

$8\frac{3}{4} \times 7 \times 5\frac{1}{2}$ mm., weighs 0.68 g, and a density value of 3.49 was obtained by hydrostatic weighing in ethylene dibromide. An idealized drawing, kindly made for the writer by Mr. T. H. Smith (fig. 1), shows the distribution of the different forms.

Owing to the roughened surface of the crystal, interfacial angles could only be determined approximately, using an eyepiece goniometer. But by calculation on the basis of the axial ratios previously measured by Claringbull and Hey, using X-ray methods, fair agreement was obtained with the measured values, and indices could be ascribed to the faces with reasonable certainty.

Forms shown were: Pinacoids, $b\{010\}$, $c\{001\}$, $a\{100\}$. Prisms, $m\{110\}$, $s\{120\}$, $r\{130\}$. Pyramids, $e\{111\}$, $q\{112\}$, $t\{132\}$. Domes, $d\{101\}$, $k\{021\}$. The angles, calculated and measured, were as follows (calculated angles in parentheses): mm' 47° ($47^\circ 20'$), me 35° ($34^\circ 56'$), rb 40° ($40^\circ 16'$), mq 54° ($54^\circ 24'$), sb 49° ($48^\circ 46'$), ck 49° ($48^\circ 58'$), cd 53° ($52^\circ 39'$), rt 43° ($42^\circ 47'$). The prism faces showed some of their original natural polish, and there was a suggestion of the a (100) face, by reflection.

It was not possible to measure the refractive indices of the specimen without damaging the crystal. The optic axial plane was parallel to (001), and the acute bisectrix was parallel to b . $2V$ was 55° approx., and the pleochroic colours were γ , pale greenish brown, β , pale brown, and α , brown; $\alpha > \beta > \gamma$.

Mr. Pain has kindly presented the crystal (B.M. 1958, 538) to the Mineral Department of the British Museum (Natural History).

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¹ G. F. Claringbull and M. H. Hey, *Min. Mag.*, 1952, vol. 29, p. 841.

Condurrite: a mixture and not domeykite.

AN examination of the eight specimens labelled 'condurrite' in the British Museum collection, from Condurrow mine and from Wheal Druid, Cornwall, confirms the original observation by W. Phillips¹ that it is 'a mere mechanical deposit, arising from the natural decomposition of other ores which abounded in copper and arsenic'. Although condurrite has been taken as synonymous with domeykite,² Phillips stated specifically that he was giving the name to the black mineral and not to the metallic grains surrounded by it; our examination of X-ray powder patterns shows that these latter are either domeykite or β -domeykite,

whereas the black material is a compact and variable mixture of cuprite, melaconite, chalcocite, and one of the domeykite phases (though not all are present in any one sample). Both domeykite phases occur in specimens from the Condurrow mine, so it is not possible to distinguish between the two mines according to the domeykite phase present on any particular specimen. Our specimens tally with the descriptions given by Phillips and by J. Garby,³ with the exception of a red earthy coating on the Wheal Druid specimens stated to be absent by the latter author, and there is no doubt in our records that all the specimens are authentic although not type material. Condurrite is thus established as a mixture, with cuprite or melaconite rather than domeykite as an essential constituent, and should no longer be regarded as synonymous with domeykite. I thank Miss E. E. Fejer for help in the interpretation of the powder photographs.

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¹ W. Phillips, *Phil. Mag.*, 1827, vol. 2 (new ser.), p. 286 (with analysis by M. Faraday).

² E.g., *Dana Syst. Min.* 7th edn, vol. 1, p. 172.

³ J. Garby, *Trans. Roy. Geol. Soc. Cornwall*, 1846, vol. 6, p. 194.