

BOOK REVIEWS

COLLINS (J. H.). *A Handbook to the Mineralogy of Cornwall and Devon*. Truro (D. Bradford Barton, Ltd.), 1969 (facsimile reprint of 2nd edition, 1892). 188 pp., 10 pls. Price 48s.

Although thoroughly out of date, this work remains the most recent detailed account of the minerals of Cornwall and Devon and its reissue is most welcome. The second edition was itself a reissue of the 1871 first edition, with addenda.

Later additions to the minerals known from Cornwall and Devon are listed by L. J. Spencer (*Min. Mag.* 1958, **31**, 787–810), in the indexes of recent volumes of the *Mineralogical Magazine* and of *Mineralogical Abstracts*, and are to be expected in a forthcoming issue of the Transactions of the Royal Geological Society of Cornwall.

Mr. Barton is to be commended for his continuing enterprise in publishing both new and old works on all aspects of the mining region of south-west England.

P. G. EMBREY

ROGERS (CEDRIC). *A Collector's Guide to Minerals, Rocks and Gemstones in Cornwall and Devon*. Truro (D. Bradford Barton, Ltd.), 1968. 49 pp., 32 figs., 9 sketch maps. Price 8s. 6d. (\$1.25).

This excellent booklet is intended mainly for interested amateurs and provides many useful hints for equipment and behaviour in the field. The numerous thumbnail sketches of minerals and line-drawings of the Cornish scene are delightful and are accompanied by notes on the main mineralized areas of Cornwall. The sketch-maps of these areas should prove very helpful to the more experienced collector who is unfamiliar with Cornwall and Devon; particularly useful are the map references for many of the old mines.

R. A. H.

VUKALOVICH (M. P.) and ALTUNIN (V. V.). *Thermophysical Properties of Carbon Dioxide*. Transl. edited by D. S. Gaunt. Wellingborough (Collet's), 1968. xiv + 463 pp., 118 figs. Price 178s. 6d.

CO₂ is one of the more important volatiles in nature and a knowledge of its thermo-physical properties over a wide range of pressure and temperature is an essential base on which to build theories for the role of CO₂ in rock-forming processes. This book offers a very extensive compilation of data on such properties as density, phase equilibrium relations, enthalpy, specific heat, equation of state, viscosity, and thermal conductivity.

Significant research has been conducted in this field since the 1870s; this book reviews all the more important works since that date, to just before the date of publishing in 1965.

In the reviewer's opinion the strongest points of the book are its critical examination of the experimental methods used in obtaining the results and an impartial estimation of the accuracy of the results. The book has been translated in a very readable form

under the direction of the United Kingdom Atomic Energy Authority and brings a host of Russian data to the notice of non-Russian-reading scientists.

D. L. HAMILTON

MÜLLER (G.) and FRIEDMAN (G. M.), editors. *Recent Developments in Carbonate Sedimentology in Central Europe*. Berlin, Heidelberg, and New York (Springer-Verlag), 1968, viii+255 pp., 168 figs. Price DM58; U.S. \$14.50.

The misleading title of this slim volume comprising thirty profound complementary specialist papers contributed to 1967 Heidelberg Carbonate Seminar should not deter the reader. It is not parochial in content or approach. The volume is an education in itself and is commended to all who deal with carbonates. The contributions, many of which have not been available in English before, cover a wide range of problems of world wide application: diagenesis, chemistry, biochemistry, geomicrobiology, pressure solution, experimental studies, electron microscope studies, microporosity, and gasometric determinations, not to mention the regional carbonate petrology of both fresh water and marine carbonates and the organic aspects involved therein. [Full details of authors and titles are given in M.A.20-244.]

J. A. E. B. H.

COORAY (P. G.). *An Introduction to the Geology of Ceylon*. Colombo (Nat. Mus. Ceylon), 1967. xxvii+324 pp., 102 figs., 39 pls., 2 maps (in pocket), 22 tables, (reprinted from *Spolia Zeylanica*, vol. 31, pt. 1). Price Rs 29 (45s.).

This useful book is a comprehensive and up-to-date introduction to, and summary of, Ceylon geology. It is addressed most directly to the Ceylon student but has also a much wider appeal.

There are three parts. The first, 'Geological Principles and Processes', is a brief (three chapters) but lucid indication of what geology is, written for the reader with little or no knowledge of the subject.

The second part, the 'Geology of Ceylon' (eight chapters), discusses the major physical features, the nature, origin, and distribution of the main rock types and associated economic minerals, and the geological evolution of the island. It is perhaps to the author's credit that he has not allowed his own specialised interest in the crystalline rocks to run away with him, and all geological aspects are thoroughly covered.

The third part, 'Geology and the Community' (three chapters) deals interestingly with the relationship of the island's ground water to geology, the application of geology to engineering in Ceylon, and the geology and soils of Ceylon.

There are five appendices. As indicated by the number of figures, maps, tables, and plates, the book is well illustrated, though the plates are of only moderate quality. The beginner is supplied with a comprehensive glossary of geological terms, and a bibliography of 94 references is available for those who need more detail. The separate map, depicting the geology of Ceylon, is the most recent and complete compilation known to the reviewer.