

stituents tends to render the rock friable. On exposure to the atmosphere it is easily disintegrated and in places is reduced to a loose mass of rectangular grains of feldspar for several feet in depth.

Compared with some of the syenite types of southern Norway, which have been made classic by the work of Prof. W. C. Brögger, the resemblance is found to be a very close one. It probably approaches most nearly to gray nordmarkite from Christiania, from which the chief discernible microscopic difference is in the coarser intergrowth of the feldspar of the Shefford rocks. This resemblance in microscopic characters is also corroborated by the chemical composition as shown by the accompanying analysis by Mr. Connor.

Its similarity to the akerite type of Norway will also be noticed, as well as to that of a syenite from Mount Ascutney, Vermont.

	I	II	III	IV	V
Si O ₂	65.43	64.04	66.13	65.43	65.15
Ti O ₂	.16	.62	.74	.50	
Al ₂ O ₃	16.96	17.92	17.40	16.11	20.55
Fe ₂ O ₃	1.55	.96	2.19	1.15	
Fe O	1.53	2.08		2.85	
Mn O	.40	.23	.13	.23	
Ca O	1.36	1.00	.81	1.49	.73
Ba O	none				
Mg O	.22	.59	.04	.40	
K ₂ O	5.36	6.08	5.60	5.07	6.39
Na ₂ O	5.95	6.67	5.28	4.00	6.67
P ₂ O ₅	.02			.15	
S O ₂	.06			(Fe S ₂ .07 F .08	
Cl	.04			.05	
H ₂ O	.82	1.18	1.22	.58	.50
Loss O	99.86 0.09			100.18 .04	
	99.86	101.37	99.54	100.14	99.99

- I. Nordmarkite—Shefford—(No. 166). Analysis by Connor.
- II. " (gray) Tonsenas, near Christiania. Cited by Rosenbusch, 'Elemente der Gesteinslehre.'
- III. Akerite—Between Thingsong and Fjellebunns, Norway. Cited as above.
- IV. Syenite—Mount Ascutney, Vermont. Jaggar and Daly. Analysis by Hillbrand. U.S.G.S. Bull. 148.
- V. Feldspar—Shefford—Already quoted.

CONTACT FACIES.

The contact zone of the nordmarkite is commonly distinguished by an increase in the dark minerals. Hornblende and biotite rise to