but it might have been better to have completed the account of each of these groups by itself and to have added a short chapter on the similarities due to convergence.

This very summary description of the contents of Reuter's work unfortunately fails to give any adequate conception of the large amount of very interesting and valuable reading it contains. As the first work to give a comprehensive survey of the habits of the solitary insects it is eminently successful. The writer has collated the essential facts from a very wide perusal of both the older and most recent literature on insect ethology, and has presented the matter in a very succinct and attractive style.

The volume ends with a well-selected bibliography of 60 pages and a good index. The bibliography includes many recent works on the social insects not cited in the text. There are few erroneous statements of fact like the one on p. 365, where it is said that ants appeared "in grossen Massen" in the Jurassic, immediately following the correct statement that "the existence of social Hymenoptera can not be demonstrated till Tertiary times." In the same paragraph we find the erroneous statement that termites occur in the Carboniferous.

The cuts in the text are mostly old, unattractive and poorly printed. Some of them set one to wondering why there are no good figures of many of our common insects, and why our author should be compelled to use, e. g., the time-worn figure on p. 32 of the Cicindela larva, which is so small compared with its burrow that it could not possibly use its legs and dorsal horn in the manner described in the text. The number of typographical errors is considerable and many of them have not been corrected in the two pages of errata at the end of the volume. If it be true, however, as the reviewer is informed, that Reuter was blind for several years before his death, all of these errors and the poor selection of figures may be readily explained and pardoned.

W. M. WHEELER

Mind and Health, with an Examination of some Systems of Divine Healing. By ED- WARD E. WEAVER, with an Introduction by G. STANLEY HALL. New York, The Macmillan Company. 1913. Pp. xv + 500. Price, \$2.00 net.

The occasion for this book is the recent interest of some of the clergy in the practise of psychotherapy. After some account of the history, scientific basis and technique of psychotherapy, and a critical discussion of the merits of Christian Science, divine healing, "new thought," the Emmanuel movement, etc., the author reaches the conclusion that the church and its ministers can rightly and beneficially take a share in treating the sick. Religious faith and fervor, he urges, are a source of vitalizing energy which can be drawn upon for the maintenance and restoration of health. Character and health go together, and the minister of religion is, therefore, charged, to a degree, with the care of health. He should be acquainted with the scientific aspects of psychotherapy and should work in harmony with the physician.

## R. S. WOODWORTH

Labrador. By WILFRID T. GRENFELL and others. New edition. New York, The Macmillan Co. 1913. \$2.50 net.

The first edition of this standard work was recognized as a valuable addition to the literature on this practically unknown part of North America. The chapters on history, geology, Indians, birds, insects, mammals, etc., are admirable contributions from recognized experts.

While the new chapters by Dr. Grenfell have no scientific value, yet they are of popular interest, treating of animal life and of conservation. He sets forth pleasantly the lack of daring courage on the part of the bear and wolf, the domestication of the caribou, the food-value of the porcupine, the destructiveness of the lynx and the wiliness of the wolverine. On animal life he tells of the long winter experiences, when the bears sleep, the rabbits eat young birch, and the porcupine keeps to conifers. He adds: "Strangely enough none of the mammals rely on sight for protection. The difficulty of survival is increased by constant warfare. The squirrel is never safe from the lynx, the caribou from the wolf, the rabbit from the fox."

As to conservation both sea and land game are steadily diminishing. The forests are firedevastated, and immense waste continues in many directions. Indians and Eskimos are decreasing, and yearly bands escape starvation only through charity. Dr. Grenfell recognizes that the aboriginal inhabitants and the lower order of animals must go to the wall. He is however optimistic as to the development of Labrador; with the exploitation of the pulp forest for the whites, and by the reindeer herds for the natives.

The index completely ignores the new matter, an unfortunate oversight of the publishers.

A. W. GREELY

## BOTANICAL NOTES

## THE FOURTH INTERNATIONAL BOTANICAL CONGRESS

ATTENTION of botanists is called to the "first circular" in regard to the next International Botanical Congress, recently issued by the Organizing Committee.

Dear Sir and Colleague,

The International Botanical Congress, held at Brussels in May, 1910, decided, on the invitation of the Royal Society of London, that the next meeting of the congress, in 1915, should be held in London.

At a representative meeting of British botanists, held in London on May 10, 1911, a provisional bureau was nominated, consisting of three presidents (Professor F. O. Bower, Sir David Prain and Professor A. C. Seward) and a general secretary (Dr. A. B. Rendle). The bureau was empowered to cooperate with the permanent bureau of the Brussels Congress and to arrange for the appointment, in consultation with the British botanists, of an organizing committee. This organizing committee was elected at a general meeting of British botanists held in London on March 11, 1912; and at a second meeting held on May 17, an executive committee was appointed. A number of distinguished patrons of botany were also invited to lend their support to the congress.

The following general regulations for the conduct of the congress have been approved by the executive committee:

1. The Fourth International Botanical Congress shall be held in London from Saturday, May 22, to Saturday, May 29.

2. Membership of the congress shall be conditional upon subscribing to its regulations and the payment of a subscription of fifteen shillings. Members will receive all the publications of the congress. Ladies accompanying members may attend the meetings and excursions of the congresson payment of ten shillings each.

3. The work of the congress shall include the different branches of botanical science; and the congress will also carry on the work on (1) nomenclature, and (2) bibliography and documentation, left over from the previous meeting.

The permanent bureaus entrusted with the work concerned with (1) nomenclature, and (2) bibliography and documentation will act in conjunction with the executive committee.

4. Any language may be used in the discussions; if desired by the members, propositions shall be translated forthwith into English, French and German. English shall be the official language of the congress.

Particulars of meetings, discussions, excursions, etc., will be issued later.

American botanists are reminded that it is not too early to begin making arrangements for this congress. Communications may be addressed to the general secretary, Dr. A. B. Rendle, keeper of the department of botany, British Museum, Cromwell Road, London, England.

A NEW KIND OF BOTANICAL TEXT-BOOK

It is not often that the reviewer of books finds one of a new type, and especially is this true in regard to elementary text-books in science; yet in John G. Coulter's "Plant Life and Plant Uses" (Am. Book Co.) we find just such a case. It is so unlike the usual book designed for beginners in botany that the author allows the use of the word text-book only with particular limitations and restrictions. Avowedly intended as "a foundation for the study of agriculture" and "domestic science" the author has not al-