

SCIENCE

VOL. LXIII

JANUARY 22, 1926

No. 1621

METHODS OF RACIAL ANALYSIS¹

CONTENTS

<i>The American Association for the Advancement of Science:</i>	
<i>Methods of Racial Analysis:</i> PROFESSOR E. A. HOOTON	75
<i>Popular Astronomic Education in Europe:</i> DR. G. CLYDE FISHER	81
<i>Edward Fuller Holden:</i> PROFESSOR EDWARD H. KRAUS	84
<i>Scientific Events:</i>	
<i>The Merger of the Armour Institute of Technology with Northwestern University; The New York Zoological Society; The James Simpson-Roosevelt Expedition of the Field Museum; The Norton Bronze Tablet at Cornell College</i>	85
<i>Scientific Notes and News</i>	87
<i>University and Educational Notes</i>	91
<i>Discussion and Correspondence:</i>	
<i>A Note on the Humboldt Current and the Sargasso Sea:</i> WILLIAM BEEBE. <i>An Investigation of the Periodic Fluctuations in the Numbers of the Ruffed Grouse:</i> J. C. PHILLIPS. <i>Gonionemus:</i> PROFESSOR H. F. PERKINS. <i>The Value of Sociology:</i> R. A. MACKIE. <i>The Deepest Hole:</i> M. E. JOHNSON	91
<i>Scientific Books:</i>	
<i>Allen's Photoelectricity:</i> DR. HERBERT E. IVES	95
<i>Special Articles:</i>	
<i>Remarks on Surface Distribution of Marine Plankton Diatoms in the East Pacific:</i> W. E. ALLEN. <i>Rickets, Ultra-violet Light and Milk:</i> JOHN W. GOWEN, J. M. MURRAY, M. E. GOOCH and F. B. AMES	96
<i>The Federation of American Societies for Experimental Biology:</i> PROFESSOR WALTER J. MEEK	98
<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

Lancaster, Pa.

Garrison, N. Y.

New York City: Grand Central Terminal.

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.

SIGNIFICANCE OF THE TERM "RACE"

THE term "race" as applied to man is commonly employed with no accurate and well-defined meaning. One often sees references to the "white race," the "Jewish race," the "Latin race," the "Irish race." Such indiscriminate use of the word "race" implies a confusion of criteria. To speak of the "white" race is to assume that race is a matter of skin pigmentation; to refer to the "Jewish race" is to differentiate race on a basis of religion; a "Latin race" implies a linguistic criterion, and finally any reference to an "Irish race" must mean a race characterized either by geographical position or, failing that, by temperament. Such confusions of usage are usually confined to the non-anthropological writing public. All anthropologists agree that the criteria of race are physical characters. The tests of racial distinction are the morphological and metrical variations of such bodily characters as hair, skin, nose, eyes, stature—differences in shape and proportions of the head, the trunk and the limbs.

Although there exists among anthropologists this general agreement as to the physical basis of race, there is no such unanimity of opinion with respect to the further implications of a classification of mankind on the score of bodily attributes.

One school of anthropologists is disposed to deny that there are any cultural or psychological correlates of race. For these the somatological variations whereby race is determined are of little significance, except as convenient characters for classificatory purposes. They regard them principally and ultimately as effects of environment, though perhaps immediately heritable. Pigmentation may be dismissed by such as a result of climate, stature as a consequence of nutrition, head-form as a manifestation of individual variation or a by-product of separately inherited size-factors. Logically, such anthropologists refuse to recognize that language, material culture, mental capacity or social organization stand in any biological, mathematical or rational relationship to races as determined by these plastic and transitory physical characters. For them race is a congeries of environmentally determined bodily features, significant principally because it effects differences in outward appearance which arouse the prejudice of the ignorant.

¹Address of the vice-president and chairman for Section H, American Association for the Advancement of Science, Kansas City, Missouri, December, 1925.

Yale University

SCHOOL of MEDICINE

FOUNDED 1812

Affiliated with the New Haven
Hospital and New Haven
Dispensary

For Information, Address:

The Registrar, Yale University
School of Medicine, New Haven,
Conn.

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.

