

have shewn me several curious facts: amongst others, one that has led me to the present inquiry. I have found, for example, that compound stellate crystals, resembling exactly many of the star-crystals of snow, may be produced in salts belonging to various systems of crystallization—although I have not succeeded in obtaining them from Hexagonal salts: another fact—so far as it goes—against the assumed crystal system of snow. Omitting all doubtful and in any way unsatisfactory cases, I have obtained repeatedly these stelliform combinations in the five substances enumerated below; and the list, I have no doubt, will be ultimately much extended:

Monometric Substances.

Camphor = $20C$, $16H$, $2O$. Star-crystals obtained from solution in alcohol. These crystals require to be examined as soon as formed, as they evaporate with great rapidity. Sal Ammoniac = $Am\ Cl$.

Trimetric Substances.

Sulphate of Magnesia = MgO , $SO^3 + 7HO$.

Monoclinic Substances.

Glauber Salt = NaO , $SO^3 + 10 HO$.

Bi-carbonate of Potash = KO , $2CO^2 + HO$.

Observed star-crystals of Camphor, Sulphate of Magnesia, and Glauber Salt are shewn, respectively, in figures 1, 2, and 3.*



Fig. 1.



Fig. 2.



Fig. 3.

The production of six-rayed stellate crystals in Glauber Salt and Bi-carbonate of Potash, is a fact of some interest: since it has been supposed that Monoclinic forms could not occur in groupings of this kind. None it is true are met with amongst minerals of natural formation belonging to the Monoclinic System, but my results shew clearly that they are capable of occurrence.

Summary.—From the observations recorded in this communication, the following conclusions may be deduced:

(1.) Stelliform six-rayed crystals are common to various systems—

* These figures are very badly executed, but they will serve to show the general character of the crystallizations to which they refer.