cases observed it should be replaced by the acute accent. A few words are habitually misspelled, probably because they are not given in the smaller dictionaries: such as cachassa for cachaça, meruhim for marui, tracachā for tracajá (111), chibēh for chibé (115).

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BOTANICAL NOTES

ANOTHER APPLIED BOTANY BOOK

We have become so accustomed to looking for a new book, or a new revision of one of his earlier books by Professor Doctor Henry Kraemer, that it will not be a surprise to receive the announcement of another big volume of over eight hundred pages. In this book, which he calls "Applied and Economic Botany" he has in mind the needs of students in technical schools, and agricultural, pharmaceutical and medical colleges. At the same time the work will prove itself to be a valuable reference book for chemists and food analysts, while students in morphological and physiological botany will find much that is helpful in its pages.

In carrying out his plan for making the book useful for these various classes of persons the author wisely first makes a rapid survey of the plant kingdom from Schizophytes, Algae, Diatoms, Fungi and Lichens to Bryophytes, Pteridophytes, Gymnosperms and Angiosperms. With this preparation the student is next given a good course in elementary cytology and histology, bringing the text up to page 298, where one finds a chapter on the outer and inner morphology of higher plants. A short chapter on botanical nomenclature must be especially useful to the particular students for whom the book is designed, as it gives a few of the general laws of nomenclature, and follows these with twenty-nine pages in which over eight hundred botanical names are enumerated and their derivations briefly given.

The three remaining chapters are given to

¹ Published by the author, 145 North Tenth St., Philadelphia, 1914. \$5.

the classification of angiosperms yielding economic products, the cultivation of medicinal plants, and microscopic technique, including reagents and their use. They all have a strong pharmaceutical bias, and yet the student in an agricultural college will find in them very much that will be helpful to him, more, probably, than in many of the books that have a more distinctly agricultural label.

It should be said that while there are many paragraphs and illustrations in this book that are identical with the author's fourth edition of his "Text-book of Botany and Pharmacognosy," 2 published four years ago, this book is distinct from that, and appeals to a much wider circle of botanical students.

CYBELE COLUMBIANA

Under this title Dr. Edward L. Greene issues a 56-page pamphlet as No. 1, Vol. I., of a new botanical periodical which bears the date of December, 1914. Although it is known that the editor's address is Washington, D. C. (Smithsonian Institution), the publishers are given as Preston & Rounds, Providence; William Wesley & Son, London, and Oswald Weigel, Leipzig. Nor is there a statement of a subscription price, but it is stated on the title page that the price for this part is seventy-five cents, from which one may infer that the cost of the volume may be about three dollars. The same title page also informs us that this is to be "a series of studies in botany, chiefly North American," by the editor, "with occasional articles by others."

This first number opens with six pages of inimitable "explanatory," with reference to the title in which it is intimated that this is likely to be a violet periodical. This suggestion is borne out by the second paper on the "Violets of the District of Columbia, I." (pp. 7-33). Other papers are "Manipulus Malvacearum" (pp. 33-36) by the editor, and "Twelve Elementary Species of Onagra" (pp. 37-56, with 5 plates) by H. H. Bartlett.

Of course every systematic botanist will welcome Cybele Columbiana.

² Lippincott, Philadelphia, 1910.

SHORT NOTES

MR. PAUL B. SEARS publishes an interesting account of the "Insect Galls of Cedar Point (Ohio) and Vicinity" in the December number of the *Ohio Naturalist*. It is accompanied by four plates in which every gall (63 in number) is figured.

Dr. M. T. Cook's "Report of the Pathologist" of the New Jersey Agricultural Experiment Station, for the year 1913, contains a useful annotated list of the most common diseases of the year, arranged alphabetically by hosts. Apples and potatoes had the most diseases (13 and 12), with sweet potatoes following close with 9, and tomatoes with 7.

Dr. G. H. Shull continues to publish plantbreeding papers, as "Sex-limited Inheritance in *Lychnis dioica*," 3 and "A Peculiar Negative Correlation on *Enothera* Hybrids." 4

HERE may be favorably mentioned A. G. Vestal's "Prairie Vegetation of a Mountainfront area in Colorado" but with eight good half-tones and a physiographic map of the region studied (near Boulder).

In the January number of the American Naturalist Professor E. C. Jeffrey publishes a vigorous criticism under the title "Some Fundamental Morphological Objections to the Mutation Theory of De Vries." The writer concludes that "hybridism is the best explanation yet put forward of the peculiar conduct of Enothera lamarchiana, as well as other species of the genus in cultures." Apparently this is also the conclusion reached by Professor B. M. Davis in the same number of the Naturalist in his article "Professor De Vries on the Probable Origin of Enothera lamarchiana."

Two new botanical journals, Journal of Agricultural Research and American Journal of Botany merit favorable notice here. The first is published by the United States De-

partment of Agriculture, and the second is the official publication of the Botanical Society of America. The first is by no means wholly botanical, and yet the articles dealing with plants, while tinged by some economic coloring, are of interest to the scientific botanist also. The second has taken high rank from the first in the literature of scientific botany. Its office of publication is the Brooklyn Botanic Garden.

It inspires hope to find that the "part" of the "North American Flora" which appeared December 31, 1914, is the first part of the final volume (34), but this hope of early completion is much dampened when we find that this part brings the total number of pages now printed up to about 2,000, which is only about one ninth of what the whole work will contain. It would not be fair, however, to estimate that since it has taken more than nine years to print this much (one ninth) it will require nine times as long, i. e., about one hundred years, to complete the Flora, for it must be remembered that authors have been at work on most of the volumes for the past ten years, and that we shall soon have a rapid appearance of successive parts. This particular part, which is principally from the hand of Dr. Rydberg, begins the tribe Helenieae of the family Carduaceae, and carries it into the tenth of the fourteen sub-tribes.

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SPECIAL ARTICLES

A FOURTH MALLOPHAGAN SPECIES FROM THE HOATZIN

The hoatzin is a curious, rather pheasant-like, South American bird, which is the only species in the strongly aberrant family Opisthocomidæ, a family that is usually even ranked as a distinct avian order. This order or family, which is to say, this bird, has long been and still is a puzzle to the classifying ornithologists. Its genetic affinities are quite uncertain, although the approved general practise of the bird books is to put the family into a pigeon-hole next to that of the pheas-

³ Zeit. of induktive Abstam. u. Vererb., Bd. XII., Heft. 5.

⁴ Jour. of Genetics, Vol. IV., No. 1.

⁵ Bot. Gaz., Vol. LVIII., No. 5