

The second part of the book is devoted to our meat supply and dairy produce. The greatest scare among home meat-producers has been occasioned by the increasing imports of frozen meat—chiefly mutton. The future of this trade is, however, very dubious, and exportation completely collapsed when prices fell in 1886 and 1887. A New Zealand colonist, writing to the *Otago Witness*, says:—"The producer, when he sends his meat to London, realizes about 4½d., perhaps only 4d., per pound; and when he deducts expenses, say 2½d., he has only about 1½d. per pound for the choice of his flock. Now, this will not pay him, and some of our largest exporters of meat have decided that it will not pay them to send home their meat."

Mr. Bear's views on the future of English farming are, on the whole, hopeful, but he is accused by some of his critics of being an optimist. He has also brought down the wrath of the Canadian Press upon him for decrying the climate of Manitoba as a wheat-growing area, and discounting the reports of its fertility. As published under the auspices of the Cobden Club, the bias of the work is in favour of free trade, if we may except the trade in live stock, where contagious diseases are involved. Some political or economical bias ought to be accepted as inseparable from a book so issued. The reader will no doubt exercise judicious discrimination in accepting all the deductions, but will not fail to see that Mr. Bear's arguments are well supported by facts and official figures. The book is, in fact, a valuable contribution towards the solution of a question of vast importance—the future of our agriculture.

COLEOPTERA.

Biologia Centrali-Americana—Zoology: Coleoptera.
Vol. I. Part II. By David Sharp, M.B., F.Z.S., &c.
(London: R. H. Porter, 1882-87.)

ALTHOUGH nearly six years have been required for the completion of this volume, entomology has received a valuable contribution, which is at the same time an evidence of the untiring industry of its author and of the great liberality and enterprise of its editors. The volume covers about 840 pages, illustrated by nineteen plates, including in its scope nine divisions of the Coleoptera, called families, as follows: Haliplidæ, Dytiscidæ, Gyrinidæ, Hydrophilidæ, Heteroceridæ, Cyathoceridæ, Parnidæ, Georissidæ, and Staphylinidæ, in dealing with three of which Dr. Sharp had already shown a rare combination of analytical power and synthetic skill.

While the arrangement of the families in the order indicated above might be criticized as somewhat unnatural, it is to be presumed that the convenient division of labour among the different authors, and the approximation of the labours of each in one volume, had more to do with the sequence than the desire to indicate affinities.

The family *Haliplidæ* presents no point worthy of special mention; there are three new species in a total of six.

The *Dytiscidæ* is represented by 168 species, of which

about seventy-one are new, nearly all small species, while the thorough analytical study previously given to the family by Dr. Sharp has left but one generic division to be indicated.

The *Gyrinidæ*, represented by twenty species, of which four are new, presents nothing of note, except the evident tendency of *Gyretes* to replace *Gyrinus* in the warmer parts of America.

The *Hydrophilidæ* contains 141 species, four-fifths of them new, requiring the indication of thirteen new genera. In the study of this family, Dr. Sharp gives evidence of the close attention he has devoted to it from the commencement of his career as an author, and he has shown how much new work may be done even in those families moderately well studied. The point seems well taken that the *Hydrophilidæ* constitute a family, and not a complex equivalent to the *Adephaga*. While no new arrangement of the family is proposed, the inaccuracy of our present method is shown, and numerous structural differences are indicated, which may form the basis of a better system when more is known of the genera from other regions than Europe and North America.

The next four families, *Heteroceridæ*, *Parnidæ*, *Georissidæ*, and *Cyathoceridæ* are all of small extent, containing between them but fifty species. While these are closely related among themselves, their position in mass between the *Hydrophilidæ* and *Staphylinidæ* is unnatural, and obscures their evident relationship with the *Byrrhidæ* and certain *Dascyllidæ*.

The greater portion of the volume is occupied with the treatment of the *Staphylinidæ*, in which more than 1400 species are enumerated, seven-eighths of them new; of the remaining eighth a fair proportion had already been described by Dr. Sharp elsewhere. The mere numerical statement will give but an inadequate idea of the labour expended in this part of the volume. Those who have had occasion to deal with the *Aleocharinæ* will realize the amount of minute examination required, almost ruinous in its effects on the eyesight. It is evident that the *Staphylinidæ* fauna of Mexico is far from being exhausted, and had as enthusiastic collectors as Mr. G. C. Champion collected in other parts as he did in his regions, it is safe to believe that the number of species would have been more than doubled. In a notice like the present it seems unnecessary to enter more deeply into details. Although much has been done in *Staphylinidæ*, our knowledge of the fauna of Europe is the only one approximately complete, and it gives a very narrow basis for comparison.

As a whole, Dr. Sharp's work will receive the recognition due to careful, conscientious, and erudite labour. It is to be regretted that the descriptions are at times too brief; and how much difficulty future students may find in following them may be inferred from the experience of Dr. Sharp with the longer and very able descriptions of Erichson.

The volume concludes with nineteen plates, with about 450 figures, which will prove useful in the identification of the species. The omission of details is to be regretted, although their representation would have given Dr. Sharp an amount of labour which he could hardly be expected to undertake.

G. H. H.