

to show how the phenomena of simple crystallization might be explained ; and we corroborated our argument, by demonstrating that the electric and magnetic forces are actually related to each other, precisely as we assumed the energies of our molecules to be. Hence we ventured to draw the conclusion, that electricity and magnetism, if not identical with, at least represent, or are analogous to those forces, the existence of which among ponderable bodies, we assumed as necessary to account for the phenomena of crystallization. Further, we attempted to render it probable, that the molecules of the imponderable principles, heat and light, possess polarities precisely analogous to those of ponderable bodies ; and that many of their peculiar phenomena depend upon these polarities.

3. In attempting to account for the different forms assumed by bodies ; we supposed that in the *solid* form, the molecules are so arranged as to attract each other, according to certain laws ; that in the *liquid* form, they are so arranged as neither to attract nor repel each other ; and that in the *gaseous* form, the arrangement of the energies of the molecules is such, as to render them mutually repulsive. Moreover, by assuming that those molecules which possess the property of attracting each other in the solid form, in preference to others ; retain a similar relation in the gaseous form, and repel each other in pre-