

ART. LI.—*Note upon Aventurine Orthoclase, found at the Ogden Mine, Sparta Township, Sussex Co., N. J.*; by Prof. LEEDS.

AMONG the masses of gneiss rock thrown out in sinking one of the shafts of the Ogden mine, I found, during the course of the past summer, large quantities of very beautiful sunstone, which appears hitherto to have escaped notice. The three cleavages *O*, *i-i* and *i-i*, are easily obtained, and afford the cleavage angles of orthoclase. The very thin plates, which may be procured by slicing the stone in the direction of the principal

cleavage, are of considerable size, and furnish excellent specimens for microscopic examination.

The color of the orthoclase is a delicate flesh-red, which color is due entirely to the imbedded crystalline scales of what has been supposed to be göthite. The stone itself is translucent and quite colorless. The results obtained in two analyses were:

	1.	2.	Mean.
Silica,	64.80	64.82	64.81
Alumina,	19.02	} 19.25	19.02
Ferric oxide,	0.23		0.23
Lime,	1.29	1.23	1.26
Magnesia,	0.61	0.58	0.59
Potash,	15.22	13.38	14.30
Ign.,	0.26	0.26	0.26
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In an analysis of an aventurine oligoclase from Tvedestrand in Norway, Scheerer obtained  $\text{SiO}_2$  61.30,  $\text{Al}_2\text{O}_3$  23.77,  $\text{Fe}_2\text{O}_3$  0.36,  $\text{CaO}$  4.78,  $\text{Na}_2\text{O}$  8.50,  $\text{K}_2\text{O}$  1.29. In this the per cent of göthite is somewhat greater than in the New Jersey orthoclase, but in both cases the extremely small amount of foreign matter which suffices to impart the brilliant aventurine character to the feldspar is remarkable. It is worth noting in this connection that all the specimens of sunstone from Kennett, Chester Co., Pa., in the cabinet of the Stevens Institute, are oligoclase, not orthoclase.