

for the origin of these rocks has been the subject of a great variety of conflicting theories; but many useful observations are recorded. The microstructures are illustrated by twelve photographs of chamositic sandstones and oolitic ores from French, Belgian, and German localities.

*A Survey of American Chemistry.* Vol. I.: July 1, 1925, to July 11, 1926, including Reports from Scientific Committees, Division of Chemistry and Chemical Technology, National Research Council. Edited by William J. Hale, in co-operation with Clarence J. West. (Published for National Research Council.) Pp. 257. (New York: The Chemical Catalog Co., Inc., 1927.) 2 dollars.

THIS compilation will afford actual assistance to chemists in so far—only so far—as its prearranged national limitations have been ignored by the authors of its thirty-four chapters. Summaries of the literature of chemistry are increasingly acceptable to the chemist, whether investigator, teacher, or student, provided that it may reasonably be supposed that relative scientific value is the only criterion of the consideration or rejection of subject matter. Moreover, the student of American history would obviously be better served if he could be provided with some means of ascertaining whether the numerous reports of investigations which are here admirably chronicled and discussed were as American in origin as the name of the journal in which they appeared would indicate; if, too, he could gauge the extent of the lacuna represented by the publications of Americans in European journals. It will be obvious, also, that the granting of a patent is no guarantee that the work is indigenous.

In any case, both chemists and historians will regret the absence of an index; not even a list of authors is provided. In some chapters, however—the net is spread very wide over pure and applied chemistry—it is evident that an attempt has been made to present a summary not only of considerable interest but also of permanent value. A. A. E.

*Gmelin's Handbuch der anorganischen Chemie.* Achte Ggung neu bearbeitete Auflage. Herausgegeben von der Deutschen Chemischen Gesellschaft. Bearbeitet von R. J. Meyer. System-Nummer 19: Wismut und radioaktive Isotope. Pp. xxii + 229. 33 gold marks. System-Nummer 20: Lithium. Pp. xxiv + 254. 37.50 gold marks. (Berlin: Verlag Chemie G.m.b.H., 1927.)

THE parts of Gmelin's new "Handbuch" which deal with lithium and bismuth, like the earlier parts, show abundant evidence that a painstaking and exhaustive review of the literature up to July 1926 has been made. Following the general plan of the work, the parts open with notes on the history and distribution of the elements. Then follows a comprehensive survey of their physical, electrochemical, and chemical properties, and a similar scheme is adopted in dealing with compounds of these elements with such other elements as precede

them in the scheme (see NATURE, Mar. 5, p. 346). That the search through the literature has been thorough may be inferred from the fact that the description of one salt alone (lithium chloride) occupies fifty pages and contains detailed numerical data relating to hydrates, to solutions in water and in organic solvents and to complex ammine-chlorides. A summary of recent work on the atomic dimensions, atomic structure, and isotopes of lithium is given, whilst the radioactive isotopes of bismuth are fully described in a special section, which includes not only detailed references to recent papers but also a synopsis of the general literature on the subject.

*Ancient Egyptian Materials.* By A. Lucas. Pp. viii + 242. (London: Edward Arnold and Co., 1926.) 7s. 6d.

IN his preface Mr. Lucas points out that it is only in recent years that the archaeologist has availed himself of the assistance of the chemist. With certain reservations this is correct, and it is true that a great deal of detailed work has still to be done. A reference to the sections in the present book which deal with the use of metals will show to what an extent questions relating to the source and early history of copper and bronze must remain in suspense until analyses of specimens of these materials from early sites and early workings have been made. Whence came the tin which was imported into Egypt? Mr. Lucas thinks that it may have been Spain, and inclines to the view which relegates Cornwall as a source of copper to the Middle Ages. If the edict of Sargon is correctly interpreted as referring to a "land of tin," this would give a mention of that metal earlier than that in Homer quoted by the author; but Spain seems a far cry from Mesopotamia at so remote a date as 2750 B.C.

This is one only of a number of problems which is raised by Mr. Lucas's book. Each of the materials used by the ancient Egyptians is taken in turn and described, its nature or composition examined, and its use, and wherever possible its place of origin and the date of its first employment given. Appendices deal with chronology and, what will prove especially helpful, give a number of analyses of metals and other materials. One point brought out very clearly by this method of treatment is the indebtedness of Egypt to western Asia.

*The Aborigines of the Highlands of Central India.* By B. C. Mazumdar. Pp. vi + 84. (Calcutta: The University of Calcutta, 1927.) n.p.

THIS is a small but valuable contribution to our knowledge of some hill tribes in central India. The author, who is lecturer in cultural anthropology at the University of Calcutta, has first-hand experience of the Sabara Kols and other neighbouring tribes. The pamphlet contains a description of the customs and organisation of these natives, as well as an attempt at tracing the historical relationships of these aboriginals to the other inhabitants of mid-India.