Catalogue of Union Periodicals

Vol. 1: Science and Technology. Edited for the National Research Council and National Research Board by Percy Freer. Pp. xvi+525. (Johannesburg: University of the Witwatersrand, 1943.)

THIS catalogue covers the periodicals of seventy-seven libraries in the Union of South Africa which have agreed to co-operate in inter-library loaning. While it should primarily facilitate such loans and thus materially aid the war effort in South Africa, it is also an important aid to reshuffling so as to place the most complete sets in the larger centres. The catalogue renders comparatively easy the compilation of a national list of desiderata of those important titles of which no sets or only poor sets exist in any South African library, and besides eliminating unnecessary duplication it should encourage co-operative purchase to fill the lacunæ thus revealed.

The catalogue includes many titles which are too recent to be included in the World List of Scientific Periodicals, and for that reason and also on account of the subject classification it may be found a useful guide to the existence of scientific and technical periodicals, although not for loan purposes, by scientific and technical librarians in Great Britain.

The present catalogue contains more than 6,000 entries as against 3,117 in A. C. G. Lloyd's List of 1927. The abbreviations used in the World List of Scientific Periodicals are used wherever possible and emphasized by underlining. The primary arrangement is by subject, and the sub-arrangement first by language, and second by country. Where no subject is expressed the main entry goes to the name, for example, Carnegie, Faraday, Franklin, Smithsonian, with cross-references from institutes and societies. Other main entries are under distinctive titles, while where no subject is expressed with academies, institutes or societies the main entry goes elsewhere, for example, to institutes, laboratories, museums, etc. Entries closed on September 30, 1941, and participating libraries are now invited to maintain a list of additions and corrections for quarterly publication in South African libraries.

The Weather

By George Kimble and Raymond Bush. (Pelican Books, A.124.) Pp. 188+24 plates. (Harmondsworth and New York: Penguin Books, Ltd., 1943.) 9d. net.

Meteorology

By Lieut. Colonel R. M. Lester. (Complete Air Training Course, No. 4.) Pp. 64+4 plates. (London, New York and Melbourne: Hutchinson's Scientific and Technical Publications, n.d.) 2s. 6d. net.

"THE WEATHER", by Kimble and Bush, must be one of the best nine-pennyworths extant. It is chatty and inconsequential, but when one comes to the end and looks through the index, one realizes that it holds a great deal of solid information; even the reader who follows the suggestion to skip the introduction will miss a great deal. The structure of the atmosphere, instruments, clouds as weather forecasters, depressions and anticyclones are all dealt with simply but effectively; then follow the seasons, 'one-man' forecasting and some oddments like weather cycles, all illustrated by many rhymes from folk-lore, some clear diagrams, and twenty-four excellent cloud photographs. There are

one or two errors, such as that a halo grows in diameter as the cloud lowers, but on the whole, readers—and we hope they will be many—will obtain a very

good grounding in meteorology.

Lieut.-Colonel Lester's little book is chiefly remarkable for its surprising statements. Its quality may best be shown by a few quotations: "No two snow crystals are ever alike. When one considers the millions of crystals that fall in a snow-storm, this is an amazing feat of nature." "Rainfall is greater at high altitudes. This is caused by the air coming into contact with the cold surfaces of these higher regions." Cyclostrophic effect in wind. "This is the deviation of its flow further from the curved path through the gyroscopic properties of the air mass." "A satisfactory type of rainfall gauge is a brass tube of just over two inches diameter inside an eight-inch cylindrical can."

Quantitative Chemical Analysis

A Student's Handbook. By Prof. Joseph Reilly and Eileen A. Moynihan. Pp. x+116. (Cork: Cork University Press, 1944.) 7s. 6d.

THIS is a very carefully written and good introduction to quantitative analysis by teachers who have evidently had much experience in presenting the subject to students, and have the ability to write a clear and concise account of all the details of the laboratory work which are essential to success. It includes both volumetric and gravimetric analysis, and the examples chosen are very good. The main emphasis is practical; the chief fault of many books, that of writing an elementary treatise on physical chemistry interspersed with a few practical exercises which are generally quite inadequately described, is avoided. The relevant theory is always given, but in its proper proportion, and the result is a very good practical manual which will make easier the work of teachers who adopt it.

The standard of the book is between the intermediate and final of most university degree courses. An appendix describes a method of phosphate separation in qualitative analysis by means of zirconium oxychloride which is an improvement on the usual

procedure by this method.

Martindale's The Extra Pharmacopoeia

Twenty-second edition. In 2 vols. Vol. 2. Pp. xxxiii+1217. 27s. 6d. Supplement to Vol. 1. Pp. 48. 2s. (London: The Pharmaceutical Press, 1943.)

THE second volume of Martindale continues to provide modern and reliable information on drugs and their assay, biochemistry, bacteriology, nutrition and therapy in general. The material provided is as up to date as is compatible with the time necessary to compile and produce the book. The sulphonamides and the vitamins, on which much recent work has been done, are well documented, but the short notes on penicillin direct attention to the rapidity of progress in this field.

As a book of reference for the clinician, pharmacologist and research worker "Martindale" is already well established, and the new volume will deserve

the reputation of its predecessors.

The supplement to Volume 1 records changes in, and additions to, the British and United States Pharmacopoeias and National Formularies. There are also notes on recent Orders affecting supplies of drugs, new proprietary names and approved names of substances.