

A RARE HABIT AND NEW FORM OF FRANKLINITE

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AMONG some minerals recently obtained from Franklin, New Jersey, is a specimen of franklinite, which is very striking in appearance and habit. The crystals are small, less than a millimeter in diameter, implanted on rhombohedral crystals of a light pink rhodochrosite and contained in the angular cavities between the rhodochrosite crystals. The crystals of franklinite are of a very bright metallic luster, with a bluish tinge, resembling somewhat that of blued steel, but on fractured surfaces they are of the ordinary color and luster of franklinite. The edges or splinters do not show the red color noted by Palache¹ in his description of another specimen, to which these crystals are very similar in habit. They are combinations of the cube, octahedron and a tetrahexahedron, in which the three forms are very regularly and nearly equally developed, as indicated in the illustration, Figure 1.

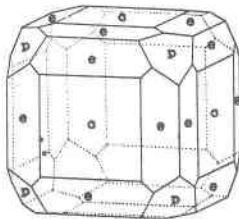


FIGURE 1.—DIAGRAM OF CRYSTAL OF FRANKLINITE, SHOWING NEW FORM *e*.

Upon measuring the angles, the tetrahexahedron *e* proved to be a form, with the indices (510), not heretofore noted on franklinite. The average of 10 measurements yielded:

Face	Measured		Maximum	Minimum	Calculated
	ϕ	ρ			
150	11° 17.6'	90°	11° 23'	11° 13'	$\phi = 11^\circ 18'$
051	00°	78° 42'	78° 45'	78° 37'	$\rho = 78^\circ 41'$

The quantitative composition of these crystals would be interesting for comparison, but the material is not sufficient for an analysis.

¹ *Am. J. Sci.* [4], 20, 177, 1910.