

whereas it is really a portion of what is practically a sphere, with radius equal to its distance from the earth's centre, and hence quite definite.

Advantage should have been taken of a new edition to correct such mistakes, but, even as it is, Mr. Hoover's work still remains the authoritative text-book on this subject. Like all text-books dealing with a branch of technology in active development, it suffers from the fact that it falls behind the times even whilst it is passing through the press, but this is a disadvantage that the writer of such books must make up his mind to endure. His chief consolation is that it is the production of such books which contributes as much as anything else to the rapid advance of the art that leaves the written page behind.

(2) With true journalistic instinct Mr. Rickard has produced his book on "The Flotation Process" at a moment when this method is attracting a very large share of attention from the mining profession; the book cannot, however, be said to form a contribution of any real value to the literature of the subject, seeing that it is a typical example of a form of book-making that appears to be in some favour on the other side of the Atlantic, though fortunately not in this country. It consists of a series of miscellaneous articles on the subject of flotation by a number of different writers, gathered from various sources, though all have appeared already in the pages of the *Mining and Scientific Press*; these have been strung together on no particular system, forming just such a scrap-book as anyone interested in flotation might put together for himself—very useful, no doubt, to the man who had compiled it for his own purpose, far less so to anyone else, and practically useless to the student who demands a systematic presentment of the subject. The articles vary in length from a few lines to many pages, and are as unequal in value as they are in extent. The best article in the book is probably Mr. Rickard's own introductory chapter, which is itself a paper presented at a meeting of the Canadian Mining Institute.

Whilst Mr. Hoover's book can be recommended to the student who wishes to know what the various flotation processes are, how they are carried out, and what results are obtained by them, Mr. Rickard's compilation gives information on none of these points, but exhibits the different and often widely divergent opinions of a number of writers who approach the subject of flotation from very varied points of view, and most of which possess little more than an ephemeral interest.

H. L.

#### OUR BOOKSHELF.

*The Drink Problem of To-day in its Medico-Sociological Aspects.* Edited by Dr. T. N. Kelynack. Pp. xii + 318. (London: Methuen and Co., Ltd., 1916.) Price 7s. 6d. net.

This book comprises a number of essays by well-known authorities dealing with various aspects of the alcohol question. Dr. Harry Campbell discusses the biology of alcoholism, and asks, What

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is the nature of the peculiar attraction which alcohol exercises over mankind? He considers that the essential factor is the power to intoxicate and narcotise. Doubtless this is so for the drunkard, but as regards the moderate drinker we do not believe it: it is the flavour, and the flavour alone, and it is noteworthy that no non-alcoholic drink has yet been manufactured which reproduces to any extent the flavour of an alcoholic one. Prof. Woodhead deals with the pathology, and Dr. Clave Shaw with the psychology, of alcoholism, Mrs. Sharlieb with alcoholism in relation to women and children, Sir Thomas Oliver with alcohol and work, and the Rev. J. C. Pringle, of the Charity Organisation Society, with alcohol and poverty. In the last essay Dr. Kelynack, the editor, discusses the arrest of alcoholism, and considers that the most effective work in limiting the worst manifestations of intemperance has been accomplished by the action of the Central Control Board, and certainly the statistics of the decline of drunkenness in London since it has been at work bear this out.

The book is largely a partisan one, but, with this limitation, all the social problems connected with the consumption of alcohol seem to be covered by it. The vexed question of moderate drinking is not altogether burked, and Dr. Clave Shaw admits that in the present war the teetotalers do not appear to have come out of the ordeal better than those who have a preference for alcohol. "Moderate drinking" is an elastic term: we would lay down that the maximum daily consumption of alcoholic drink should not exceed an equivalent of two fluid ounces of absolute alcohol for a weight of ten stones, and that it should be taken in a dilution not stronger than 10 per cent. It is interesting to note that a weighty committee of the French Academy of Medicine has advocated a moderate ration of wine in the French Army on the ground that it replaces a certain amount of meat (protein) and actually diminishes the risk of alcoholism!

*Results of Meteorological Observations in the Five Years 1911-1915, also of Underground Temperatures in the Twelve Years 1898-1910. Made at the Radcliffe Observatory, Oxford.* Vol. li. Pp. xv + 215. (Oxford: Humphrey Milford, 1916.) Price 15s. net.

The first part of this volume contains daily meteorological data, for the five years 1911 to 1915, in regard to barometric pressure, temperature, wind, cloud, sunshine, rain, ozone, weather notes, and occasional phenomena, according to a plan adopted in previous years. The figures relating to wind are from two instruments of different dimensions, and a detailed comparison would be interesting, as the instruments are at very nearly the same height above ground, though not quite so nearly as the table makes them appear, since the higher one, given at 114 ft. in all the tables, is really at 116 ft. For this comparison, however, we must wait, as it cannot be made from the figures in the volume before us.

In the appendix, which forms the third section