ADMISSION

Candidates for admission must be graduates of approved colleges or scientific schools with at least two years' instruction, including laboratory work, in chemistry, and one year each in physics and biology, together with evidence of a reading knowledge of French and German.

Each class is limited to a maximum of 75 students, men and women being admitted on the same terms. Applications may be sent any time during the academic year but not later than June 15th.

If vacancies occur, students from other institutions desiring advanced standing may be admitted to the second or third year provided they fulfill the requirements and present exceptional qualifications.

INSTRUCTION

The academic year begins the Tuesday nearest October 1, and closes the second Tuesday in June. The course of instruction occupies four years and especial emphasis is laid upon practical work in the laboratories, in the wards of the Hospital and in the dispensary.

TUITION

The charge for tuition is \$360 per annum, payable in three installments. There are no extra fees except for certain expensive supplies, and laboratory breakage.

The annual announcement and application blanks may be obtained by addressing the

Registrar of the School of Medicine, Johns Hopkins University, Washington and Monument Sts., Baltimore, Md.

Owing to an extensive building program about to be inaugurated at the Hospital and Medical School, it has been deemed necessary to withdraw, for the next two years at least, post-graduate instruction during the year as well as the summer course formerly given during June and July.

COLEMAN & BELL

Laboratory Reagents Are Dependable!

Our List Includes:

C. P. Inorganic Chemicals
C. P. Organic Chemicals
Chemical Indicators (dry). Including
Hydrogen Ion Indicators of
Clark & Lubs and Sorensen
Biological Stains (dry)
Reagents and Solutions—
Stains in Solution
Indicators in Solution
Blood Reagents
Diagnostic Reagents
Fixing Solutions
Mounting Media
Volumetric Solutions
Test Papers

Coleman & Bell Products may be secured from the principal dealers in laboratory supplies in the United States and in Foreign Countries, or may be ordered direct. Catalogue sent upon request.

THE COLEMAN & BELL COMPANY

(Incorporated)

Manufacturing Chemists
Norwood, Ohio, U. S. A.

School of Medicine Western Reserve University

Cleveland, Ohio

NEW LABORATORIES AND HOSPITALS
RESTRICTED CLASSES

THOROUGH INSTRUCTION

LARGE CLINICAL FACILITIES

HIGH STANDARD OF SCHOLARSHIP

Admission confined to students having academic degrees and to Seniors in Absentia.

For information address:

THE REGISTRAR

2109-15 Adelbert Rd.

CLEVELAND

THE MICROSCOPE

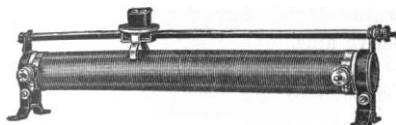
By SIMON H. GAGE, of Cornell University

Revised Edition (14th) Ready

The Old and the New in Microscopy, with a special chapter on Dark-Field Methods and their Application.

Postpaid, \$3.50

COMSTOCK PUBLISHING CO., ITHACA, N. Y.



By means of sliding-contacts the resistance value of

JAGABI RHEOSTATS

can be varied from zero to full rating in exceedingly small steps.

They are eminently suited for, and are largely used in Educational, Research and Industrial Laboratories.

Write for Illustrated Bulletin S 1040

JAMES G. BIDDLE, PHILADELPHIA
1211-13 ARCH STREET



VACCU-FILTER

18,000 in use for filtering fast through filter paper or felts.

\$8.00 and \$15.00 sizes complete with pump.

Write for circular.

ALSOP ENGINEERING CO.
47 W. 63rd St., N. Y.

PHONELESCOPE

TEACHES THROUGH THE

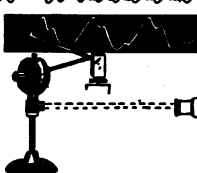
The Movies for all

SOUND

WAVE MOTION

ELECTRICITY

HERBERT GROVE DORSEY



Marine Biological Laboratory

Woods Hole, Mass.

