

the supermolecule of carbon, or of some of its compounds, remains the permanent and *characteristic* element; and that the different modifications are produced by variations in the supermolecule of water; which may be called the *modifying* supermolecule.

Secondly. The manner of the operation of the modifying agency may be thus illustrated. If to a portion of cane sugar, we add that quantity of water, which, by an easy calculation, we learn is necessary to be united with cane sugar, in order to its conversion into sugar of honey; we find that we cannot succeed in producing such conversion; and that the excess of water which had been added, flies off, and leaves the cane sugar in its original state. On the other hand, if we apply heat to the sugar of honey; though we may indeed drive off part of the water essentially associated with that sugar, we do not obtain sugar similar to cane sugar; but we destroy, or altogether decompose the sugar of honey. These facts, therefore, show that the excess of water, constituting the difference of the sugar of honey from the sugar of the cane, is really in some state of essential union, incapable of being imitated; while, in the cane sugar, the water may exist as an accidental ingredient only. In truth, according to our views of molecular arrangement; *every individual supermolecule of the weaker sugar contains a portion of this excess*