

Principles of Economic Zoology. By L. S. DAUGHERTY, M.S., Ph.D., Professor of Zoology, State Normal School, Kirksville, Mo., and M. C. DAUGHERTY, Kirksville, Mo. Philadelphia and London: W. B. Saunders Company. 1912. Cloth, 12mo. Pp. 410. 301 illustrations. \$2.00 net.

This recent text-book presents a number of commendable features and adds another to the rather numerous list of available text-books for the beginner in zoology. It seems more particularly adapted for the normal school work in which the authors are engaged, and this perhaps accounts for the effort to include a very large number of examples rather than to give a more detailed and exact description of representative forms in the principal groups of animals. Possibly the great number of forms mentioned would be confusing, but in the hands of a skillful teacher the book could certainly be very useful in the extending of acquaintance with animal forms in general. The economic feature of the work, which has been emphasized in its title, will make it welcome in many schools where attention to this phase of the subject is desired. While these references are usually brief they generally sum up in fairly compact form the more important economic points, and are quite suggestive for references to more extended works in this field.

The illustrations are numerous, usually well selected and very well printed, and add a very important feature to the book.

One point which seems somewhat of a blemish is the inclusion of a discussion of economic or other matter referring to an entirely different class under a sub-heading which is restricted to some minor division of the group, for example pages 40, 44 and 70, the discussion of economic importance included in a paragraph under minor classes in the branch, relate for the most part to species included in entirely different classes and without especial attention of the student might very likely be supposed to refer to the class in which the paragraph occurs. This fault is one which might easily be corrected by a different arrangement of sub-headings.

The substance in general seems to be carefully stated and while there are some errors, due no doubt to lack of first-hand knowledge, the preparation shows care, and while stated to be essentially a compilation, the authors are to be commended for the success shown in selection and presentation of material.

In typographical respects the book is very satisfactory and a credit to the publishers.

HERBERT OSBORN

THE MINERAL WEALTH OF CANADA

ALTHOUGH the discussion of reciprocity with Canada is now quiescent, yet all citizens of the United States are naturally interested in the development of our sister country. This is especially true of the readers of SCIENCE, because Canada has given to this country such a large number of eminent, influential and successful educators and scientists.

A recent publication of the Canadian Department of Mines gives us many items relating to the mineral wealth and to some of the resulting manufactures that ought to be of importance to our own people. This work is entitled "A General Summary of the Mineral Production of Canada during the Calendar Year 1911," by John McLeish, B.A., chief of the Division of Mineral Resources and Statistics.

From this we learn that the total value of the mineral products of Canada in 1911 was \$103,220,994, or \$14.42 per capita. The production was distributed amongst the various Canadian provinces arranged in order of the values as follows: Ontario, \$42,796,162; British Columbia, \$21,299,305; Nova Scotia, \$15,409,397; Quebec, \$9,304,717; Alberta, \$6,662,673; Yukon, \$4,707,432; Manitoba, \$1,791,772; Saskatchewan, \$636,706; and New Brunswick, \$612,830.

Of these mineral products the metallic were valued at \$46,105,423; the non-metallic at \$57,115,571, of which \$22,709,611 were for structural materials and clay products.

As a matter of comparison it is here pointed out that for the same year 1911 the mineral products of the United States, according to our