The agreement between the optical properties of the two is sufficiently close to show that the Franklin Furnace mineral is unquestionably identical with the very rare mineral ganophyllite. Palache[5] had previously identified ganophyllite from Franklin Furnace. Additional notes on the optical properties, pyrognostics, etc., as well as the occurrence, are given in the paper referred to above.

[5] Palache, Chas., Contributions to the mineralogy of Franklin Furnace, N. J.: *Am. J. Sc.*, *XXIX* 187 (1910).

THOMSONITE FROM PEEKSKILL, NEW YORK

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Several years ago a party of students on a field trip near Peekskill collected some specimens of thomsonite, and I believe this is a locality from which it has not heretofore been reported. Locally it occurs two miles east of Peekskill and about five hundred feet south of Dalton's emery quarry, in an area termed pyroxenite by G. S. Rogers,[1] in his paper on the "Cortland series and its emery deposits." He however mentions a mineral occurring in some of his sections of a sodalite syenite, lying near the thomsonite locality, which from its optical properties he thought might be thomsonite, and from its hexagonal outline was believed to be a secondary product from nephelite.

Occurrence. The thomsonite occurs in irregular angular cracks, possibly shrinkage cracks, which in some cases possess scoriaceous walls. It was preceded in its crystallization by some unknown mineral of tabular habit, the presence of which is now recognized by solution cavities both in the thomsonite and between it and the rock walls of the cavities. The thomsonite is of the usual radiated habit, some of the rays reaching four inches in length but without crystalline terminations. Now that the tabular mineral has been dissolved it is associated with no other mineral, but is coated with a thin film of a light colored clay, which has been mechanically washed into the cavities and gives the crystals a light yellowish color, but underneath this thin film the mineral is white and transparent with numerous capillary cavities elongated parallel to the vertical crystallographic axis, causing a slight silky luster.

[1] G. S. Rogers, *Annals N. Y. Acad. Sci.*, *XXI*, 11, (1911).

Several specimens of analcite were obtained from the same locality, but these two zeolites occupied separate and distinct cavities, at least in the specimens obtained, with one exception where there are several crystals of analcite occupying a solution cavity and plastered or spread out on the walls of thomsonite forming the cavity, seeming to indicate that the crystallization of thomsonite, in the cooling of a rock mass, is earlier or prior to that of analcite.

If this is the case, thomsonite is one of the earliest zeolites to crystallize. Fenner states, in the Watchung Basalt,[2] analcite and natrolite are the first to crystallize but does not mention thomsonite, which is a rare mineral in that locality.

Composition. The analysis of this thomsonite shows that it is almost exactly the composition of the theoretical molecule that Dr. Wherry[3] has calculated for thomsonite, of the proportion of $Na_2 : Ca = 1 : 4$, as follows:

	Theoretical	Peekskill	Kilpatric, Scotland
SiO_2	37.3	37.44	37.21
Al_2O_3	31.6	31.57	31.79
Fe_2O_3	——	.08	——
CaO	13.9	13.80	13.60
Na_2O	3.8	3.98	4.20
K_2O	——	.04	——
H_2O	13.4	13.22	13.27
	100.00	100.13	100.07

The specific gravity is 2.3860 at 20°C.

The indices of refraction were determined, with a Fuess reflectometer, on polished oriented surfaces to be $\alpha = 1.527$, $\beta = 1.531$, $\gamma = 1.543$. These values are a little higher than any given by S. G. Gordon,[4] but this specimen contains more calcium than any in his list. The nearest is that from Kilpatric, Scotland, the indices of which are $\alpha = 1.529$, $\beta = 1.531$, $\gamma = 1.541$ and the analysis as given by Dana is as above.

[2] C. H. Fenner, *Annals N. Y. Acad. Sci., XX*, No. 2, pp. 95-187.

[3] Edgar T. Wherry, Notes on the Composition of Thomsonite. *Am. Min.*, **8**, 121 (1923).

[4] S. G. Gordon, Optical Notes on Thomsonite. *Am. Min.*, **8**, 125, (1923).