overcome, the effects of the African slave-trade in spreading disease and the conditions under which the trade was carried on."

The book is bound in two volumes, apparently for the sake of convenience in handling, rather than as a mode of arrangement of the subject-matter. The contents are distributed under 23 chapters of widely varying lengths or number of pages, the longest being Chapter VII on Yellow fever covering about 160 pages and the shortest being 20th Chapter on Suez Canal in nine pages. The first four chapters deal, in general terms, with the medical conditions in the navy, army, Africa, India, Australia, in the early days of colonization. Chapters V and XVIII describe, with varying degrees of detail and range of knowledge, some of the important diseases commonly labelled as tropical diseases. Malaria, Blackwater fever, Yellow fever, Trypanosomiasis, Leishmaniasis, Leprosy, Cholera, Plague, Undulant fever, Relapsing fever, Melioidosis, Dengue, Amœbic dysentery and Hepatitis and Ankylostomiosis form the order in which they are dealt with. Chapter XIX is entitled Tropical diseases connected with food and is subdivided into two groups. The first is called Avitaminoses and includes Beriberi, Epidemic Dropsy, Pellagra and Scurvy. The second sub-group deals with poisonous foods (ginger paralysis, etc.). The next three chapters (Chapter XX, XXI and XXII) are of a general nature devoted respectively to the Suez Canal, the Panama Canal and the Slave-trade. The last chapter (XXIII) containing brief biographies of Jacobus Bontius, David Bruce, James Carroll, Oswaldo Cruz, John Everett Dutton, Juan Carlos Finlay, Garcia de Orta, William Crawford Gorgas, Jesse. W. Lazear, William Leishman, James Lind, Patrick Manson, Hideyo Noguchi, Walter Read, Ronald Ross.

D. V. S. REDDY.

Plant Science Formulae. By R. C. McLean and W. R. Ivimey Cook. (MacMillan & Co., London), 1941. Pp. vii + 203. Price 7*sh.* 6*d.* net.

This is a useful little volume which most laboratory workers in botany will find handy on their bench. For its size a book of this nature can scarcely be made anything like exhaustive but on the whole the selection of matter has been carried out judiciously, and the reader will be grateful for many practical hints not easily found in books on botanical technique.

As a university teacher, the reviewer particularly welcomes the suggestion (p. 141) that the devising and constructing of laboratory equipment should form a part of the training of all postgraduate students. The plea for a well-equipped workshop attached to every botanical laboratory is also fully justified.

B. SAHNI.

Sir Shanti Swarup Bhatnagar Commemoration Volume. Edited by Drs. V. S. Puri and P. L. Kapur. (Indian Chemical Society, Lahore Branch), 1941. Pp. vi + 112. Price Rs. 2-8-0 or 5*sh.*

The Commemoration Volume published by the Indian Chemical Society, Lahore Branch, and presented to Sir S. S. Bhatnagar on the occasion of his appointment as Director of Scientific and Industrial Research, Government of India, is a fitting tribute to the many services of Sir Shanti Swarup to the cause of Chemistry in the Punjab. This volume is the outcome of the high esteem in which he is held by the chemists of the Punjab. The Chemistry Laboratory of the Panjab University, the standing monument to the many achievements of Sir Shanti Swarup in the field of chemical research, has produced a band of workers who would add lustre to his inspiring leadership. This volume gives but a glimpse of the numerous investigations in the domain of chemistry that were directly or indirectly inspired by him.

In this volume there are 12 original papers and 2 reviews. The latter are on the importance of Magnetic Measurements for Chemical Problems and the Recent Applications of Colloid Chemistry to Textile Problems. Both these reviews summarise and bring into prominence the important work done in the Chemical Laboratories on these subjects. Other papers cover a wide range of subjects including Soils, Biochemistry and Corrosion Problems. The volume opens with a paper on Adsorption by Precipitated Hydroxides of Copper and Bismuth by Yajnik and his co-workers. It is followed by a paper on the Influence of Magnetic Fields on Adsorption. This is a subject on which Sir Shanti Swarup has done monumental work. The paper contains several references to the previous work

done by Bhatnagar's School. The effect of Inorganic Colloids on the Electro-Deposition of Metals has been ably dealt with by V. S. Puri and his co-workers in his two papers on the subject. Dr. Balwant Singh has contributed the 10th part of his extensive investigations on the Potentiometric Studies in Oxidation-Reduction Reactions. The paper deals with iodometric determinations of oxidising substances. Dr. Gaind has given Part VI of his investigations on Local Anæsthetics with which he has been associated for a long time. A. N. Puri and Asghar have contributed two papers on the Interaction between Oxalates and Soils and Heat of Neutralization of Soil Acidoids. They have produced experimental evidence to show that soil acidoids behave like ordinary acids as regards their heats of neutralization. Kapur and Mathur have studied the Corrosion of Copper and given results of their study on the corrosion of copper by glacial acetic acid. They have shown that percentage of corrosion regularly increases with time. They have also found that concentration accelerates the corrosion of copper. The role of oxygen has also been brought out.

The Commemoration Volume is well printed and well bound and should adorn the book shelves of Sir S. S. Bhatnagar's numerous admirers, students and co-workers.

A. N. PURI.

Education in India: 1937-38. Prepared by John Sargent, Educational Commissioner with the Government of India. (Published by the Manager of Publications, Delhi.) Price Rs. 2-8.

The Bureau of Education, under whose auspices this Report is published, has done good service to the country in bringing out this publication. It deals with education in British India during the official year 1937-38 and covers the usual ground in the usual way. It takes a wide sweep over all types of education: primary, secondary and collegiate, the education of girls and women, the training of teachers, professional and technical education, and the education of certain special communities. It also deals with the personnel and organization of education as well as with certain miscellaneous activities of an educational character.

Up till now the latest authoritative source of information had been the Quinquennial Report for the period 1932–37. Now the present volume brings our information about educational matters nearer to our own times by one more year. It is a pity, however, that this Report has appeared so late. An explanation for the delay is no doubt given in the Preface, but still it is desirable to have these annual Reports as soon as possible after the close of the official year to which they relate. Their utility declines with the time that elapses. An annual Report is like a clinical thermometer which a doctor uses in order to take periodical temperatures of his patient. If the thermometer is not made available in time the progress of the patient cannot be followed and his treatment cannot be intelligently undertaken.

Certain suggestions may now be given with a view to make the Report under review more generally useful to the public. Official Reports often repel the reader because of their unattractive presentation of material. A Report need not be very much different from a book. The Reports prepared under the auspices of the Board of Education in England, for instance, are like books in regard to their format and presentation of matter. The chapter heads for all major topics or divisions of the subject are given boldly as in a book. The same procedure may be followed here. An index may also be provided for ready reference. In the Preface it is mentioned that the Appendices to the present Report are printed in a separate volume. It is necessary to indicate in this volume what those Appendices contain.

Throughout the Report the education of girls and women is referred to as education of "females". Since it is unlikely that the fair sex will be pleased with this appellation it is better to change the terminology.

The price of the Report, Rs. 2-8, is far too much even in these days of paper scarcity and high cost of printing. Finally, the utility of the Report can be considerably enhanced if statistics regarding Indian States could be incorporated and the progress of education in them also could be taken into consideration.

D. S. GORDON.
