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1911.

This notice may close with the following extract from a letter of De Geer from Leufsta, dated October 16th, 1772:—

“A short time since my son [Emanuel] wrote to me from London, that Solander during his voyage got over 1000 new plants, as well as several packages of special animals in spirit. He thought that the Archiater [Linné] should be invited to travel to London without expense, to inspect and describe all these rarities. It would be highly desirable if the Archiater's years would permit of such a journey, as it would be of the greatest value to all lovers of Nature, for no so eminent a judge exists in the world, as the Archiater is.”

B. D. J.

TWO BOOKS ON LICHENS.

The Lichens of Minnesota. By BRUCE FINK. Pp. xvii, 269, 51 pl. 18 figs. Washington, 1910.

Die Brandpilze der Schweiz. By Prof. Dr. H. C. SCHELLENBERG. Pp. xlv, 180, 79 figs. Price, 6 m. 40 pfg. Bern, 1911.

MR. BRUCE FINK has been engaged for many years in the study of Minnesota Lichens, both in the field and in the laboratory, and papers embodying the results of his observations have appeared from time to time in the *Minnesota Botanical Studies* and in the *Bryologist*. The volume before us furnishes the complete record of his work.

A clear and succinct account is given in the Introduction of Lichens in general, their morphology and physiology, their distribution and economic uses. The principal part of the work is systematic, and is prefaced by a descriptive catalogue or outline of classification, largely based on accepted modern methods. The different orders and families are described, and the catalogue is followed by an artificial key to the genera, which should prove helpful to students in determining the position of their plants in the scheme of classification. With each genus is given a key to the species.

The author has successfully avoided too great technicality in his diagnoses of species; he claims merit for being the only writer who gives size of thallus, podetia, &c., but when one turns to the details and finds that certain podetia may be anything between 3 mm. and 30 mm. in height, or, as in another case, from 25 mm. to 90 mm., one wonders where exactness comes in. The crustaceous lichens are equally variable, and measure, say, 10 or 15 mm. to 60 mm. in diameter. A form such as *Lecanora tartarea*, which may spread for feet, if not for yards, is left unmeasured. The old vague terms of “effuse,” “widely spreading,” &c., seem to fit the requirements of lichens sufficiently well, though to beginners in the study these measurements may be of assistance.

Lichens have a wide distribution, many genera and species occurring in all countries where similar conditions prevail, and *Minnesota Lichens*, as the author surmises, should prove a useful text-book for a wide region in North America from the Atlantic to

the Pacific. It has been received in our country with very great interest, as many of the species are familiar to our lichenologists. The record even for Minnesota, however, must surely be far from complete; *Opegrapha* is represented by only two species, the large genus *Lecidea* by twenty-nine. There must be much work still for field students.

The plates illustrating the work are reproduced from photographs, but, though good in themselves, they generally miss just the specific points that are necessary for purposes of identification; as illustrations of the text they are not without value. Mr. Bruce Fink has earned the gratitude of lichenologists by this fine contribution to a somewhat neglected branch of botanical study.

Dr. Schellenberg's volume, containing a complete record of the Smuts of Switzerland, forms part of a larger cryptogamic flora. The preface gives a historic sketch of the study, the distribution and natural history of this group of fungi, all of them parasites, and some of them causing widespread diseases of cereals. They are divided into two families, *Ustilaginaceæ* and *Tilletiaceæ*; keys are given to the genera. With each species there is published an account of infection experiments, germination of spores, &c., and copious figures are provided of infected plants, spores, and germination stages. A list of host-plants, a bibliography, and a good index complete a very full and interesting account of these smut fungi.

A. L. S.

BOOKNOTES, NEWS, &c.

THE last issue (July 4) of the *Journal of the Linnean Society* (Botany) contains a paper "On the Flora of the Falkland Islands," by Mr. C. H. Wright; an enumeration of Chinese Ferns, by Dr. C. G. Matthew; and a revision of the genus *Actinidia*, by Mr. S. T. Dunn. The first is based on a collection made by Mr. Vallentin; there are a few prefatory remarks, from which we learn that the Tussac Grass (*Poa flabellata*) is being rapidly exterminated through the ravages of cattle, and that *Primula magellanica*, since the introduction of sheep, has decreased in height and in the size of its flowers.

MR. NATHANIEL COLGAN contributes to vol. xxxi. of the *Proceedings of the Royal Irish Academy* a paper on the Gaelic Plant and Animal-Names, and the folklore associated with them, of Clare Island. They were collected from the country folk and fishermen of the island in 1909 and 1910, none being admitted which have not been obtained "in the field." The list is prefaced by an interesting essay on various points connected with the names and their origin.

Going about the Country with your Eyes open, by Owen Jones and Marcus Woodward (Pearson, 1s. net), is a volume of the "Scout Library" and is mainly concerned with matters connected with "Scout" life and with animals of sorts. There is however a useful chapter on "How to know the Trees," and a practical one on "Some Uses of the Hazel and Ash."