MINERALOGICAL NOTES: No. VIII.—TOPAZ, ANGLESITE, AND OTHER AUSTRALIAN MINERALS.

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(Plates lxxix.-lxxxi.)

TOPAZ.

CARPET SNAKE CREEK, NEAR TORRINGTON, N. S. WALES.

(Plate lxxix., figs. 1, 2.)

The specimens here described consist of a small lot of isolated crystals and a fragment of matrix carrying one magnificent crystal and several smaller ones; they were acquired by the Trustees from Mr. Charles Bogenrieder, Mining Engineer. The figured crystal, which measures ·8 × 1·5 × 3·25 cm., is loosely attached to a matrix consisting of a clayey decomposition product (evidently felspathic), quartz, wolfram, molybdenite, and a small quantity of a purplish mineral too minute for determination, but which is in all probability fluorspar. The topaz is closely moulded on the accompanying minerals, which therefore preceded it in most cases. No information is available regarding the geological conditions of its occurrence, but the hand specimen indicates a decomposed pegmatite vein as its original home.

The crystals are colourless, transparent, and of a uniform habit, belonging to the Russian domatic type; the crystallographic characters are very similar to those of the Emmaville topaz.[1] The faces, with the exception of the base which is always more or less rough, are highly polished and give good signals. Prism forms are numerous, *m* (110) being the best developed; *l* (120) has fairly large faces, but other forms in this zone are very narrow. Of the domes, *f* (021) and *d* (201) are prominent, *y* (041) and *h* (203) small; *o* (221) and *u* (111) are the most important pyramids. An interesting feature is the presence on the *m* faces of very distinct, quadrangular markings, resembling the

[1] Anderson—Austr. Mus. Rec., v., 1904, pp. 296-299; *Ib.*, vi., 1905, pp. 83-85.