

the same matter. It is obvious, therefore, that the ultimate molecules of bodies are influenced by other powers than those of simple *inertia* and attraction: what is the nature of these powers? On this point there have been various opinions. Some have supposed the ultimate particles of bodies to possess shapes identical with those of the aggregates which they form; that a crystal, for example, whose shape is a cube, is formed by the aggregation of a number of infinitely little cubes, &c. But to others this supposition has appeared so improbable, and so unlike the usual simplicity of nature's operations, that they have rejected it, and have formed the more feasible hypothesis, that the ultimate molecules of bodies are either spheres or spheroidal; that is to say, more or less, *virtually* globular.*

Let us take it for granted then, that the ultimate molecules of bodies are spheres: with what powers is it necessary to suppose these little spheres to be invested, in order to enable

* Strictly speaking, perhaps this observation is applicable to the forms supposed to be assumed by the influences surrounding the molecules, and by which all their operations are directed, rather than to the absolute forms of the molecules themselves; which, though in all instances virtually exerting spheroidal influences, must, in different instances, have very different forms. Those who wish to study the principles upon which spheroidal molecules may be supposed to aggregate into crystalline forms, are referred to Dr. Wollaston's interesting paper on the subject in the *Philos. Trans.* 1813, p. 51. It may be noticed, however, that the principles we shall advance differ materially, in other respects, from those referred to.