

Velocity of Reactions and Catalysis; Fixation of Atmospheric Nitrogen; Glass, Soda, Soap; Electricity and Chemistry; the Colloidal State; Molecular Structure; and Synthetic Chemistry.

The mere enumeration of the titles of the several chapters will serve to show the range and method of treatment of the subject-matter of the book. Prof. Findlay, it will be observed, carried his hearers, and will carry his readers, far beyond the stock subjects of ordinary lecturers on the utility of chemistry. He has not hesitated, in fact, to deal with some of the most recondite problems of modern science, and has given amongst his illustrations many of the most striking and characteristic achievements of the present time. In so doing he has acted wisely. He has not only added thereby to the interest and merit of his book, but he has conferred upon it a measure of permanency which it might otherwise not possess.

The work is a distinct and valuable addition to the popular literature of science, and it is well worthy of a place in the library of every secondary school. No more appropriate gift-book to the youthful tyro could be given, for it is admirably calculated to awaken the aspiration and quicken the enthusiasm of the boy or girl who has any latent faculty for science. Even if it does not impel them towards a scientific calling, it will at least furnish them with a stock of facts and ideas which cannot but tend to widen their intellectual horizon and enlarge their mental outlook. If books of this kind were more generally read and digested we should have less cause to complain of that apathy which has hitherto characterised even the cultured classes in this country in regard to the claim of physical science to be an essential part in the scheme of our national education.

T. E. THORPE.

ECONOMIC GEOGRAPHY.

Commerce and Industry. By Prof. J. R. Smith. Pp. viii+596. (New York: H. Holt and Co., 1916.) Price 1.40 dollars.

THIS book is for the most part an abridgment and rearrangement of the matter composing the same author's "Industrial and Commercial Geography," reviewed in NATURE of February 26, 1914 (vol. xcii., p. 707), though this fact is disguised, to some extent, by the titles given to the sections and chapters. Part i. is entitled "The United States," but the chapters are, for the most part, the same, even in title, as those which come under the general heading, "Industrial Geography," in the earlier and larger work, but with the omission or transference to another part of the book of paragraphs which do not properly come under the head of "The United States." The second part is entitled "Foreign Countries," and here comes in most of the new matter; but even here so much is made up of paragraphs derived from the source just indicated that it requires a very close comparison of the two volumes to ascertain how much altogether is new. A third

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part is entitled "World Commerce," and this is entirely composed of chapters abridged from the corresponding chapters of either part i. or part ii. of the "Industrial and Commercial Geography." A statistical appendix is added, containing tables transferred from the body of the earlier work, brought up to date where necessary, in addition to a few others, these latter including elaborate and useful international comparisons.

From the account just given it will be understood that though the title of the present volume does not profess to offer us a geographical textbook, the contents are even more geographical in form than those of its predecessor. Different countries, or sometimes regions, are the subjects of the chapters in the part, comprising just 200 pages, bearing the general heading "Foreign Countries." In the arrangement of these chapters, as well as in the allotment of space to the different countries, the American point of view is naturally dominant. The first six chapters are devoted to American countries outside the United States, and take up one-fourth of the space given to the whole of this part. The descriptions of countries are necessarily brief. They do not go into details of regional geography, but everywhere they show the author's well-known penetrating intelligence. They are admirable summaries from the viewpoint indicated in the title of the book. They provide teachers with much food for thought as to the geographical causes explaining or contributing to explain the actual state of industrial and commercial development and course of trade, as well as those which afford grounds on which to base reasonable estimates for the future. And in this respect the text is well supplemented by illustrations (many new to this work) of striking significance.

One defect of the larger work is illustrated in this book also. The author does not seem to be a very good proof-reader. On p. 132, title of illustration, we have "countries" for "counties"; p. 476, "Cerea" for "Ceará"; p. 480, "Masamedes" for "Mossamedes"; p. 482, "Beiro" for "Beira." In the last table of the book, a reproduction of that given on p. 100 of the earlier work, the obvious mistake of "165" for "165" as the percentage of protein in sirloin steak is repeated. In the legend to the wheat map of Russia on p. 400 one is obliged to ask, 1 per cent. of what?
G. G. C.

OUR BOOKSHELF.

Geodetic Surveying. By Prof. Edward R. Cary. Pp. ix+279. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1916.) Price 10s. 6d. net.

UNDER the title of "Geodetic Surveying" this book deals with the determination of positions of points with the aid of which topographical surveys can be controlled and combined to form a consistent whole. The methods described are those which have been developed by the Coast and Geodetic Survey of the United States, and their publication in the present work provides a convenient