

given a single case of enteric fever, the habits of the house-fly may easily cause an outbreak of the disease, which may have far-reaching consequences. As a potential disease-disseminator, at any rate, no other British insect is of anything like the same importance as the common house-fly; yet by the British public its potentialities are but dimly realised, if at all.

In the volume under review, which "is not intended to be a scientific monograph," Dr. L. O. Howard, a well-known authority, provides a convenient and altogether admirable summary of existing knowledge concerning the subjects mentioned in the title. The book is well arranged, simply yet forcibly written, excellently illustrated, and provided with a very complete "bibliographical list," while the results obtained by other workers down to the date of publication are duly noted in the text. With regard to the range of flight of house-flies—a subject of great practical importance—it may be mentioned that the observations of Copeman, Howlett, and Merriman, showing that the insects are capable of flying to a distance of more than 1400 yards, were published too late for inclusion. Only two comments seem necessary by way of criticism; in a subsequent edition, which we hope will be called for, Dr. Howard should correct the unfortunate slip on p. 18, where it is stated that the house-fly's eggs vary in length "from one-sixth of an inch to a little longer" (the real length being one millimetre or a little less), and should on no account omit to provide an index. If a hackneyed phrase may be pardoned, "The House-fly—Disease Carrier." "supplies a want," and a copy of it should not only find a place on the shelves of every medical officer of health and borough surveyor in the British Islands, but should also be included in every public library.

E. E. A.

#### MAN AND BEAST IN EASTERN AFRICA.

*Man and Beast in Eastern Ethiopia: from Observations made in British East Africa, Uganda, and the Sudan.* By J. Bland-Sutton. Pp. xii+419, with 204 engravings on wood. (London: Macmillan and Co., Ltd., 1911.) Price 12s. net.

THIS work has been prepared with considerable care, and the reviewer has no desire to be captious; but he feels bound to say that there is little in it which strikes him as being due to really original observations on the part of the author; nor are the illustrations (all of them woodcuts) particularly novel, or, in the case of beasts and birds, invariably accurate. They do not possess the truth of photographs taken direct from nature. Moreover, in regard to these illustrations, many are from photographs or drawings in other books; and even when the source of the original is mentioned (this is not always done), one asks oneself why they should be reproduced, since the original work is easily accessible in libraries.

In like manner, the text of the book is almost entirely made up by extracts or paraphrases from the published books or reports of H. M. Stanley, Joseph Thomson, F. Elton, Speke, F. C. Selous, H. H. Johnston, Newton Parker, J. F. Cunningham, various

members of the Church Missionary Society, C. W. Hobley, R. J. Stordy, Mr. and Mrs. Hinde, W. S. Routledge, L. von Höhnelt, A. H. Neumann, F. J. Jackson, Drake-Brockman, J. E. S. Moore, Donaldson Smith, and others, whom it would be tedious to enumerate. As an example of inappositeness the author has put in a drawing of *Cobus ellipsiprymnus*, the South African waterbuck; but he is obliged to explain that it is absent from the districts he is describing, where the form of waterbuck is *Cobus defassa*. The African lung-fish (Protopterus) is described as the Lepidosiren (the Lepidosiren being the representative of this order which is found in the waters of the Amazon and its tributaries in South America; the figures in the text, of course, are those of Protopterus).

These criticisms do not imply that the book is not an exceedingly interesting one for persons who are unacquainted with the natives, beasts, birds, and reptiles of eastern equatorial Africa. To those who desire a superficial acquaintance with this remarkable fauna it will certainly be of use, but to be perfectly fair, it must be taken as the summary of other people's work and other people's observations, and cannot be described, as it is on the title-page, as being based on observations made by the author, though undoubtedly the author's own journeys have taught him to appreciate the interest and the accuracy of the works published by his many predecessors.

H. H. JOHNSTON.

#### OUR BOOK SHELF.

- (1) *A Compendium of Aviation and Aërostation: Balloons, Dirigibles, and Flying-machines.* By Lieut.-Colonel H. Hoernes. With a preface by J. H. Ledebuer. Pp. xi+179. (London: Charles Griffin and Co., Ltd., 1911.) Price 2s. 6d. net.
- (2) *The Helicopter Flying-machine: an Account of Previous Experiments, including an Analysis of the Author's Turbine Machine.* By J. Robertson Porter. Pp. viii+80. (London: Aëronautics Office, 1911.) Price 3s. 6d. net.

(1) LIEUT.-COLONEL H. HOERNES has, under the title given above, produced a very readable popular handbook, and its low price and handy size should find it a ready market. Its chief value is as an historical record, the section dealing with dirigibles being particularly useful and giving a mass of important information in a small space. As may be expected from one whose name is well known as an authority on lifting-screws, the author declares emphatically for the helicopter as the machine of the future, and says: "In my opinion at least, the lifting-screw machine, or helicopter, forms an advance on every other type of flying-machine." The reasons for this statement are given as its capabilities for vertical rise, its lightness, strength, and ease in landing, its safety, trustworthiness, and ease in control.

(2) On the other hand, in "The Helicopter Flying-machine," Mr. J. R. Porter, who has devoted many years to the study of the subject, rejects the helicopter proper for what he terms a "turbine machine." The propellers in this apparatus are designed to produce a horizontal and radial current of air, which is diverted downwards by means of curved annular surfaces, with the result that an upward reaction is produced. It is his opinion that a helicopter proper "has less stability than the aeroplane, that the matter