

On extraction of the saline part by distilled water, a fine powder remained, which, after ignition, weighed 5.8 grs. and was quartz.

The saline solution afforded, on crystallization, only vitriol of zinc.

These crystals therefore consist of,

Quartz	-	-	-	-	0.250
Calx of zinc	-	-	-	-	0.683
Water	-	-	-	-	0.044
					<u>0.977</u>
Loss	-	-	-	-	0.023
					<u>1.000.</u>

The water is most probably not an essential element of this calamine, or in it in the state of, what is improperly called, water of crystallization, but rather exists in the crystals in fluid drops interposed between their plates, as it often is in crystals of nitre, of quartz, &c. Its small quantity, and the crystals not falling to powder on its expulsion, but retaining almost perfectly their original solidity, and spathose appearance in the places of fracture, and, above all, preserving their electrical quality wholly unimpaired, which would hardly be the case after the loss of a real element of their constitution, seem to warrant this opinion.

If the water is only accidental in this calamine, its composition, from the above experiments, will be,

Quartz	-	-	-	-	0.261
Calx of zinc	-	-	-	-	0.739
					<u>1.000.</u>

I have found this species of calamine amongst the productions of Derbyshire, in small brown crystals, deposited, together with

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