

NOTE ON CERUSSITE FROM ILLINOIS AND WISCONSIN.

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A few years since the University of Wisconsin obtained by purchase the mineral collections of W. T. Henry, of Mineral Point, Wis. They consist largely of the minerals associated in the zinc and lead deposits of southwestern Wisconsin and northwestern Illinois, and comprise the best series existing from that region. Among the carbonates cerussite is found, the best localities being Galena, Ill., and several points in Iowa County, Wis.

In a number of specimens in the University of Wisconsin collections the mineral is quite well crystallized and is always found on the surface of galenite, where its presence is best explained by the action of carbonated waters on the galenite. Cubes of galenite attaining in some cases dimensions of several inches are half covered by yellowish white cerussite crystals, which vary in size from a millimetre to more than a centimetre in diameter. They are stoutly columnar and translucent, with a color varying from yellowish white to light steel-gray. The faces are generally somewhat rounded, especially the terminal ones. The brachy-axis is the one of principal development, the columnar habit being given by the planes $s, \frac{1}{2}P\infty$ (012), and $u, 2P,\infty$ (021), which have about equal development. The fundamental prism M terminates the crystals. The pyramid t, P (111) appears as a rounding of the combination edge $M : s$. Twins parallel to M were frequently observed. Measurements of the interfacial angles with the goniometer of the Fness *Universal-apparat* gave the following results:

	Measured	Calculated.
$u : u (2P\infty : 2P\infty)$	111° 2'	110° 40'
$s : s (\frac{1}{2}P\infty : \frac{1}{2}P\infty)$	139° 54'	140° 15'
$M : M (\infty P : \infty P)$	117° 25'	117° 14'
$t : t (P : P)$	130°	129° 30'

The face t gave no image, the value being the average of a number of measurements by the shimmer seen when the lens was in place before the telescope.

Figure 1 shows the average development of an untwinned individual.

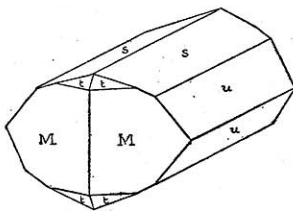


FIG. 1.

Mr. R. B. Green, late of the University of Wisconsin and now chemist for the Lake Superior Iron Company at Ishpeming, Michigan, has made an analysis of some of the more translucent crystals from Galena, Illinois, with the following results:

		Calculated
		for Pb Co ₃ .
Pb O.....	83.42	83.52
CO ₃	16.45	16.48
	99.87	100.00

The material analyzed was specially examined for zinc with negative results.

UNIVERSITY OF WISCONSIN.