hollandite whose properties agreed with those given by Fleischer and Richmond (op. cit.). These experiments clearly show that a certain minimum temperature and some barium in the manganese ores are essential factors for the formation of hollandite.

The well-developed crystals of hollandite found at the contact of the quartz-veins and the manganese-ores suggest that silica-rich residual fluids were probably at a temperature between 500 and 600° C, which at the contact of manganese-ores was sufficient for the dehydration of a psilomelane type of ore (containing barium) to hollandite. The fibrous hollandite and the hollandite crystals have the same field relationship and as such they must have formed under the same conditions, though the manner of formation of these morphologically different hollandites is not yet clearly understood. It is concluded, therefore, that the manganese-ores rich in barium and the temperature of about 500–600° C of the silica-rich solutions forming the quartz-veins resulted in the formation of hollandite at the Kajlidongri Mine.

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Two pseudometeorites: Leroy and Newtown

IN 1914 Mr. J. Pierpont Morgan purchased the meteorite collection of the late E. E. Howell from his estate and presented it to this museum. Included in this collection was a 102-gram piece of rusty metal labelled 'Leroy'; no other information concerning its source is available. It was briefly mentioned by MacNaughton (1926). The specimen is a porous

mass of iron, and appears to be a weathered furnace product. It contains no nickel and is certainly not a meteorite.

A fireball was observed near Newtown, Connecticut, on the evening of December 29, 1925. About five months later an irregular mass of iron, $10 \times 5 \times 1$ cm, weighing some 220 grams, was found on a patch of sand about half-a-mile northwest of the Newtown railway station. It was acquired by this museum and listed as the Newtown meteorite by Reeds (1937). However, the metal is structureless and contains no nickel, and the specimen is not a meteorite.

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BOOK REVIEW

BAKER (George). *Detrital heavy minerals in natural accumulates with special reference to Australian occurrences.* Melbourne (Austral. Inst. Mining and Metall.), 1962, xii+146 pp., 4 pls. Price £A 2. 2*s*.

This small book has been written primarily for those concerned with the identification and mineralogical investigation of the heavy minerals encountered in the Australian beach sand industry, which produces large tonnages of rutile, zircon, ilmenite, and monazite along the Queensland and New South Wales coastline and to the south of Perth in Western Australia. It serves both as a general introduction to the mineralogy and characteristics of detrital minerals, and as a review of the 40 or 50 heavy minerals encountered in Australian sands, reference being made to about a hundred papers on the subject, the majority (71) of which are Reports from the Mineragraphic Laboratory of the Commonwealth Scientific and Industrial Research Organization in Melbourne, to which the author is attached. Methods of investigation are listed but not described, and the 12 pages devoted to the diagnosis of heavy minerals although discursive is rather weak, as are the short chapters on radioactivity and fluorescence. The geographical distribution of heavy minerals in Australian sands, both marine and fluviatile, is conveniently summarized in tabular form.

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