

The classes most fully dealt with in the guide are "General Reference", "Social Sciences", and "History and Geography". These classes go to confirm Mr. Minto's reputation for solid and scholarly workmanship; but in the classes "Natural Science" and "Useful Arts" Mr. Minto and his coadjutors are clearly out of their depth. The nature of the omissions may be gathered from the following examples. In the class "Chemistry" there is no reference to any of the chemical abstracts or under "Chemical Technology" to the annual reports of the Chemical Society. Under "Mining Engineering" "The Mineral Industry" is omitted, and there are only two entries under the "Bibliography of Agriculture"—one a 44-page pamphlet which is described as representing an important collection! The agriculturists' Bible, "The Experiment Station Record", is not recorded. In turning to the list of contributors mentioned in the preface we see that the advice of librarians of scientific institutions was not thought worth securing. It is regrettable that the Library Association did not insist upon a proper representation of scientific bibliographers upon the advisory panel. The neglect of scientific advice has rendered an otherwise valuable work useless for scientific and technical workers.

### Our Bookshelf.

*Geologische Karte der Erde.* Von Franz Beyschlag. Bearbeitet mit Unterstützung durch die Preussische Geologische Landesanstalt. 1:15,000,000. Lieferung 2, enthaltend die Blätter 5, 6, 9, 10. (Berlin: Gebrüder Borntraeger, 1929.) Gesamt-Subskriptionspreis 150 gold marks.

THE second section of this map on the scale of 1 to 15 million, which is being issued by the Prussian Geological Institute under the supervision of Prof. Beyschlag, includes the four sheets of the southern part of the New World. Two of them were easily prepared, for one covers the Central Pacific with part of California, and another the south Pacific and New Zealand. The islands are too small to show their composition by colour, but initials might have been used for the purpose. As it is, islands such as Barbados and those off Brazil are left without any indication of their geology.

The most important of the new sheets is one covering Central and most of South America, and another of Patagonia and the South Atlantic Islands. These two sheets are especially useful. It is not easy to read them fully without the index of colours, which is to be issued with the last section; but they give a clear view of the general structure of South America. South Georgia is unfortunately coloured as Archean, and that mistake is the more remarkable since the fossil which most clearly proves that at least part of the slates in the island are Mesozoic was found by a German doctor,

was determined by Pompeckj, and is in the collection of the University of Heidelberg. The uncertainty as to the geology of South America may be realised by comparison of this map with that compiled by Du Toit in 1927. Prof. Beyschlag greatly reduces the area of Lower Mesozoic volcanic rocks in the Upper Parana basin and south-western Brazil, but includes in the lavas a large area near Ascension which Du Toit marks as Devonian, Carboniferous, and Archean. The composition of the Sierra de Tanjil and range to the south of it are also different from Du Toit's map. The maps are an example of clear and beautiful colour printing.

*Les Étapes de la physique.* Par H. Volkringer. (Encyclopédie Gauthier-Villars.) Pp. ix+217. (Paris: Gauthier-Villars et Cie, 1929.) 20 francs.

THIS little book of 200 pages is such a good example of the specially French art of popularisation that it is worth examining how the success is obtained. The first point is obvious and clearly attained in the case of M. Volkringer: the author must be a master of his subject. Wherever he gives details of any particular conclusion or experiment, he speaks clearly, as one who has been through that stage and knows it. In the second place, he must be able to select with judgment. This book, slight as it is, gives some enlightening illustrations of all the main stages from Archimedes to Planck and Rutherford. The third point is one on which the French are nearly always more successful than others, one on which the English populariser is apt to feel shy and open to comment. The successful author of such a book must give a certain amount of moralising and what may be thought commonplace generalisation. In this matter M. Volkringer is particularly good; he gives it and it does not appear cheap. Not only his own remarks but apt quotations from greater men punctuate and enliven especially the later pages. "Le succès est le plus puissant toxique." "Le but essentiel de l'industrie est l'adaptation des richesses à la satisfaction les besoins humains." "Tout le secret de sa valeur et son influence [that is, of physics] est dans le fait qu'elle est la science de la mesure."

The book concludes with two short but sufficient chapters on the place of theory in science and the nature of scientific law. The reader gets a glimpse of the philosophy of the subject, but is not immersed in it.

F. S. M.

*An Introduction to Organic Chemistry.* By Dr. Eric John Holmyard. Pp. xi+282+10 plates. (London: Edward Arnold and Co., 1930.) 4s. 6d.

DR. HOLMYARD has attempted to arouse interest in organic chemistry among boys and girls in upper forms who have already passed the school certificate examination, by describing the structure and chemical properties of some of the simpler compounds in both the aliphatic and the aromatic series. Stress is laid upon methods used in the purification and analysis of compounds and upon the development of structural formulæ in order to