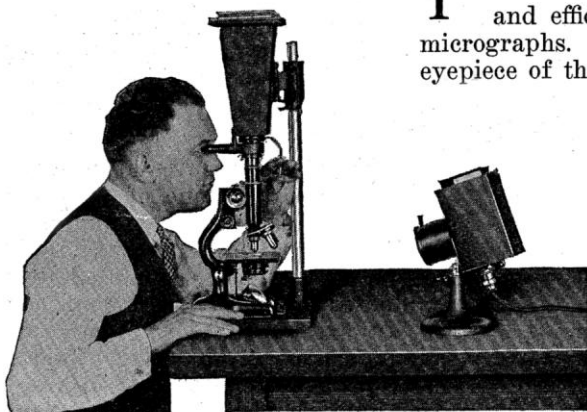


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Macmillan and Company, Limited, London

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McGraw-Hill Book Company, New York

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D. Van Nostrand Company, Inc., New York

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If you are not already enrolled, now is the time to join. Applications and remittances should be sent to the permanent secretary's office, A. A. S., Smithsonian Institution Building, Washington, D. C., from which sample copies of the journals and information about the Association may be had at any time.

## IF YOU ARE A MEMBER OF THE ASSOCIATION

You can help its work very much by sending to the permanent secretary's office, now or later, the names and addresses of persons who may be interested to become members; there are many thousands of such people in the United States and Canada.

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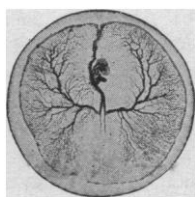
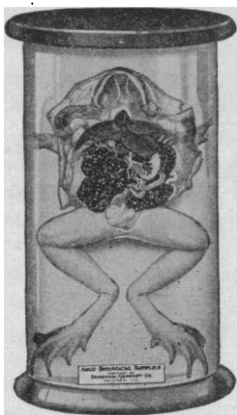
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