

way, by assuming certain attractive and repulsive points upon our spheres, at appropriate parts of their superficies, it is not difficult to conceive them capable, in different instances, of forming aggregates of any shape whatever. The question to be next considered is, how far are we authorized in making such apparently complicated and gratuitous assumptions respecting the properties of the ultimate molecules of matter; are there any phenomena in nature justifying such conclusions, and what are they? And this leads us to enquire further, but as briefly as possible, into the phenomena of aggregation, as we see them constantly going on around us.

Aggregation is usually considered to be of two distinct kinds; viz. aggregation depending on the simple cohesion of *similar* molecules of matter, as of water; which similar molecules for the present, may be supposed to undergo no change by the combination: and aggregation depending on the union of *dissimilar* molecules of matter, capable of exerting a mutual *chemical* change upon each other: in which kind of aggregation, the aggregate produced is a *tertium quid*, or third something, differing altogether from either of the original molecules composing it. Now both these conditions of aggregation obviously exist in the same substance; at least when in the solid form. In the