

attention to questions as to just when a particular principle is to be introduced so that it may stimulate the reasoning powers and be an effective tool in the further study. The compact statements in which the principles of chemistry are expressed afford rather poor material for a memory exercise. It would seem, therefore, to be desirable to develop the principles and theories, at least during the whole course of undergraduate chemistry, rather than in a single course of lectures. G. A. HULETT.

Elements of Mineralogy, Crystallography and Blowpipe Analysis, from a practical standpoint including a description of all common or useful minerals, the tests necessary for their identification, the recognition and measurements of their crystals, and a concise statement of their uses in the arts. By ALFRED J. MOSES and CHARLES LATHROP PARSONS. Fourth edition, vii + 444 pages, 580 figures and three double pages of tables for determinative mineralogy. New York: D. Van Nostrand Company. Price, \$2.50.

The fourth edition of this well-known book differs but very slightly from the third edition (1904). Some changes in the introductory chapter, a few paragraphs added, and the statistics of production and value revised are the only changes noted. The main body of the text, descriptive of the mineral species, has not been changed. For instance, molybdenite is still stated to be MoO_3 (page 277), and thorianite is not mentioned at all. While it is always difficult to decide on what to include and what to exclude from "all common or useful minerals," it would seem more desirable to include a mineral like dumortierite which has been found in this country in five different states, rather than such rare ones as aikinite, apthitalite, etc. It must be somewhat confusing, particularly to a student, for whom the book is specially adapted, to find under pyroxene, crystal drawings of "fassaite" and "leucaugite" (Figs. 518 and 519), neither of which is mentioned in the text or in the index. The brief mention of many of the not very common yet still not very rare minerals would be a slight improvement on this otherwise excellent book, which gives, as the extended sub-title briefly indicates, about all the essential facts of mineralogy. W. T. SCHALLER.

Annuaire pour l'An 1910. Published by the Bureau des Longitudes. 16 mo., 820 pages. Paris: Gauthier-Villars, 1910. Price, 1.50 francs.

As cheap as before, as full of inaccuracies as usual. In the immense amount of information given upon astronomical, geographic, physical and chemical phenomena, the larger part is of course correct, but a short search brings to light so many inaccuracies that the work as a whole must bear the stigma of being unreliable, at least as regards physical and chemical data. In one place, a column of chemical equivalents of the elements is headed "electrochemical equivalents." In a table of atomic weights and chemical equivalents, antimony, arsenic, nitrogen,