also may suggest that the hills once studied by Prof. Watts should be called "the Breidden," not "the Breiddens." But these remarks are not criticisms. The book will prove a charming and trustworthy companion to any observant traveller in the beautiful native county of Charles Darwin.

OUR BOOKSHELF.

Tri-lingual Artillery Dictionary. By E. S. Hodgson. With introduction by Col. J. H. Mansell. In three volumes. Vol. i., *English-French-Italian*. Pp. viii+92. (London: Charles Griffin and Co., Ltd., 1918.) Price 5s. net.

WITH the progress of every department of engineering, new technical terms are being continually introduced into the languages of various nations. In the case of artillery, the difficulty of intercommunication which thus arises is considerably increased owing to the conditions under which international relations become necessary in the progress of military operations. Any reader who thinks himself to be a good French or Italian scholar will receive a rude awakening if he opens any page of this book. Even among the most commonplace technical terms he will find the French and Italian equivalents to be quite different from anything that would naturally have been imagined. It is quite evident that much of the work of preparing such a book falls within the definition of original research.

It might be possible for officers of various nations to make each other understand their meaning by pointing to a gun or a model or a drawing, but the use of the telephone renders this method inadequate. By making this dictionary of the size of a quarter-plate photograph, Mr. Hodgson has given officers a book which they can easily carry about and use in communicating with their French and Italian colleagues. The latter ought, of course, to have corresponding books also. It is, moreover, quite certain that a companion volume for German will be urgently needed under any conditions which the future may have in store.

Apropos of dictionaries, the following suggestion is not without a certain significant aspect, namely, that a dictionary is wanted between the language of the Tripos type of mathematical examination paper and the language of the engineering factory. The difference of language certainly does harm.

G. H. BRYAN.

The Mycetozoa: A Short History of their Study in Britain; an Account of their Habitats Generally; and a List of Species Recorded from Essex. By Gulielma Lister. (Essex Field Club Special Memoirs, vol. vi.) Pp. 54. (Stratford, Essex: The Essex Field Club; London: Simpkin, Marshall, and Co., Ltd., 1918.) Price 3s. net.

THE Essex Field Club has done well to reprint as a whole the subject-matter of Miss Lister's two

presidential addresses, and in this way to render them available to a larger public than the readers of the *Essex Naturalist*.

The list of species recorded from Essex is mainly of county interest, but it is the county to which Miss Lister and a number of friends who have been inspired by her work and that of her father have devoted special attention, and therefore serves as an object-lesson to naturalists in other counties. The tabulated lists at the end of the book of the species recorded from similar areas in the Home Counties, the West of England, and the North of Scotland respectively, indicate what may be done by a few enthusiasts in the study of this interesting little group at the base of organised life.

But the greater part of the volume is of wider interest. The first section, on the study of Mycetozoa in Britain, is an historical *résumé* of their study in this country, from the time of John Ray, who refers to one of our commoner species in his "Synopsis of British Plants" in 1696, and of Dillenius, who figures several species in an enlarged edition of the "Synopsis" in 1724, to the classic "Descriptive Catalogue of the Mycetozoa," by Mr. Arthur Lister, in 1894. This monograph, in the preparation of which Miss Lister shared, and the handy little "Guide to the British Species" have done much to extend the study of the group, both in Great Britain and abroad, as is indicated by the rapidly increasing number of species in successive editions of the "Guide," the fourth of which is now being issued by the Trustees of the British Museum.

The second section, on the habitats of the Mycetozoa, will be of great service to workers in indicating where to look for these organisms, and what species are likely to be found in special environments. The habitat varies remarkably, including woodlands, alpine pastures, moorland, rocks, bare earth, sawdust- and straw-heaps, manure, and even bone. A useful list gives a selection of the habitats with the associated species.

Guide to the Study of the Ionic Valve: Showing its Development and Application to Wireless Telegraphy and Telephony. By W. D. Owen. Pp. vii+59. (London: Sir Isaac Pitman and Sons, Ltd., n.d.) Price 2s. 6d. net.

THIS little book is divided into fifteen chapters, each chapter consisting of three or four paragraphs of large print describing the historical development of the ionic valve, the principles on which it works, and the various types of valve that are now used in wireless telegraphy. The diagrams are clear, of large size, and not overcrowded with details. References are given to the original papers describing the various forms of valves and their developments. The book can be recommended to all who intend to take up the serious study of radio-telegraphy, as it will impress the main facts about the ionic valve on their minds.