

inaccuracy of the quarter of a second by the ordinary rhythmic signals—the time vernier of General Ferrie—sent out several times every day from the Eiffel Tower and many other stations. The Eiffel Tower signals (10 and 10.45, A.M. and P.M.) can be received on a crystal set, and practically all the other European stations on a two-valve set. The principal American stations can all be received on a three-valve set. The stations sending out time signals employ a musical note, so it can generally be easily picked out, even when “harmonics” and atmospheric are troublesome. In a few of the world stations, hand signals are employed, so their accuracy may be doubtful to the extent of one second. The ease with which clockmakers get the accurate time from the Eiffel Tower station has already greatly increased the accuracy of the clocks in Great Britain.

The latter part of this interesting little book is devoted to weather predicting. When the amateur has acquired a knowledge of slow Morse he can easily distinguish the different weather telegrams. With the help of a few meteorological hints he can thus with reasonable certainty anticipate the weather in his own locality.

*Butterfly Lore.* By Dr. H. Eltringham. Pp. 180. (Oxford: Clarendon Press; London: Oxford University Press, 1923.) 4s. 6d. net.

WE do not recall ever having read any popular book on insects, of equally limited compass, so attractively written and so accurate and original in its facts as this little work by Dr. Eltringham. Its author is known among entomologists as an enthusiastic and skilful investigator of Lepidoptera, and in writing this popular manual he has brought into it that “freshness” and breadth of outlook that only comes as the result of first-hand inquiry. He treats of butterflies and moths as living organisms, and relates how they live in their different stages and maintain themselves in the struggle for existence. It is not easy to pick out one chapter as being better than another, but perhaps the most suggestive and original are those on the urticating hairs and secretions of caterpillars and on the sense organs of the perfect insects. The concluding chapter, it may be added, gives a very good summary of current views respecting the significance of coloration in butterflies. Almost all the illustrations are original, and many could only have been the product of one who is thoroughly familiar with biological technique. Dr. Eltringham's book deserves a wide circulation, and we hope the publishers will see their way to issue similar manuals on the other and less familiar orders of insects.

A. D. I.

*Economic History of American Agriculture.* By Prof. E. L. Bogart. Pp. x+173. (London: Longmans, Green and Co., 1923.) 6s. net.

PROF. BOGART'S book, although an independent volume, is in the main comprised of the relevant chapters from his “Economic History of the United States,” and is primarily intended for agricultural teachers and students. It is an extremely readable and fascinating account of a subject that can only too easily be made dull. The prime necessity of a book

that serves as a general introduction to a subject is that it should maintain a fair perspective. This is never an easy task, least of all in agriculture, owing to its position as the fundamental industry of mankind, on which, in the ultimate analysis, all civilisation is based. The difficulty is further accentuated in the case of American agriculture owing to the rapid growth of every phase of that country's activities. Prof. Bogart has successfully overcome these formidable obstacles. Whether he is dealing with the application of machinery to agriculture, the great Westward movement, or the system of land tenure, he leaves the reader with a clear and unbiased idea of the essential facts. His conclusions are presented in a final chapter that abounds with terse comments, of which the following is typical: “There is finally an inconsistency, not to say a danger, in a society which is politically democratic, but economically plutocratic.” B. A. K.

*A Bibliography of British Ornithology from the Earliest Times. Supplement: A Chronological List of British Birds.* By H. Kirke Swann. Pp. xvii+42. (London: Wheldon and Wesley, Ltd., 1923.) 5s. net.

As a supplement to “A Bibliography of British Ornithology,” by W. H. Mullens and H. Kirke Swann, the latter author has now published “A Chronological List of British Birds,” consisting of references to the earliest authorities for the generic and specific names of British birds. These researches into the literature of the subject bring valuable aid to the systematic ornithologist. One hopes, however, that the immense labour devoted to them has now brought about something approaching finality in the nomenclature of familiar species. Nomenclature is merely a scientific convenience and not an end in itself, and, however desirable adherence to the rules of strict priority may be, it must be admitted that the recent resuscitation of early and still earlier names for well-known birds has been for the moment the reverse of convenient. If greater uniformity results in the future, when the revised names have become more widely accepted and familiar, there will have been a substantial gain: to such an end a work like this is a useful contribution.

*British Hymenoptera.* By A. S. Buckland, L. N. Staniland, and E. B. Watson. Pp. 48+8 plates. (London: E. Arnold and Co., 1923.) 9s. net.

THE introduction to this book states that the aim is to assist any one who may want “a volume more accurate than the popular romantic books and less technical than a systematic book.” The Hymenoptera are a difficult group to treat in this form, and to produce a handbook of real use, and at the same time non-technical in character, is not an easy task. The present work suffers from over-compression: the actual descriptive letterpress only runs to 34 pages, which, it may be added, have exceptionally wide margins, and the result is that some of the superfamilies are dismissed in but a few lines. At the end of the book are eight clearly executed half-tone plates illustrating typical Hymenoptera and insects which resemble members of that order. The beginner who uses the book should note that the family headings of Figs. 25 and 26 and of Figs. 59 and 60 have been transposed.