Biological Material

1. ZOOLOGY. Preserved material of all types of animals for class work and for the museum.
2. EMBRYOLOGY. Stages of some invertebrates, fishes (including Acanthias, Amia and Lepidosteus), Amphibia, Reptiles and some mammals.
3. BOTANY. Preserved material of Algae, Fungi, Liverworts, Mosses, Ferns and Seed Plants.
4. MICROSCOPE SLIDES in Bacteriology, Botany and Zoology.
5. LIFE HISTORIES, Germination Studies and Natural History Groups.

Catalogues furnished on application to
GEORGE M. GRAY, Curator
WOODS HOLE MASSACHUSETTS



Direct Reading Ohmmeter



A WESTON portable direct reading ohmmeter for use in making rapid resistance measurements for both commercial and scientific work. It is operated by the ordinary type of dry cells making for convenience and economy, no auxiliary rheostat or other apparatus is needed. It is guaranteed to an accuracy of $\frac{1}{4}$ of one per cent.

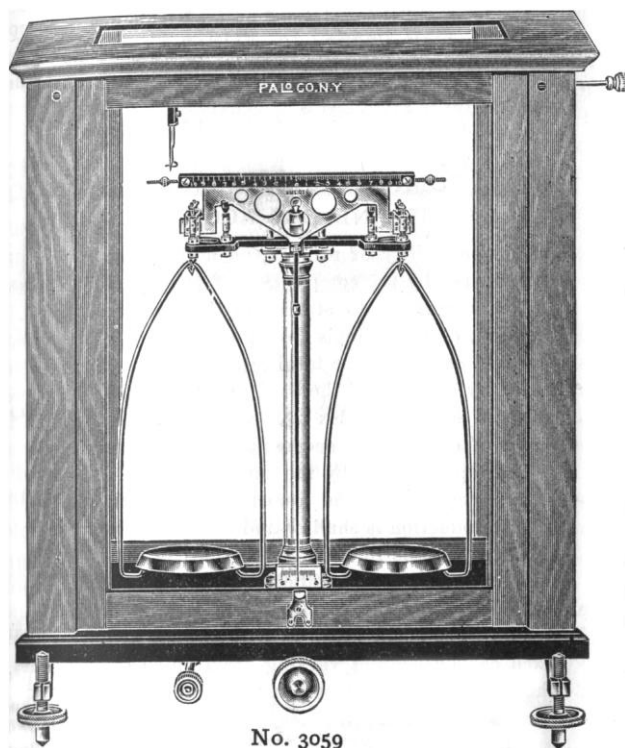
Industrial and scientific workers have long known the value of using Westons for accuracy, dependability, long life and above all for scientific assurance.

Our engineers will gladly supply you with specific technical information on this or any other groups of Westons which may be useful in your work—whether it is scientific or commercial.

Weston Electrical Instrument Corporation

52 Weston Avenue, Newark, N. J.





New Analytical Balance

Capacity 200 gms.

Sensitivity 1/10 mgm.

There is no other analytical balance of equal quality available at a lower price.

The rider attachment lifts rider *vertically* off beam.

Complete with 5/8-inch polished black slate base \$54.00

Write for Balance Bulletin

Apparatus for Industrial and Laboratory Use
153 West 23rd Street, New York, N. Y.

BECBRO LABORATORY RHEOSTATS



Screw Adjustment Type

"BECBRO" Rheostats carried in stock include numerous different ratings.

Included in the stock sizes are tubular types of lengths 20"; 16"; 8"; the resistance element being Wire or Ribbon.

Each tube has a slider adjustment which varies the resistance by very small steps from Zero to total value of the unit.

The approximate total resistance of these stock rheostats vary from 0.3 ohm to 30,000 ohms per unit, and have corresponding current capacities of 25 amperes down to 0.1 ampere.

Rheostats of more or less special construction include the Single Tube equipped with two rods and two sliders; Single and Double Tube equipped with Screw Adjustment (see cut); Double and Triple Tubes mounted as a Unit; Non-Inductive Wound Tubular and Stone Types.

"BECBRO" Carbon Compression Rheostats with corresponding Normal Ratings of 250; 1000; 1500; 3000 Watts.

Write for Catalog S-20

BECK BROS.

3640-42 North Second Street

Philadelphia, Penna.