

ablest men in all scientific lines in the world, and weekly finds its way through the mails to all parts of the Eastern and Western hemispheres.

From its distinguished editor, J. McK. Cattell, this morning a magnificent silver vase was received as a token of appreciation for The New Era Printing Company's efforts. With it came this letter:

SCIENCE,
Editorial Department.
GARRISON-ON-HUDSON, N. Y., Dec. 28, 1919.
THE NEW ERA PRINTING COMPANY,
Lancaster, Pa.

Dear Mr. Hershey: In order to express recognition of the admirable manner in which The New Era Printing Company has printed SCIENCE for twenty-five years, and of our friendly relations during this long period, I am sending a token of appreciation.

Sincerely yours,
J. McK. CATTELL

From base to top the sterling silver vase measures twenty and one-half inches, and is modeled and embellished along exquisitely chaste lines. It is a Lebolt production, hand-hammered, of uncommon weight, and bears this inscription:

SCIENCE,
1894-1919.
To The New Era Printing Company.
In Grateful Appreciation.

The New Era Printing Company is constrained to a public appreciation of Editor Cattell's handsome remembrance. "Old friends to cling to!"—what more apt response or hope for the years to be?—The Lancaster *Daily New Era*.

SCIENTIFIC BOOKS

Fossil Plants. By A. C. SEWARD. Vol. IV. Pp. 543. Cambridge, University Press.

This, the concluding volume of the Cambridge text on fossil plants, is devoted to a consideration of the Ginkgoales, Coniferales and Gnetales. The final proofs were passed in the spring of 1918, but the printing was held up because of war conditions so that a number of recent contributions could not be

considered. The method of treatment in the present volume is consistent with that of the preceding volumes and the same lack of balanced treatment is shown in the present work. To cite but a single instance of this, six lines are devoted to the remains of *Ginkgo* from North America although *Ginkgo* is exceedingly well represented in the Mesozoic and early Eocene on this continent.

As regards the subject matter, a chapter is devoted to the Ginkgoales, recent and fossil. The second chapter considers *Ginkgoideum*, *Czekanowskia*, *Feildenia*, *Phoenicopsis* and *Desmophyllum*—genera that are believed to belong to the Ginkgoales. The third chapter includes supposed Ginkgoalan genera of still more doubtful allegiance. The nine following chapters are devoted to the Coniferales. There is a rather full and excellent account of recent Conifers. These are grouped in the following nine families: Araucarineæ, Cupressineæ, Calitrineæ, Sequoiineæ, Sciadopitineæ, Abietineæ, Podocarpineæ, Phyllocladineæ and Taxineæ. They are considered as probably monophyletic, the Araucarineæ being regarded as the most ancient and the Abietineæ as the most modern. There are some illuminating discussions of vascular anatomy and the view is expressed that the cone scales in the Araucarineæ are morphologically simple ovuliferous leaves, the double cone scales of the Abietineæ being derivatives of a simple form of sporophyll. *Mesembrioxylon* is proposed for the fossil woods formerly referred to *Podocarpoxylon* and *Phyllocladoxylon*. The final chapter is devoted to the Gnetales and is without noteworthy features.

Opinion will differ as to the necessity or desirability for some of the new generic terms that are proposed, e. g., *Ginkgoites* for *Ginkgo* leaves, on the ground that even in the Tertiary forms the confirmatory evidence of flowers and fruits is lacking: *Cupressinocladus* for vegetative shoots of conifers of a cupressoid habit; and *Pityites* for abietineous fossils of uncertain generic relationship. There is but slight profit in compounding confusion and although a conservative attitude is warranted in dealing with the vegetative remains

of conifers there is but slight evidence in the more recent history of the study of fossil conifers to show that stem anatomy or strobilar morphology furnish any easier read or more definite criteria than vegetative habit, and from the nature of the remains we can not hope to have all of the criteria in individual cases. Even the older students in dealing with foliar impressions were not guilty of more pretentious absurdities than have been put forward under the banner of anatomy during the past decade.

The present volume contains 190 illustrations which on the whole appear rather uniformly better than those of volume III. although it is difficult for the reviewer to understand why paper and presswork were wasted on such illustrations as that forming the frontispiece of the present volume. The bibliography which has a certain air of completeness really contains not more than about twenty per cent. of the literature, but perhaps this should not be criticized since it avowedly contains only "papers and works referred to in the text."

On the whole it seems to the reviewer that Professor Seward has performed a difficult task about as well as could be expected, and despite their obvious shortcomings, which have been freely criticized, these four volumes are a mine of information for the student interested in the floras of the past.

EDWARD W. BERRY

JOHNS HOPKINS UNIVERSITY

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE REPORT OF THE ST. LOUIS MEETING

THE seventy-second meeting of the American Association for the Advancement of Science and the affiliated national scientific societies was held in St. Louis, December 29, 1919, to January 3, 1920, under the presidency of Dr. Simon Flexner.

In spite of the adverse ruling of the United States Railroad Administration on the granting of reduced fares and other difficulties attending travel, the attendance was most satisfactory. All sections held sessions except

Section C, and twenty-two affiliated societies presented attractive programs. The experiment of holding all meetings under one roof, namely the Soldan High School, is believed to have been a success, for the advantages of this concentration, including registration head-quarter and luncheon facilities, more than offset certain minor difficulties.

The formal opening of the meetings of the association took place in the spacious auditorium of the Soldan High School on Monday evening, December 29, Chancellor Hall of Washington University delivering the address of welcome. President Flexner responded fittingly, after which he introduced the retiring president, Professor John M. Coulter who then delivered the address on "The Evolution of Botanical Research," which was printed in the issue of SCIENCE for January 2.

At the conclusion of his address the revised constitution was read and unanimously adopted. The following changes were made in the copy of the revised constitution as it appeared in the November 21 issue of SCIENCE.

Article II. Increasing the annual dues from \$4 to \$5 and the fee for life membership from \$75 to \$100.

Article V. Changing the title of Section H from Anthropology and Archeology to Anthropology and that of Section I from Psychology and Philosophy to Psychology. That the proposed Section J be designated as Section K and that the letters assigned to sections following be dropped back one letter alphabetically in the order given.

The Committee on Policy submitted an amendment to the Constitution to be acted upon at the next meeting providing for a section R, Conservation of National Resources.

The new constitution was declared in effect at the end of the present Convocation.

A reception was tendered to the members of the association at the close of this meeting.

On Tuesday evening at the Soldan High School an address complimentary to the members of the association and affiliated societies and the citizens of St. Louis was delivered by President Flexner. His subject was "Present Problems in Medical Research."