

BOOK REVIEWS

X-RAY POWDER DATA FOR ORE MINERALS: THE PEACOCK ATLAS, by L. G. Berry and R. M. Thompson. The Geological Society of America, 419 W. 117th Street, New York 27, New York, *vi* plus 281 pages, 1962, \$8.25 (\$6.00 to GSA members).

This is a long-awaited and valuable addition to the growing list of publications that present modern and reliable *x*-ray powder data for the identification of minerals. Data on the patterns of nearly 300 species are listed. Groups included are most of the native metals, sulfides, sulfosalts, metallic oxides and the silver and mercury halides. Also included are those of quartz, wolframite, scheelite, calcite, dolomite and siderite. The minerals are arranged with few exceptions according to the classification used in Dana's System of Mineralogy. Data that are listed include Bragg angles, observed spacings, calculated spacings, intensities and indices. For most of the species, cell dimensions also are presented, together with brief statements on the crystal structure, if it is known. All of the specimens that were studied are identified as to locality, and in a number of instances a particular species was studied from numerous localities.

There are four indexes: An alphabetical index of mineral species; a chemical index of mineral species (arranged alphabetically by element); an index of strongest powder lines (the three most intense); and a locality index (arranged by continent, alphabetically, then by country, alphabetically). Twenty-seven plates reproduce 295 *x*-ray powder pattern films.

Unquestionably this work sets a standard for compilations of this type that previously has hardly been approached. Doubtless it will become a "best seller" and will remain a standard reference work for a long time. All mineralogists will find it an indispensable tool for the identification of these groups of minerals. The authors deserve the thanks of the profession for their painstaking efforts.

E. WM. HEINRICH
The University of Michigan

PREHISTORIC COPPER MINING IN THE LAKE SUPERIOR REGION. A COLLECTION OF REFERENCE ARTICLES. Ed. by Roy Ward Drier and Octave Joseph Du Temple. Published privately by Drier and Temple, 715 Plain Street, Calumet, Michigan. Edition limited to 1000 copies, 214 pages, 1961, \$5.95.

This is a felicitous compilation of articles on a fascinating subject. Part I deals with Pre-history and Part II with Early-history. The volume can be described as a source book for articles dealing with the ancient copper mining activities of the Lake Superior region. Several of the articles are by Professor R. W. Drier, and the introductions to the two parts are by O. J. Du Temple. The other articles have been taken from various published sources, most of which are not readily accessible. The manuscripts cover a period of over 300 years of written literature on this subject.

The inclusions have been selective. The compilers have omitted articles that are more readily available and those that make no significant contribution of fact. The book is well and opportunely illustrated with thirty-nine figures and plates. A selective bibliography concludes it. To those of us who have not followed the workings of the archeologists in this area in detail, it comes as something of a shock to realize how much detailed effort has been expended in trying to solve the problem of the people who worked these native copper deposits in prehistoric times and how little we still actually know about them. Mineralogists and geologists who have been interested in the Michigan "copper-country" will find this book a valuable source for articles on the archeology of the region.

E. WM. HEINRICH
The University of Michigan