MINERALOGICAL NOTES: No. I.—TOPAZ, BERYL, VESUVIANITE, TOURMALINE, AND WOLFRAMITE.

By C. ANDERSON, M.A., B.Sc., Mineralogist.

(Plates xxxix.-xli.)

TOPAZ.

Topaz from New South Wales has been previously described by Hahn[1], but I am unable to refer to his paper, and, as I am ignorant as to the localities and development of his specimens, it may be that this paper simply duplicates or falls short of his work. Nevertheless it is hoped that, besides being a description of specimens actually on view in the Australian Museum, the present paper will perhaps be useful to Australian Mineralogists to whom, as to the writer, the earlier work may not be available.

EMMAVILLE, NEW SOUTH WALES.

The collection of minerals lately purchased by the Trustees from Mr. D. A. Porter contains a large assortment of topaz, mainly small crystals, from an emerald mine at this well-known locality, which may be given more exactly as Glen Creek, seven miles N. by E. from Emmaville. It is associated with tinstone, beryl, and fluorspar in pegmatite, the occurrence having been already described by various observers[2]. The crystals are almost invariably clear and colourless, but do not seem to attain a large size, six of the better developed specimens averaging 7 mm. × 6 mm. × 5 mm. Two larger, doubly-terminated crystals, measured 13 mm. × 10 mm. × 8 mm., and 18 mm. × 9 mm. × 7 mm. respectively. The larger specimens are much less perfectly developed but show a greater proportion of doubly terminated crystals, which are rarely found in this species. Thus a collection of nineteen crystals specially picked on account of their suitability for goniometric measurement contained only one doubly terminated specimen, while no less than twelve were found in a collection of forty-four larger and less perfect crystals. The base, which is a constant feature in all the crystals I have examined though sometimes very small, is often pitted and dull. The faces in the prismatic zone are sometimes striated, but usually give good reflections; the unit prism, *m*

[1] Hahn—Zeits. Kryst., xxi., 1893, p. 337 (quoted 1st Appendix to the sixth edition of Dana's System of Mineralogy, 1899, p. 69).

[2] David—Ann. Rep. Dept. Mines for N.S. Wales for 1891 (1892), pp. 229-234; Curran—Journ. Roy. Soc. N.S. Wales, xxx., 1897, pp. 244-247, pl. xiv.