

The refractive index of the resin varies according to the proportions of the various constituents, but is about 1.55.

Outstanding among the features revealed by this technique is the preservation by pseudomorphs of the original texture in an apparently textureless aggregate of clay and quartz. Fig. 1 shows a fairly fresh rock in which the mica has been stained to facilitate modal analysis.¹ Rectangular section, similarly stained, of a rock derived by alteration from that in fig. 1; the albite has been replaced entirely by microcrystalline aggregates of kaolinite and secondary mica but its shape is perfectly preserved, as is the general texture of the rock.

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¹ P. S. Keeling, *Trans. Brit. Ceram. Soc.*, vol. 53, p. 67.

Atacamite from Cumberland and Cornwall.

UNTIL a year or two ago, the only British specimen of atacamite, the orthorhombic basic copper chloride, was one in the British Museum collection, purchased in 1860 and labelled from Roughtongill in Cumberland; all the other British specimens, formerly supposed to be atacamite from the St. Just district in Cornwall, had been found to be the rhombohedral phase paratacamite.¹

In 1951 we collected, among some material from a small copper vein near Potts Gill on the northern fringe of the Caldbeck Fells in Cumberland, several specimens which proved to be atacamite and with which the British Museum specimen is absolutely identical in every way, so that we feel sure it must originally have come from the same locality. We have found no trace of the mineral at the Roughtongill mines, and from our recent investigations in the northern Lake District it has become very evident that the locality 'Roughtongill' was, in the past, used in an extremely loose and general way for almost anywhere in this district north of Skiddaw, and Potts Gill is, in fact, not very far from Roughtongill.

We have since found further specimens of atacamite at this locality near Potts Gill and, in addition, at Hay Gill, also in the Caldbeck Fells, but in no way resembling the Potts Gill material; one of us has also

¹ F. A. Bannister, M. H. Hey, and G. F. Claringbull, *Min. Mag.*, 1950, vol. 29, p. 280.

recently found atacamite at four further localities, all in Cornwall: Penberthy Croft mine, St. Hilary; Perran St. George mine, near Perranporth; Wheal Prudence, by Hanover Cove, St. Agnes; and Wheal Owles, St. Just. At Hay Gill, Penberthy Croft, and Perran St. George mines, the mineral, in colour and habit, closely resembles and might easily be mistaken for malachite.

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