

ical optics, has never been translated into English, is a reproach to both Great Britain and America. To make its valuable contents accessible to those who do not find it easy or convenient to read a foreign language will be conferring a boon on many scientific investigators in the vast and expanding territory which this book was originally intended to cover.

Incidentally, the proposed English edition will be a memorial of the hundredth anniversary of the birth of Hermann von Helmholtz, whose influence on modern scientific thought in nearly every direction has perhaps been as widespread and permanent as that of any of his great contemporaries in the nineteenth century.

It is estimated that the cost of translating, editing, and publishing this memorial volume (or volumes) will be \$5,000 or more. It is particularly desired that every individual who is interested in the success of this project and in the advancement of the science of light and vision in this country will have an opportunity of contributing towards it.

Contributions, no matter how small, may be sent to Adolph Lomb, Esq., treasurer of the Optical Society of America, care of Bausch & Lomb Optical Company, Rochester, New York. Make cheques payable to "Adolph Lomb, Treasurer."

Any one subscribing as much as \$15 will receive a copy of the complete work when it is issued.

JAMES P. C. SOUTHALL,  
*President, Optical  
Society of America*

DEPARTMENT OF PHYSICS,  
COLUMBIA UNIVERSITY,  
November 28, 1921

#### THE AMERICAN SOCIETY OF NATURALISTS

THE thirty-ninth meeting of the American Society of Naturalists, as has been noted in *SCIENCE*, is to be held in Toronto on December 29 and 30, with two symposiums of unusual interest—one on genetics and variation, by the zoologists, the other on orthogenesis, in which Henderson, Osborn, Bateson and others will take part.

It is interesting to recall that for the first

three years the society was under a paleontologist, Alfred Hyatt; for the two succeeding years under a zoologist, Grove K. Gilbert; then for two years under a comparative anatomist, Harrison Allen. Then in turn the society was presided over by the botanist Goodale, the physiologist Martin, the geologist Rice, the paleontologist Osborn, and a succession of paleontologists and zoologists until 1902, when the psychologist Cattell presided, since which time it has been chiefly under the guidance of zoologists.

The keynote to the success of the Society of Naturalists was the discovery that a more representative body of scientific men can be assembled at a winter meeting than at a summer session. This society has proved to be the mother of societies, because from its broad original organization have gone forth the six national American societies of Geology, Anatomy, Physiology, Botany, Zoology, and Paleontology, all holding winter meetings in various parts of the United States, from the eastern seaboard to Chicago. The zoologists alone cling to the mother Society of Naturalists and hold their meetings in the same time and place.

Of the founders of the Naturalists in the year 1883 there now survive the following: Libbey, Osborn, Scott, Rice and Clarke, the latter, Professor Samuel F. Clarke of Williamstown, being one of the first to answer the call.

HENRY FAIRFIELD OSBORN

#### THE PROGRAM OF THE SECTION OF BOTANY FOR THE TORONTO MEETING

ARRANGEMENTS have been completed to hold the Section G program on Wednesday afternoon, December 28. Since this program will be of interest to others than the members of this Section the speakers are given below.

Address of the Retiring Vice-President, Dr. Rodney H. True, "The physiological significance of calcium for higher green plants."

#### *Symposium on "The Species Concept"*

From the viewpoint of the systematist: Dr. Charles F. Millsbaugh.

From the viewpoint of a geneticist: Dr. George H. Shull.

From the viewpoint of a morphologist: Dr. R. A. Harper.

From the viewpoint of a bacteriologist and physiologist: Dr. Guilford B. Reed.

From the viewpoint of a pathologist: Dr. E. C. Stakman.

The address of the retiring vice-president will be thirty minutes in length, and each speaker in the symposium has agreed to limit his paper to fifteen minutes. This should allow considerable time for discussion.

ROBERT B. WYLIE,  
*Secretary*

#### THE TWENTIETH INTERNATIONAL CONGRESS OF AMERICANISTS

THE Twentieth International Congress of Americanists, which was to be held in Rio de Janeiro in 1921 but had to be postponed, will be held definitely from August 20 to 30, 1922, in connection with the celebration by Brazil of its first century of independence.

The organizing committee of the congress announces a rich and attractive program, and in view of the importance of Brazil to American Anthropology it is hoped that a special effort will be made by Americanists in this country to attend the congress, or at least to become members. Application for membership, with the dues of \$5, may be sent directly to the Secretary of the coming Congress, Sr. Domingos Sergio de Carvalho, Praça 15 de Novembro N. 101, Rio de Janeiro, Brazil; or to the writer.

ALEŠ HRDLIČKA  
*Sec. Gen. XIXth I. C. A.*

U. S. NATIONAL MUSEUM,  
December 3, 1921

#### FOSSIL MAN FROM RHODESIA

THE British press has just announced the discovery of a fossil human skull from northern Rhodesia that may prove to be epoch-making. It was found in the "Bone Cave" at Broken Hill mine, and bids fair to be of the first importance in its bearing on the physical characters of fossil man. The cranium is practically complete and in a perfect state of preservation; the lower jaw

was not recovered. Judging from the newspaper half-tones, the cranium is of a more lowly type than any Neandertal cranium yet discovered; it remains to be seen after a full report has been published whether we may not have here a new species of *Homo* about midway between *Pithecanthropus erectus* and the *Homo neandertalensis*.

The face is intact; the prognathism of the upper jaw is extremely accentuated, this being possible partly because of the unusual maxillary height between the anterior nasal spine and the alveolar margin. The nasal bridge is fairly prominent, a character which has recently come to be recognized as belonging to the Neandertal race.

The brow ridges are more pronounced than in any other known fossil human skull. The cranial height and breadth are correspondingly small, pointing to a comparatively low cranial capacity.

This precious relic is at the British Museum, South Kensington. It will be examined by Dr. A. Smith Woodward and Professors Arthur Keith and Elliott Smith, to whom science is so much indebted for their reports on the Piltdown remains; the result of their study of the cranium from the cave at Broken Hill mine will be awaited with intense interest. If the efforts to find the lower jaw should be rewarded, they may result in throwing new light on the Piltdown paradox.

GEORGE GRANT MACCUDRY  
DIRECTOR, AMERICAN SCHOOL IN FRANCE  
FOR PREHISTORIC STUDIES

#### SCIENTIFIC BOOKS

*Physiology and Biochemistry in Modern Medicine.* By J. J. R. MACLEOD. 3d edition. St. Louis, C. V. Mosby Co., 1920. Price \$10.

The third edition of this interesting textbook has been largely revised and partly rewritten. The changes are uniformly improvements, and the whole book is well written and filled with important methods and facts which are interestingly discussed. Dr. Macleod describes the advances in the