

SECTION III.

Of the solid Form of Bodies. Crystallization.

NATURAL solids present us with a variety of properties usually termed *secondary*, many of which are of the utmost importance: such are *hardness* and *softness*, *elasticity*, *toughness*, *malleability*, *tenacity*, *ductility*, &c., all too well understood to require definition here. These properties evidently depend in a great degree upon original differences in the properties of the component molecules themselves; but there is no doubt that many of them are also intimately connected with the modes in which the molecules are arranged. Of these modes we can form no precise idea in a great many instances; there is, however, *one* form of solid aggregation, the *regular crystalline form*, which has occupied much more attention than the rest, and upon this form we proceed to offer a few remarks.

As an object of illustration we shall select the familiar one of *water*; which from its well known properties of existing either as a solid, a liquid, a vapour, or a gas, by a slight variation of circumstances, is well adapted for our purpose; as we are thus enabled to employ the same object of illustration throughout. At present we have to consider water in its solid form of *ice*.