

through the frozen surface. Now if the density of water continued to increase in a regular progression to the moment of congelation, it would necessarily happen, from the sinking of the particles gradually thus condensed, that at some given moment the temperature of the whole mass, still in a liquid state, would have arrived at the freezing point; and consequently the whole mass would have been frozen, or become solid, at the same moment. The possibility of such a simultaneous congelation is not merely a philosophical deduction, it sometimes actually occurs. Thus, under certain circumstances, particularly if kept entirely free from agitation, water, still retaining its liquid form, may be cooled down to a point several degrees below that of congelation; when, upon a slight agitation, the whole mass is converted at once into the state of ice.

SECT. VII.

The natural Sources of Water.

FOR the supply of a substance of such immediate necessity to the very existence of man, and of such extensive utility in promoting his comforts, nature has provided the amplest means; all however ultimately derived from that mass of water which has been carried up into the atmosphere by evaporation from the sea: so that if that evaporation were to fail, all forms of ani-