

to fourteen years of age. The first volume of the series is adapted to children of nine to ten, and the second to children of ten to twelve.

In the preparation of such a book, the author is always confronted with the difficulty of adapting technical knowledge without sacrificing accuracy; but in this volume the difficulty is well overcome. From a simple, yet sufficiently minute, study of typical plants, the exposition passes to the problem of breathing and reproduction in plants, and, by a natural transition, to the study of the human body. There are lessons on the general skeleton, the bones, the muscles, foods, digestion, water, drinks, and stimulants, and also special lessons on respiration, the voice, the senses, the skin, the liver, the blood-vessels, the blood, the nervous system, and education.

These subjects are included in the first 160 pages, which form Part I. Part II. contains some 70 pages, which treat of the leading points of first aid and nursing. The volume is profusely and carefully illustrated, and will serve at once the purpose of a school reading-book and of a handbook for the teacher. It is a virtue that the technicalities are not over-explained—a fact common in books “written down” to children.

- (1) *Vorbereitungsbuch für den Experimentalunterricht in Chemie.* By Prof. Karl Scheid. Pp. viii+620+2 tables. (Leipzig and Berlin: B. G. Teubner, 1911.) Price 13 marks.
- (2) *Chemisch-technisches Praktikum.* Uebungsbeispiele aus der chemisch-technischen Analyse für Studierende an technischen Hochschulen und Universitäten. By Dr. W. Moldenhauer. Pp. vii+206. (Berlin: Gebrüder Borntraeger, 1911.) Price 6 marks 80 pfennigs.
- (3) *Bücher der Naturwissenschaft.* Herausgegeben von Prof. Dr. S. Günther. 11 Band, Chemie und Technik. By Dr. G. Bugge. Pp. 190+7 plates. (Leipzig: Philipp Reclam, jun., n.d.)

(1) A LECTURE assistant with Prof. Scheid's book at his disposal is provided with ample means for demonstrating the chief phenomena of chemistry. The book is compiled with the fullness of detail characteristic of the country from which it comes, and describes the methods used in carrying out some 3000 experimental demonstrations. Many of these are marked as suitable for use by a class, so that the book serves to some extent also the purpose of a laboratory manual.

(2) Dr. Moldenhauer's book on technical analysis deals with coal, water, gas, sulphide-ores, nitrates, vitriol, soda, Weldon-mud, Stassfurt salts, superphosphates, basic slag, manures, iron and iron-ores, zinc and zinc-ores, galena, oils, fats, and waxes, soaps, glycerin, and lubricants. The book also contains a short introductory chapter and a series of density tables. The chapter on nitrates includes a photograph of the “imposing Rjukan power station,” the only lighter touch in a book which should be of standard value to the chemist engaged in the analysis of “heavy” chemicals.

- (3) A small semi-popular manual of applied

chemistry in thirteen chapters. A notable feature of the book is the series of seven admirable quarter-plate photographs, ranging from blast furnaces to bacteria, which form the frontispiece.

*The Great Star Map: being a Brief General Account of the International Project known as the Astrographic Chart.* By Prof. H. H. Turner, F.R.S. Pp. vii+159. (London: John Murray, 1912.) Price 2s. 6d. net.

PROF. TURNER'S labours and interest in the making of the greatest star map, now approaching at least partial completion, eminently fits him for the position of historian, while his characteristic lucid and cogent style makes his history readable by, and interesting to, even the general reader.

The introduction briefly states the purpose of the work, reviews the previous attempts to survey the heavens, and recounts the improvements in instruments and methods which rendered possible the hopeful undertaking of so stupendous a task. Prof. Turner's account of the first Paris Conference, in 1887, is characteristically full of interest, while the discussion of the various schemes proposed, the unselfishness of collaborators, such as Dr. Common, in sinking their own pet schemes, and the method of measuring the plates, holds the reader enthralled by the display of that true scientific spirit which has been a feature of the whole work.

Further on we read of some of the important results already accruing, such as the “solar cluster” and its possible analogues, the ratios of stars of different magnitudes, the relative efficiency of various optical systems, &c.

But it is by future generations of astronomers that the principal harvest will be reaped, and on this account the form in which the results of the measures are recorded is of primary importance. Prof. Turner gives a very simple account of the trend of the earnest discussions of this matter, and the conclusions which have been arrived at from time to time.

*The Statesman's Year Book, 1912.* 49th Annual publication. Edited by Dr. Scott Keltie. Pp. 1428+1xxxiii+9 plates. (London: Macmillan and Co., Ltd., 1912.) Price 10s. 6d. net.

THE utility of the “Statesman's Year Book” increases with every issue. The forty-ninth volume contains the usual compact and accurate information to which we are accustomed, and handles current events as admirably as usual. Maps show the census returns of the United States and India, the changed boundaries in Africa, as well as the parts of the United States and Canada which have been surveyed. The introductory tables provide an important statistical summary of the resources and productions of the British Empire.

The results of recent censuses have been included so far as possible. The volume as a whole tends to make one wonder what improvement can be made to celebrate the approaching jubilee of this valuable annual.