

been in the greatest difficulty to know whence to draw his ore supplies, to be informed officially that the probable reserves are more than 94 million and the possible reserves more than 435 million tons, he meanwhile knowing but too well that only a very small fraction of even the smaller figure is ever likely to find its way to his furnaces.

H. LOUIS.

### Our Bookshelf.

*Practical Pharmacology: For the Use of Students of Medicine.* By Prof. W. E. Dixon. Pp. viii+88. (Cambridge: At the University Press, 1920.) Price 7s. 6d. net.

WE welcome the appearance of Prof. Dixon's manual; it is certainly the most practical and useful guide to students of experimental pharmacology which we know. The experiments are extremely well chosen to illustrate the underlying principles of therapeutics, and the text, with its illustrations and tables, is so clear and logical that a student can at no time be in doubt as to the methods for performing the experiments, or fail to appreciate their bearing on the practical application of the drugs in disease.

The experiments, some seventy-eight in number, are classified to explain the action of drugs on the various systems of the body, and while use is made mainly of the pithed frog, suitable experiments with mammalian tissues are introduced. Experiments with decerebrated mammals are not described, the author considering that their use in large classes is impracticable and that they may be replaced by suitable demonstrations under Certificate C. A chapter is devoted to a description of the essential physical properties of important drugs, and there is appended a useful table of the doses required to produce typical pharmacological effects in animals.

We have no hesitation in recommending this book as an excellent guide to the study of practical pharmacology. It is one which will be extremely useful to students of medicine, whether they are receiving experimental tuition in the laboratory or not, and it will also be read with much profit by medical men who have not had the advantages of a practical training in the action of drugs.

*The Teaching of Science in the Elementary School.* By Gilbert H. Trafton. (Riverside Text-books in Education.) Pp. x+293. (New York: Houghton Mifflin Co.; London: Constable and Co., Ltd., 1918.) Price 6s. 6d. net.

IN a brief introduction Prof. Cubberley states that the author's aim was "to construct a simple and helpful volume for the teacher who is called upon to teach elementary science lessons, and yet has neither scientific training nor apparatus for the work." The statement prepares the reader for the limitations of the book. Mr. Trafton's scheme includes practically no chemistry, and the physics is both exiguous and scrappy; by far the

greatest part consists of simple observational work upon plants and animals. Within these limitations, however, there is much that is both attractive and useful, and the limitations themselves correspond to those of most rural elementary schools in this country.

Mr. Trafton classifies his subject-matter under the headings of biological, agricultural, physical, and hygienic science, and rightly insists that, however rudimentary the work along these lines may be, it should be done in the genuine scientific spirit. In his introductory chapters he gives a good deal of sound and practical advice with regard to the choice of subject-matter and the methods of teaching, and the bulk of the book consists of sections in which typical parts of the curriculum he recommends are worked out in detail. The curriculum is, of course, chosen with reference to American conditions, but the English teacher should be able to profit by Mr. Trafton's suggestions. There is a carefully compiled bibliography, covering practically the whole field treated in the book, but consisting entirely of American titles.

*Peoples of the Philippines.* By Prof. A. L. Kroeber. (American Museum of Natural History: Handbook Series No. 8.) Pp. 224. (New York: American Museum of Natural History, 1919.)

THE interest of the Philippine Islands to the ethnographer lies in the fact that they are the largest of the possessions of the United States, and the only one of importance in the Eastern hemisphere; that they form a considerable and growing nationality; and that they display in an unusually complete manner the stratification of races and cultures. Three types of race can be identified in the present population, and these may be arranged in the probable order of their arrival—the Negritos of the interior, a short, black people with an elementary type of religion and culture; the Indonesians, of the Mongoloid family, but presenting fewer specific Mongoloid features than the third race, the Malaysians, occupying the coastal areas. As regards culture, the remarkable fact is the predominance of Indian influence as compared with that of China, which provided little more than certain manufactured products. India did not furnish the Filipinos with a definitely crystallised religious cult, or, if so, this cult had already disappeared before the Europeans appeared on the scene. But there came from the Indian races, probably by Malay intervention, a mass of religious practices, ideas, and names, a considerable body of Sanskrit words, a system of writing, the art of metallurgy, a vast amount of mechanical and industrial knowledge, and unquestionably a much higher degree of civilisation than their predecessors had acquired. These facts are clearly brought out in the present handbook, which provides in small space much information, and is furnished with good maps and illustrations.