was inferred that the lime really belonged to intermixed calcite which could not be completely separated. This view is fully confirmed by Friedel's examination of the Dawsonite discovered by M. Mauriee Chaper in Tuseany, and the right of the mineral to rank as a good species may now be considered as fully established. Its special interest of course depends upon the fact that it is the only well defined earbonate containing aluminium which has yet been met with in nature.

The Tuscany Dawsonite is stated to occar in minute creviees, both in marl and sandstone, the latter being impregnated with dolomite. Among the minerals associated with it are calcite, dolomite, pyrite, fiorite and cinnabar; and it is said that the miners of the region look upon Dawsonite as a favourable indication in their search for cinnabar. The Tuscany mineral is evidently obtained in a purer condition than ours, and from his analyses Friedel concludes that the composition of the species is represented by Al<sub>2</sub>O<sub>3</sub>, Na<sub>2</sub>O, 2 CO<sub>2</sub>, 2 H<sub>2</sub>O or, as he also puts it, Al<sub>2</sub> (CO<sub>2</sub>Na)<sub>2</sub> (OH)<sub>4</sub>.

The following table gives under I. the results of Fridel's analyses; under II and III the original analyses of the mineral from McGill College; and under IV a recent one of that found at the Montreal reservoir. The last, it will be seen, indicates the presence of a large proportion of calcite:—

	I	II	III	I $V$
Carbon dioxide	29.59	29.88	30.72	$32\ 23$
Alumina	35.89	32.84	32.68	24.71
Soda	19.13	20.20	20.17	15.64
Water	12.00	11.91	(10.33)	9.06
Lime	0.42	5.95	5.65	16.85
Magnesia	1.39	tr.	0.45	tr.
Potash		0.38		
Manganese dioxide				0.23
Silica	• • • •	0.40		0.84
-	98.42	101.56	100.90	99.56

If from the above analyses we deduct the substances which may justly be regarded as impurities, including lime and magnesia in the form of carbonates, and then calculate the normal constituents for one hundred parts, it will be seen that the results agree well with the formula Na $_2$  [Al $_2$ ] C $_2$ O $_8$  + 2H $_2$ O: