

BOOK REVIEWS

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-1914, under the leadership of Sir Douglas Mawson. *Scientific Reports* by W. R. Browne, A. L. Coulson, J. O. G. Glastonbury, F. L. Stillwell, and C. E. Tilley. Series A, Vol. III, Parts I-VI, 330 pp., 45 pls., 14 figs. Government Printer, Sydney, New South Wales, Australia, 1918-1940. Price £2 12s 6d.

AUSTRALASIAN ANTARCTIC EXPEDITION, 1911-1914, under the leadership of Sir Douglas Mawson, *Scientific Reports* by P. G. W. Bayly, A. B. Edwards, J. O. G. Glastonbury, A. W. Kleeman, Douglas Mawson, S. R. Nockolds, F. L. Stillwell, H. S. Summers, and C. E. Tilley. Series A, Vol. IV, Parts I-XIII, 429 pp., 18 pls., 34 figs. Government Printer, Sydney, New South Wales, Australia, 1923-1940. Price £2 12s 9d.

The scientific reports of the Australasian Antarctic Expedition are embodied in a ten volume series, two of which treat of the petrology and petrography of the rocks collected *in situ* and from the moraines of Adelie, Kaiser Wilhelm, King George, and Queen Mary Lands. Close to 1500 rock and mineral specimens were collected, of which well over 50 per cent are erratics. This figure does not include dredged specimens and the large collection from Macquarie Island. Approximately 15 per cent of the specimens are igneous, three per cent sedimentary, and the rest are metamorphic rocks and minerals. A stony meteorite is reported from Adelie Land. Uncommon rock types encountered include charnockites, pseudotachylyte, and jaspilite. Atacamite, cassiterite, dumortierite, ferrimolybdate, gold, kornuperine, molybdenite, stibnite, and tetrahedrite are some of the minerals reported by Mawson as occurring in this section of the Antarctic. Up until the time of the publication of the reports in 1940 there was little, if anything, on such minerals in Antarctic literature.

Volumes III and IV contain 137 photomicrographs, 31 camera lucida drawings, 93 photographs of specimens, outcrop areas, etc., 26 chemical analyses of rocks, eight chemical analyses of minerals, one chemical analysis of rookery liquors, one chemical analysis of "soil," analyses of the meteorite, six approximate chemical analyses derived from Rosiwal analyses, 125 quantitative microscopical analyses and a number of approximate percentage compositions of rock constituents. The chemical analyses are quite complete, including, aside from the "standard" oxides, in many instances, Cr₂O₃, NiO, CoO, and BaO.

There are few typographical errors. On page 394, Volume IV, Part 12, "West Antarctica" should read "East Antarctica." Such terminology as that used by Kleeman in referring to twin lamellae that "peter out" is rather descriptive.

Little attempt is made to compare the rocks collected with those of other Antarctic lands, with the exception of Nockolds' contribution.

The microscopical descriptions of the individual minerals of the various rocks are quite detailed, but much less space would be required if the qualitative microscopical analyses were tabulated.

The whole work is exceptionally well done, and is a most excellent addition to the publications on Antarctic petrology and petrography.

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