Siegbahn and of others is described, and two clear diagrams of modern X-ray tubes for spectroscopic purposes are given.

The book may be thoroughly recommended to all interested in the matters with which it deals.

Adventures of Exploration. Book 4: *Africa.* By Sir John Scott Keltie and Samuel Carter Gilmour. Pp. iv+180. (London: George Philip and Son, Ltd.; Liverpool: Philip, Son and Nephew, Ltd.; n.d.) 2*s*.

THIS volume is the most recently published of a series of six supplementary readers designed to quicken interest in geography by stories of adventurous travel. They do not claim to give a coherent history of exploration, but serve to direct attention to the great steps and prominent names in the story of discovery. In this respect they form valuable supplements to the orthodox geographical text-book. After a general chapter on early voyages the story begins with Bruce at the Blue Nile, moves to Mungo Park and the Niger, and after a chapter on the seekers for Timbuktu, takes the reader to the great lakes, the Nile sources, with chapters on the work of Burton, Speke, Baker, Thomson, Livingstone, Stanley, and others, and finishes with some of Selous' adventures and Hassenein Bey's recent journey. The stories are admirably told, and well illustrated with maps and pictures. The series deserves to be widely used. R. N. R. B.

Macmillan's Secondary School Atlas. With an Introduction by T. Alford Smith. Pp. iv+64+8. (London: Macmillan and Co., Ltd., 1926.) 5*s*.

THE 64 pages of coloured maps in this atlas include physical and political maps of every part of the world, with enlarged maps of Europe and the more important parts of other continents. There are also January and July temperature maps and annual rainfall maps of all continents and the British Isles, geological maps of the British Isles and Europe, and a number of distributional maps of the world. The physical maps are particularly good, and not overcrowded with names. On all maps the projection is given. Although the scales vary a good deal, an attempt has been made to use simple multiples of the scales of the maps of Great Britain. An index of some two thousand names gives reference by latitude and longitude. The world-pressure maps would be improved by southward extension to show the Antarctic high-pressure area, and in the current and vegetation maps some revision is required on the coasts of Greenland. Murmansk, and not Alexandrovsk, is the terminus of the Murman railway.

The Story of Minerals. By Herbert P. Whitlock. (The American Museum of Natural History, Handbook Series No. 12.) Pp. 144. (New York: American Museum of Natural History, 1925.) n.p.

IN this book the author has aimed at a popular exposition of the elements of mineralogy, his declared intention being "to answer questions rather than to rehearse facts." In preparing it, he has taken advantage of his experience as Curator of Mineralogy in the American Museum of Natural History, and has fashioned the book to answer questions usually put by visitors to the Museum. About a third of the book is given to the principles of mineralogy, including chapters on "Nature's mathematics" (crystallography), "the mimicry of minerals," "water as a maker of minerals," and "change and decay in minerals." The remaining chapters describe some of the commoner minerals and groups of minerals. The book is very well illustrated, and should prove interesting as well as useful to those numerous visitors to the Museum who have not previously studied the science of mineralogy.

Introduction to the Study of Organic Chemistry: a Theoretical and Practical Text-book for Students in the Universities and Technical Schools. By Dr. John Wade. Revised by Dr. Henry Stephen. New and enlarged edition, with an Appendix containing Supplementary Practical Detail, forming with the text an Illustrative Laboratory Course. Pp. xx+646. (London: George Allen and Unwin, Ltd., 1925.) 8*s*. 6*d*. net.

WADE'S "Organic Chemistry" is a book which has enjoyed a deserved popularity for some years. It is therefore only necessary to say that the new edition appears to have been carefully prepared, and that the appendix of laboratory experiments, occupying 65 pages, makes the volume a self-contained guide for students preparing for honours degrees. Dr. Stephen has added a new chapter on derivatives of pyrone, chromone and xanthone, and some new matter at the ends of various chapters. The price of the book brings it within the reach of students, and it may be warmly commended.

Gems and Gem Materials. By Prof. E. H. Kraus and Dr. E. F. Holden. Pp. vii+222. (New York: McGraw-Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1925.) 15*s*. net.

THIS is a well-illustrated account of gem minerals, in two parts. The authors remark in a brief introduction that the study of gem minerals has been named "gemmology," but it is a great relief to have their assurance that this term is not widely used. Part 1 (pp. 9-104) deals with the general properties of minerals, including chapters on the genesis, cutting and polishing, naming and manufacture of gem stones. Part 2 (pp. 107-213) gives descriptions of the various minerals used as gems, and includes numerous tables in which gem minerals are classified according to their properties. The last of these tables gives a summary of the properties of gem minerals described in the text, the arrangement of the minerals being alphabetical. The book concludes with a useful index.

Le mouvement scientifique contemporain en France. 3: *Les sciences physico-chimiques*; 4: *les sciences mathématiques.* Par Dr. Georges Matisse. (Collection Payot.) Pp. 320. (Paris: Libr. Payot, 1925.) 10 francs.

THIS volume constitutes a small guide-book which indicates the main contributions of French chemists, mathematicians, and physicists to modern scientific knowledge. Since the work of about thirty scientific workers is summarised, that of any individual worker is only outlined in a very brief manner.