

Note on Crystals of Manganite from Harzgerode.

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ON examining a specimen of manganite from Harzgerode, consisting of iron-black crystals of apparently long-prismatic habit, it was found that they were, in most instances, composed of many individual crystals, the latter ranging from about two to four millimetres in length. As they seem to differ in habit, so far as I know, from the crystals of manganite hitherto described and figured, a short account of them, pending more careful investigation and measurement, may be of interest.



In some cases individual crystals of small dimensions occur. In these the dominant form is the rhombic prism $\{110\} = 99^{\circ}40'$ combined with the macroprism $\{210\} = 134^{\circ}15'$ together with curved faces which approximate to those of a steep vertical pyramid, while the basal planes, when present, are only represented by very diminutive and somewhat convex faces. The edges in which the faces of the prism and the more or less convex pyramid faces meet are slightly but distinctly curved, the curves springing from the obtuse edges in which the faces of the prisms $\{210\}$ and $\{110\}$ intersect, and meeting on the acute edges of the prism $\{110\}$ in points situated much further from the origin. The curvature of the pyramid faces is more clearly perceptible on the acute than on the obtuse polar edges of the pyramid. These faces are seen under the microscope to be somewhat irregularly traversed by two sets of striæ, one set, the more strongly marked, lying in the direction of the obtuse polar edges of the pyramid, while the other striæ cross those of the preceding set obliquely, and at angles which appear to diminish as the striæ approach the terminations of the crystals. It seems probable that the curved pyramid faces represent either an oscillatory combination of pyramid and prism faces or a series of pyramids. A number of small crystals, such as those just described, when grouped parallel to $\{110\}$ give rise to stout prisms with jagged ends, each of the spikes representing the

terminal portion of an individual crystal. Several of these composite prisms in the specimen are seen to consist of two or more sets of prisms superposed, the grouping in each set being the same, namely, parallel to a face of the prism {110}. This method of superposition involves the overlap of one tier slightly beyond that of the tier which succeeds it, so that the composite prisms appear to taper to a very small extent.

Specimens of manganite from Ilfeld do not seem to show any crystals of the habit here described.
