rests as loosely compacted, and more or less freely developed, capillary crystals up to 1/16 of an inch in length.

The best specimens were obtained from a fissure about 3 inches in width, which was completely filled with thaumasite in the form of mealy masses, somewhat loose in texture. These also are built up of capillary crystals, aggregated together with a tendency towards a feathery arrangement, and the specimens show a somewhat fibrous structure when broken. The material for analysis was selected from these specimens, and it was found to be remarkably pure, only 0·3 per cent. remaining undissolved in cold dilute hydrochloric acid. The analysis yielded the following result:—

	Theoretical composition	Corporation Quarry	Molecular ratio		
SiO_2	9·64	9·38	·156	0·96	1
SO_3	12·86	13·07	·163	1·01	1
CO_2	7·08	6·71	·153	0·95	1
CaO	27·01	27·32	·488	3·02	3
H_2O	43·41	43·69	2·427	15·00	15
	100·00	100·17			

The ratios agree fairly closely with the established formula, $3CaO.\ SiO_2.\ SO_3.\ CO_2.\ 15H_2O$. Both the silica and the carbon dioxide are a little low. Three determinations of the carbon dioxide gave 6·66, 6·71, and 6·71 per cent. The water was determined by the Penfield direct method.

The specific gravity was determined as 1·877 by the pycnometer method, and 1·879 using Thoulet solution. This agrees with the value usually assigned to thaumasite, but is higher than that found by Schaller for the Utah material (Sp. G. =1·84). The remaining physical properties, and the optical characters, so far as they could be determined, are as usual for thaumasite, and call for no comment.

Thaumasite has not previously been recorded from Canada; indeed, this peculiarly constituted mineral appears to be of somewhat rare occurrence, having been noted only at one or two localities in Sweden and the United States. It was first described in 1878 by Baron von Nordenskiöld,[1] from the copper mines of Areskuta, Jemtland, Sweden, and it has since been found at two other neighbouring localities in that country. In the United States, the occurrence of the mineral at Berger's Quarry, West Paterson, New Jersey, was described

[1]Compt. Rend., vol. 87, 1878, p. 313.