

crystal, is not shown in Figure 1, as it is too close to the form V to be properly represented in the drawing. The crystals measured varied in dimensions from $6 \times 4 \times 3$ mm. to $3 \times 2 \times 1$ mm.

The forms c, a, m, w, l, R, and p are prominent, being found on all the crystals measured, the forms σ , η , ν , and h somewhat less so, being found on only three of the crystals, while the remaining forms are subordinate. The two new forms, V and U, appear only once on crystal 1, and on no other crystal.

	Symbol	ϕ	ρ
From measurements	$U - \frac{2}{3} \frac{3}{2}$	$25^{\circ}36'$	$56^{\circ}12'$
	$V - \frac{7}{5} 0$	$270^{\circ}00'$	$54^{\circ}43'$
From calculation	$U - \frac{2}{3} \frac{3}{2}$	$26^{\circ}10'$	$55^{\circ}48'$
	$V - \frac{7}{5} 0$	$270^{\circ}00'$	$54^{\circ}38'$

Of these two new forms, the form V is thus verified, while the form U is extremely probable.

TWINNING IN THE NEW JERSEY "PSEUDOMORPHS"

FREDERICK A. CANFIELD

Dover, N. J.

WITH the view of helping to solve the problem as to what was the mineral which occupied the rectangular cavities, so abundant in the quarries at Paterson and Great Notch, the writer would call attention to the occurrence of molds which indicate that the original mineral sometimes twinned, hoping that all persons interested will examine their specimens, and perhaps find better examples than have been observed thus far.

In the molds which have been examined the narrower sides have been replaced by two planes, which are so inclined as to form re-entrant angles. The cross-section of the mold has the shape of a penetration twin, as shown for instance in Fig. 218, p. 63, in Rogers' "Introduction to the Study of Minerals." In some of the molds the replacements by quartz, filling the thin openings which formed while the original mineral was being leached away, are parallel with the longer sides of the rectangle, and midway between them, showing as is often the case in twinned crystals that the original substance was more soluble at the line of twinning than at any other place.

The specimen examined came from Paterson.