

with to make it valuable as a handbook, but the work will serve a good purpose in stimulating a desire on the part of the reader to know more of the subject and lead him to examine some of the more complete works.

ALBERT F. WOODS.

THE CYCLOPEDIA OF AMERICAN HORTICULTURE.*

It is scarcely a year since the first volume of Bailey and Miller's *Cyclopedia of American Horticulture* appeared. The third volume, bringing the work down to page 1486, has now come from the press, and there is reason to hope that the concluding volume will not be delayed much beyond the end of the summer. Considering the large number of persons who have written 'copy,' the many illustrations to be selected and prepared, and the extent of the work, this promptness of publication is not only deserving of commendation but quite remarkable.

What has been said of the quality of the earlier volumes (*SCIENCE*, June 1 and August 10, 1900) applies equally to the one now under consideration. Perhaps the general reader will be most interested in the excellent brief horticultural treatment of the States the names of which begin with N to P—therefore comprising most of the great horticultural States of the country—and of the Philippines and Porto Rico, and in the articles on parks, perfumery gardening, photography as applied to horticulture, physiology of plants, plant breeding, and the correct methods of potting and pruning plants. The most extensive botanical monographs are those of *Opuntia*, *Pinus*, *Populus*, *Prunus*, *Pyrus* and *Quercus*; and the most important horticultural monographs, aside from some of these, are those of the Orange, Peach, Pear, *Pelargonium*, Pecan and *Primula*.

T.

SOCIETIES AND ACADEMIES.

THE AMERICAN PHYSICAL SOCIETY.

At the meeting of the Society, held at Columbia University, on April 27th, Professor A. A.

* Bailey, L. H. and Miller, W. *Cyclopedia of American Horticulture*. N-Q. Pp. xv + 432. Pl. 11 + ff. 606. New York, 1901. The Macmillan Company. Price, \$5.00.

Michelson, of Chicago, was elected president to fill the vacancy caused by the death of Professor H. A. Rowland, and Professor A. G. Webster, of Clark University, was elected vice-president. The following resolution was adopted and made a part of the minutes:

The Physical Society desires to record its deep sense of sorrow for the death of its late president, Professor H. A. Rowland, and its appreciation of his services to science. By his brilliant researches he did much to advance our knowledge of physics, and by his work as a professor he stimulated many students to greater zeal for accurate scholarship and scientific investigation. His interest in the Society was shown from its beginning, and it owes much to the care with which he watched over the organization. By his death the Society, the science which it represents, and our country have sustained a loss which will be severely felt.

At the same meeting of the Physical Society Professor S. W. Stratton gave an account of the organization of the National Bureau of Standards which is to be established at Washington, and which, it is hoped, will prove of great value both to the scientific workers of the country and to manufacturers.

A paper by Mr. Bergen Davis on a 'New Phenomenon produced by Stationary Sound Waves' described some interesting quantitative experiments with organ pipes. The apparatus and methods employed by Mr. Davis gave results in close accord with what theory would predict, and they make it appear possible to bring the experimental study of these subjects on to an exact quantitative basis.

Mr. H. J. Hotchkiss presented a paper on the 'Counter E. M. F. of the Electric Arc,' giving an account of an experimental study of one phase of this much-discussed question. Mr. Hotchkiss employed an oscillograph, of a type which he has developed and used in numerous previous investigations, to determine whether the arc contains a counter electromotive force which lasts for an appreciable time after the current has been removed. The period of the needle of the oscillograph was about 1/5,000 of a second, and a study of the curves obtained by it has led Mr. Hotchkiss to the conclusion that if a counter electromotive force does exist, which lasts as long as a ten-thousandth of a second after the current is broken, then the