## **REVIEWS**.

Minéralogie de la France et ses colonies. By A. LACROIX. Vol. V, pp. 501. (Paris : Ch. Béranger, 1913. Price 35 francs.)

Volume IV, published in 1910 and noticed in this Magazine (vol. xvi, p. 71), was to have been the last of this important and valuable work, the author having then abandoned his original intention of giving a detailed geographical index. Fortunately, however, with the assistance of Colonel Azéma the laborious task of indexing and correlating all the localities mentioned in the set of volumes has now been effected, adding greatly to the value of the work for purposes of reference. The present volume contains a second supplement (94 pages) of descriptive matter, dealing mainly with new occurrences of minerals from Madagascar. The elaborate geographical index extends to 464 pages. By including certain localities in countries bordering on France (Alsace-Lorraine, Belgium, Spain, Italy, Switzerland, Channel Islands) the usefulness of the index is increased. Finally, there is a systematic table of all the mineral species described, and a general index and list of errata to the five volumes.

The Curious Lore of Precious Stones. By GEORGE FREDERICK KUNZ. Pp. xiv+406, with 49 plates (6 coloured) and 24 text-figures. (Philadelphia and London: J. B. Lippincott Company, 1913. Price \$5.00 = 21s. net.)

The scope of this new book of Dr. Kunz's is indicated in the sub-title: 'being a description of their sentiments and folk lore, superstitions, symbolism, mysticism, use in medicine, protection, prevention, religion, and divination. Crystal gazing, birth-stones, lucky stones and talismans, astral, zodiacal, and planetary.' We hasten to explain, however, that although precious stones are endowed with certain important characters, fortunately for mineralogists these do not include sentiments, superstitions, &c. The superstitious regards for precious stones date back to remote periods and have little foundation in fact, but it is curious to find how much seriousness is attached to 'birth-stones' even to the present day.

The volume is based on the notes which Dr. Kunz has collected from a wide range of sources and during a long period of years, and he has

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contrived to make the whole readable and of interest. The illustrations are good and varied in character: they are, however, unnumbered, and some of them do not appear to be referred to in the text.

Manual of Petrographic Methods. By ALBERT JOHANNSEN. Pp. xxviii +649, with 770 figures. (New York and London: McGraw-Hill Book Company, 1914. Price \$6.00 = 25s. net.)

Dr. Johannsen, Assistant Professor of Petrology in the University of Chicago, has produced a book on petrographic methods which is well in advance of anything previously attempted in the English language. Besides outlining principles, he has aimed at giving a brief yet clear account of all the pieces of apparatus and all the methods hitherto published, the descriptions being supplemented by full references to the literature. The book will therefore be indispensable to the advanced student and worker in petrography, whilst the treatment is sufficiently lucid for it to be also of use to the elementary student provided he receives some guidance in his selection. The subject-matter is treated in forty-two chapters, and there is also an appendix giving useful formulae, tables, and recipes. The following selected chapter-headings will give an indication of the scope of the work : Mineralogical principles, Stereographic projection, Principles of optics, Lenses, The Microscope (construction, various models, use, and care of), Observations in ordinary light, between crossed nicols, and in convergent light, Measurement of the optic axial angle, Determination of specific gravity, Mechanical separation of rock constituents, Microchemical reactions, Preparation of thin sections, Petrographic collections (field work and office work). The book is well printed and the numerous text-figures are excellent.

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