library. Some one ought to make the experiment of using it as a supplementary reader in the high schools.

CHARLES E. BESSEY.

THE UNIVERSITY OF NEBRASKA.

Catalogue of the Flora of Montana and the Yellowstone National Park. By PER AXEL RYDBERG, Ph.D. New York. 1900. 8vo. Pp. xii+492.

This fine volume, which is issued as the first volume of the Memoirs of the New York Botanical Garden, appeared early in the year, bearing date of February 15, 1900. It is the result of several seasons of work done in the field by the author as collector for the United States Department of Agriculture and the New York Botanical Garden. When he came to work up these collections he found that the flora of Montana was but little known, and accordingly he availed himself of all the accessible material of previous collectors. The final result is a list of 1976 species and varieties of Pteridophyta and Spermatophyta, of which 776 are not recorded in Coulter's 'Manual of the Rocky Mountain Region,' and 163 are new to science.

The treatment of the subject is liberal, and we have here much more than the old-fashioned list which has all but disappeared from botanical literature. The nomenclature is modern, of course, and authorities and descriptions are so freely cited that no one need have any difficulty in certainly identifying all of the species and varieties included. Habitat and locality notes are given with much fullness, and in nearly every case herbarium specimens are particularly indicated by numbers, the only exception being in those cases where the species had been authoritatively reported in standard works. The selection of type, the size of page, and quality of paper all contribute to the finish of the work for which the author supplied so well wrought a text.

The work includes 42 Pteridophytae, 21 Gymnospermae, 423 Monocotyledones, and 1490 Dicotyledones. The large families are Polypodiaceae (22 species), Pinaceae (20), Gramineae (191), Cyperaceae (105), Juncaceae (23), Liliaceae (28), Orchidaceae (22), Salicaceae (29), Chenopodiaceae (50), Amaranthaceae(27), Alsinaceae (34), Ranunculaceae (71), Crucifereae (76), Saxifragaceae (35), Rosaceae (84), Papilionaceae (122), Onagraceae (43), Umbellifereae (41), Primulaceae (24),Polemoniaceae (39), Boraginaceae (40), Scrophulariaceae (93), Compositeae, including Ambrosiaceae and Cichoriaceae (357).

That much work is yet to be done in this region may be seen from the author's remark in the preface that "the area east of the 108th meridian on the south side of the Missouri River, and of the 112th meridian on the north side is practically unexplored botanically," in fact it appears that it is only the mountain regions that have been fairly well explored.

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The Agricultural Experiment Stations in the United States. By A. C. TRUE and V. A. CLARK. U. S. Department of Agriculture, Office of Experiment Stations, Bulletin No. 80. Pp. 636, pls. 153.

This book was prepared as a part of the exhibit of the American Agricultural Experiment Stations at the Paris Exposition. It is an exhaustive treatise on the history, work, and present status of the experiment stations in general and of the fifty-six stations individually, profusely illustrated with half-tones showing the buildings, plats, laboratories, herds, etc., of the different stations. It opens with an account of the general agricultural conditions of the United States as related to the work of the stations, dividing the country into six general regions. The part devoted to the history of the stations includes an account of the early experimental work carried on by the agricultural colleges and other institutions prior to the establishment of experiment stations supported by State appropriation. The first of these stations was located at Middletown, Conn., in 1875, and was afterwards removed to New Haven, where it continues in operation. The movement to secure Federal aid for experiment stations, resulting in the passage of the Hatch Act in 1887, and the development of the stations under the Hatch Act are reviewed. There are now fifty-six stations in operation, including those in Alaska and Hawaii, fifty-two of which receive Federal aid.