what they ought to do. They were simply left alone to do as they thought best, and they did so. "By their fruits ye shall know them."

It seems to me that the Carnegie Institution is to be greatly congratulated on the methods of its work.

GRAHAM LUSK

## TINGIIDÆ

Mr. Parshley (Science, Vol. LVI, p. 754) credits me with too much. I can not lay claim to any "novel idea." And I wish here to state only three facts.

First: Words like Aphiidæ have been used for a long time. See Aphiidæ, "Traité d'Entomologie Forestière," Barbey, 1913.

Second: We are here concerned not with Latin usage and with professors' opinions but with the International Rules of Zoological Nomenclature.

Third: Article 4 of these rules simply states that ide is to be added to the stem. No latitude is given us. It is the writer's humble opinion that any desired modification or interpretation of this article should be made by the International Commission and not by an individual.

A. C. BAKER

BUREAU OF ENTOMOLOGY

## SCIENTIFIC BOOKS

The Cactaceæ: Descriptions and illustrations of plants of the Cactus family. By NATHANIEL L. BRITTON and J. N. ROSE. Vol. III. Carnegie Institution Publication No. 248. 1922.

What Professor Wheeler irreverently calls silo and saleratus botanists, and doubtless others, often sniff in private over "the futility of spending fortunes in monographing the Cactaceæ," or any other group of plants. Whiffs of such sedition occasionally reach the outside world, but scarcely penetrate the costly shrines wherein such deeds are accomplished. It is not the purpose of this review to make the appearance of the third sumptuous volume of this greatest of modern monographic ventures either the occasion, or the excuse, to fan into a breeze the undeniable zephyr of discontent that comes from botanists who feel that a great deal too much money is being spent on them. And they are unquestionably costly, as rumors of fourteen thousand dollars spent for illustrations alone on this third volume amply testify—not to speak of the still greater cost of exploration, cultivation of specimens and years of study. So that each of these four volumes, judged by a botanical gauge of wealth, costs a fortune, and by any gauge the four of them are perhaps the most expensive of any recent botanical publication.

The completion of this volume, however, with its twenty-four gorgeously colored plates and two hundred and fifty half-tones, does make a good occasion to reiterate that the enterprise is one that only modern conditions could have produced. For in the hurly-burly of the modern educational and scientific world. the three things that can produce such a work are hard to find, and to find them together is all but a miracle. They are knowledge and the opportunity to increase it, time and money. The authors supplied the first, bringing to their work long experience, and having, in the equipment of the New York Botanical Garden. unexampled opportunity to increase it. Freedom from the rush to produce "research" as a manufacturer might produce a foundry was made possible by the far-sighted policy of the Carnegie Institution in providing sufficient money over a long period of years. The whole enterprise is one where cooperation between great institutions and individuals, willing to sink institutional or personal aims for the sake of the work, has been a conspicuous success.

As to the botanical merit of the volumes, specialized journals will no doubt report upon that in due season. All the botanical world knows that the authors are the greatest living students of the Cactaceæ, and their studies have led them into every part of North and South America, to which the group is practically confined. As something over half a million square miles of North America is a desert country, the necessity of knowing pretty accurately the cactus constituents of this flora is obvious. These volumes are, therefore, the foundation upon which all ecological, phytogeographical and physiological work on desert cacti must be based. And in spite of gentle zephyrs of doubt, such as were noted above, the logic of their preparation and the excellence of the product must be as great a satisfaction to their collaborators as the volumes