BOOK REVIEWS

The third section of the book ('Crystal Chemistry') deals briefly with types of bond. Unfortunately, important features, as for instance isomorphism and isotypism, are treated extremely briefly. The most important lattice types, both organic and inorganic, are clearly illustrated and provide an excellent survey for the student.

Remarkable is the sub-division of 'Crystal Physics' into a descriptive and an explanatory part. Mechanical, optical, electrical, and magnetic characteristics of crystals are summarized in the first chapter. The author lays much emphasis on tensor mechanics as applied to crystal physics. He stresses the importance of problems of elasticity and deformation and his treatment suggests that the dominant position taken by crystal optics in many textbooks is not entirely justified. Nevertheless the main features of crystal optics are dealt with in a comprehensive and clear way, assisted by excellent diagrams. The definitions are simple and straightforward. Cleavage, hardness, diffusion, Frenkel and Schottky defects, resonance, and crystal growth, as well as some practical applications (transistors, detectors, &c.), are discussed in the second chapter.

The reader, whether or not mathematically inclined, will find the book a concise yet comprehensive account of modern crystallography.

E. F. STUMPFL

MASON (Brian H.). Trap Rock Minerals of New Jersey. New Jersey Geological Survey, Department of Conservation and Economic Development. Bulletin 64, 1960, 51 pp., 16 figs., 1 map. \$1.50.

This booklet gives an interesting and up-to-date account of the minerals of the trap rocks of New Jersey with special reference to the zeolites. A description of the occurrence and paragenesis is followed by some details of the localities. The species (of which there are sixty) are arranged in systematic order. Each mineral has a section devoted to its basic properties, followed by a note on the occurrence in New Jersey. Although it is not specifically stated, the general information on each mineral (which would be found in any elementary textbook) and the notes on the zeolite group suggest that the book is primarily for the amateur. It is very well illustrated from specimens in the American Museum of Natural History and has a useful map and bibliography. An unusual and helpful addition is a list of discredited and unconfirmed occurrences, but there is no general index.

J. M. S.