

and Tanganyika Territory. Then follow two chapters containing a most useful summary of the geology of the Union of South Africa. Central and South-West Africa and British West Africa are dealt with in the two succeeding chapters, the latter including some pages devoted to the British Cameroons and Togoland. Canada and Newfoundland are dealt with in two chapters occupying sixty pages, and the Indian Empire in two of sixty-six pages. These are admirable summaries, which are especially welcome in view of the importance and interest of the work which has been done in these lands and of the great volume of literature that has been epitomised. The Malay States, British Borneo, the Indian Ocean islands, and Hong Kong are treated in a chapter on the East Indies. Then come two chapters on the geology of Australia, one on New Zealand, and one on Oceania, some account being included in the last of territory acquired since the war. The last chapter, under the title of the Mandatory Regions, deals with Mesopotamia and Palestine.

In most cases the descriptions of the several regions are accompanied by sections and folding geological maps in black and white. These are printed on good paper, and students would derive considerable benefit in tinting them with washes of colour. In connection with each area a useful bibliography is also given, which, by referring readers to further sources of information, adds greatly to the value of the book.

Both author and publisher are to be congratulated upon having produced an important and most useful addition to British geological text-books.

(2) Mr. Penzer's book is of a more specialised kind. It is the second of a series devoted to the raw materials of industry, the first of which dealt with cotton and wool throughout the world. This second volume restricts itself to tin within the Empire, which, constituting two-thirds of the world's supply, provides ample material for a single volume. It is proposed to issue later another volume describing the extra-British sources of the metal.

The introduction deals with the history of tin production and with the tin-bearing minerals. Then there are four chapters describing the various fields, arranged according to continents; this part of the book contains much detailed information, and is illustrated by a number of specially drawn distribution maps. There is also a chapter on the industrial applications of tin, and one giving statistics as to output, prices, and conditions of sale. The volume closes with an elaborate classified bibliography.

A perusal of this book has left the impression that its writer has been assembling information upon a subject which is outside the limits of his own practical

experience. This impression detracts a little from the authority of the work, but it must not be allowed to obscure the fact of the author's remarkable industry or of the extraordinary amount of information which he has gathered together into the 350 pages of his book. By indefatigable labour he has made a valuable compilation which many interested in the mineral industries will be glad to possess and keep by them for purposes of reference.

C. G. C.

Our Bookshelf.

The Vitamins. By Prof. H. C. Sherman and S. L. Smith. (American Chemical Society: Monograph Series.) Pp. iii + 273. (New York: Chemical Catalog Co., Inc., 1922.) 4 dollars.

A VERY welcome addition to the literature of vitamins has been provided by Prof. Sherman and Mr. S. L. Smith in the volume under notice. The plan of the book is very simple; an historical introduction is followed by three chapters devoted to the three generally recognised vitamins and a final chapter is added on the relation of these important principles to the problem of food supply. A bibliography is also given, which comprises about a thousand entries and includes the literature so far as the end of 1921.

The treatment of the subject is throughout clear and critical, and the authors err if at all on the side of caution. Thus they do not regard the identity of the water-soluble and antineuritic vitamins as proved, but consider that "the preponderance of evidence thus far available favours the view that the water-soluble, growth-promoting vitamin is probably among the substances which may exert antineuritic action." They display a similarly open mind as to the vexed questions of the nature of vitamin B and its relation to the growth of yeast, which are both being actively investigated, with tantalisingly varied results, in many laboratories. The concluding chapter will probably be found the most interesting by the non-specialised reader, as in it the authors discuss the commonly used foodstuffs from a general point of view, devoting attention to their special merits or demerits, not only as carriers of vitamins but as sources of "good" or "bad" proteins and of energy. Their final conclusion brings comfort to those who are anxious as to the suitability of their everyday diet: ". . . we believe it safe to say that with a dietary selected to make the best use of our ordinary staple foods there will rarely if ever be occasion to purchase vitamins in any other form, or to give any greater anxiety to the vitamins than to some other factors which enter into our present conception of nutritive requirements and food values."

Essai philosophique sur les probabilités. Par Pierre-Simon Laplace. (Les Maîtres de la Pensée Scientifique: Collection de mémoires et ouvrages. Publiée par les soins de Maurice Solovine.) I. Pp. xii + 103. II. Pp. iv + 108. (Paris: Gauthier-Villars et Cie, 1921.) Each vol. 3 francs net.

OUR students spend little or no time in the study of the classical documents of scientific discovery. This neglect is very much to be regretted, for there can be