

MINERALOGICAL NOTES: No. V.—CASSITERITE  
CERUSSITE, ZEOLITES AND OTHER AUSTRALIAN  
MINERALS.

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(Plates lxxv.-lxxx.).

CASSITERITE.

EMMAVILLE, NEW SOUTH WALES.

(Plate lxxv., fig. 1).

The crystal of cassiterite from this locality here figured is of interest as having an acute pyramidal habit through predominance of the di-tetragonal pyramid  $z$  (321); it resembles the needle or sparable tin of the Cornish miner, a type which seems very rare in Australian cassiterite. The prism faces are strongly striated owing to oscillatory combination between  $m$  (110) and  $r$  (230),  $r$  however being subordinate. The crystal measures  $1.25 \times .75$  cm. The part bounded by the prism faces is mainly black with patches of semi-transparent "ruby tin," the apex of the crystal down to the faint line traversing the faces of  $z$ , a little below and parallel to its intersections with  $s$ , is black with metallic lustre, while the central part is reddish and opaque. From this curious distribution of colour the probable history of the crystal may be deduced. Thus it may be inferred that it was at first prismatic in habit, most likely terminated by  $s$  (111), and of a black colour. With a change in composition (indicated by the change in colour) the prism ceased growing and the pyramid  $z$  predominated; finally came another change in composition at a time when the crystal had assumed nearly its present habit.