

Reviews.

LECTURE NOTES IN MEDICAL PROTOZOOLOGY.—By Major R. KNOWLES, I.M.S., Protozoologist, Calcutta School of Tropical Medicine. Obtainable from Messrs. Thacker, Spink & Co., Calcutta, 1923, 236 pp. Price Rs. 6.8 including postage.

THE majority of the important diseases which a medical man has to treat in a tropical country are caused by protozoa and yet there is no text-book on medical protozoology. In order to acquire any knowledge of the rudiments of protozoology and the place of the various parasitic protozoa of man in the general scheme of the protozoa it has been necessary for the "student" to dive into many large text-books on general protozoology, into others on tropical medicine and as a reward to gain a very confused, if not inaccurate, idea of the whole subject. The consequence of this has been that most of us have had to learn our protozoology backwards. During the last few years Dobell and O'Connor have systematised the intestinal protozoa for us, but this constitutes only one branch of the subject.

The present volume is not the missing text-book, but it is the next best thing; it is a collection of the notes which could, and we hope will, form a basis for such a text-book. As the author explains the primary objects of this book were to place in the hands of his students his lecture notes in readable form and to found the fortunes of a book fund which will finance his more ambitious project (i.e., a text-book of medical protozoology). The whole cost of the production of this volume has been generously borne by Sir R. N. Mukerjee and Mr. Ganshyam Das Birla; the whole of the proceeds from its sale will be devoted to the book fund of the Calcutta School of Tropical Medicine.

After the opening chapter on general principles the author has dealt systematically with the various species that are associated with man grouped in the four main protozoological sub-phyla, namely, Sarcodina, Mastigophora, Sporozoa, and Ciliophora, and has ended with three chapters, or rather lectures, on those "nobody's children" the spirochaetes and one of the problematic chlamydozoa.

Each of the human protozoa is described separately as to its position in protozoological classification, its usual environment, its morphology, staining characteristics and differential diagnosis, its method of reproduction and the pathological conditions with which its presence is usually associated. Detailed notes on the technique in the methods of recovering and identifying the organism are given in each lecture which is concluded in every case with a full bibliography.

In dealing with a subject of this nature it is almost impossible to avoid controversial points, but wherever the views of accepted authorities do not coincide both theories have usually been detailed; with a few exceptions, such as in his treatment of the chlamydozoa, his opinions may be said to be comparatively orthodox.

The bibliography at the end of each chapter contains in all over three hundred references; this does not include any references for the trypanosomes, the bibliography of which the author explains is too enormous to be attempted.

This excellent book goes far to supply a long-felt want; that it does not go the whole way is not the fault of the author. A copy should be in the hands of every post-graduate student in the tropics. The whole of medical protozoology is presented in an easily assimilable form and at the same time the position in general protozoological classification of the various protozoa of medical interest is clearly explained.

There are many points about this book which one could criticise, as for example the précis method of

writing which is very irritating to read, the absence of an index or of even a list of lecture headings and so forth, but these faults were all committed in the interests of economy and were probably quite as obvious to the author as they are to us.

OFFICIAL HISTORY OF THE WAR. MEDICAL SERVICES: HYGIENE OF THE WAR. Vols. I and II.—Edited by Major-General Sir W. G. MACPHERSON, Col. Sir W. H. HORROCKS, and Major-General W. W. O. BEVERIDGE, London: H. M. Stationery Office, 1923. Price. 21s each, Vol. I—pp. 400, Vol. II—pp. 506. Obtainable from Messrs. Thacker, Spink & Co., Calcutta and all agents for Government publications.

WE have already noticed in these columns the volumes devoted to the surgery and medicine of the war. The war was largely a struggle in the preservation of morale. Constantly varying conditions had to be considered, provided for, and the necessary adaptations made. Early prodigality had later to be replaced by scientific sufficiency, and efficiency had to be attempted with makeshift contrivances. A small but highly trained and competent army, having done its work, was replaced by a large mass of new soldiers who, though young, eager and willing, were untrained. But in these circumstances we can find the reason for the success which rewarded the efforts of the sanitary personnel of the British army. The first army, from the highest to the lowest rank had been well trained in sanitary science. All had appreciated and had accepted the importance of military hygiene, not only the trained personnel, but every officer and man of the original expeditionary force. There was therefore ready the framework for building up the sanitary structure of the new army. And the sanitary sense was not wanting in the new soldier. Already in civil life he had learned the benefits and comforts of good sanitation and though new conditions and surroundings left him somewhat at a loss, he was receptive and responsive to the teaching of those who knew, and soon the new was as good as the old.

These volumes are of extreme interest. To the military medical officer they will of course be indispensable, but for the civilian medical officer in India where conditions sometimes resemble those "behind the front line" they will also be of great value. In reading the volumes one admires the prescience and the organizing abilities of those responsible for the soldier's hygienic welfare. They were quick to realise the importance of new factors and problems, able and willing to enlist the help of those who could most quickly point the solution, and quick again to see that these methods were put into practice where applicable; and in the records under review full credit is given where it is due.

The various chapters deal with the different aspects of military hygiene and each chapter is written by an expert, who, in addition to his own experience, has been able to draw on all official documents relating to his subject. It is impossible to treat each subject in detail and we can only indicate the most salient features.

A short but excellent preface by Major-General Macpherson, epitomises the scope and purpose of the books.

The chapters on water supply and on the disposal of waste products, being subjects of primary importance, naturally fill most of the first volume.

Sir William Horrocks contributes the section on water purification and a complete description is given of all measures taken in connection with water purification and distribution; not only in France but in all other theatres of war. In France chlorination was carried out from the beginning and continued to be the most successful method of giving safe drinking water,