BERRY (L. G.) and MASON (Brian). *Mineralogy: Concepts, Descriptions, Determinations*. San Francisco and London (W. H. Freeman and Company), 1959, xi+612 pp., 34 tables (excluding 26 pp. of determinative tables), 262 text-figs. Price 56*s*. 0*d*.

This well-produced book, 'designed to satisfy the requirements of an undergraduate course in mineralogy', is divided into three sections as indicated by the title. The section on concepts (278 pp.) contains the following chapters: Introduction; Crystallography; The chemistry of minerals; The physics of minerals; The genesis of minerals; Determinative mineralogy; The systematics of mineralogy. The chemical approach to the subject is lucid and concise, and the emphasis placed on geochemical principles throughout the book fills a long-felt need. It is thus to be regretted that the chapter on crystallography (138 pp.) is not uniformly clear, and although admirably conceived as a whole it is rendered heavy by too detailed a discussion (for the purpose of the book) of individual forms in the various crystal classes; International Symmetry Symbols are used freely, but the student is expected to grasp their meaning with little help from the authors. The great disappointment of the book is the decision of the authors to confine discussion of the optical properties of crystals to three pages in the physics chapter, and a quarter-sentence in that on determinative mineralogy (p. 268); thin-section methods are discussed in many textbooks, crushed-fragment methods in so few that the student is in danger of not realising their usefulness. Two hundred well-chosen species are described in the second section of the book (287 pp.), and the text is supplemented by clear diagrams and half-tone figures (157 in all). The eight chapters are arranged according to a condensed version of the Berzelius classification, and each begins with a periodic table of the elements concerned in that chapter; the relationships between analogous species are discussed, frequently with the aid of comparative tables, and the status of the silica group as silicates is perpetuated. The determinative tables are based on lustre and hardness, and minerals in each class are listed in order of increasing density; they appear to be convenient to use. The index is good, and the few misprints or mistakes seen by the reviewer are connected with the text-figures—e.g. hexoctohedral (fig. 2–66); the position of ϕ (fig. 2–33*a*). The diagrams and line drawings are clear throughout, although the latter would be far better without the perspective cube surrounding every crystal illustration regardless of symmetry. Aside from these comments, this textbook is excellent and deserves a place in all teaching libraries; it is a pity that the price is rather high for the average British student.

P. G. EMBREY