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**General Principles of Geology.** *J. F. Kirkaldy.* Philosophical Library, New York. 1955. 327 pp. \$6.00.

There is a need in this country for a geological text that includes both physical and historical geology, for use in one-term college courses intended to cover the elements of the science. With one exception, American texts of this sort are wordy, or obsolete in thought, or addressed to students who like to memorize, but resist mental exercise. Our texts are anthropomorphic or lack any coverage of some of the major concerns of geology such as isostasy or continental drift. This British text fills the need without any of these drawbacks. The author is a Reader in Geology at the University of London.

This book has seven sections and two appendices. Section one covers the development and scope of the science of geology. The second is concerned with "basic principles": stratigraphy and structure. The third deals with weathering and gradational processes, wherein insolation is described as an important weathering process, and the author follows the Davisian concepts of stages of stream erosion. The treatment of glaciology is rather short, but there is a good discussion of periglacial effects. The fourth part, on petrology and mineralogy, includes elementary crystallography, good tables for mineral identification, the use of the petrographic microscope with abbreviated tables, and an extensive section on hand-specimen petrology and economic uses of rock products. The fifth, on the composition and origin of the earth, includes a review of earthquakes and the interior of the earth, isostasy, orogenesis and convection currents, and continental drift. The sixth part, on historical geology, treats of the time scale (wherein only European orogenies are listed), fossils and organisms with an illustrated taxonomy of invertebrates and very abbreviated description of vertebrate and plant groups, evolution, and a brief geologic history of the British Isles. The last section is on economic geology and includes water supply, engineering applications of geology, non-metallic resources, oil geology, and subsurface methods. The study of topographic maps and suggestions for further reading are the two appendices.

An outstanding advantage of this text is the brief but very extensive treatment of geology: a nucleus adaptable to a variety of course plans and a wide range of course content. Some may object to the fact that most examples and illustrations are from the British Isles, but these are not of themselves objectionable, and the lecturer can of course freely adduce examples and illustrations from North American geology.

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