

naturally have sunk : for similar reasons, also, the lowest stratum of ice would have been the last to have melted. Now, let us reflect for a moment upon the consequences of such an arrangement. In the northern, and even in temperate, climates, the bottoms of all lakes and deep waters would have been a mass of ice, and totally inaccessible, therefore, to organized beings. During the summer, a few feet of the upper part of the ice would, perhaps, have been melted ; but what little had thus been melted in summer, would again have become solid during winter ; and as the accumulations of ice would have been constant ; all the seas, even perhaps to the tropical climates, at least at their bottom, would, long before this time, have been a mass of ice ! But what in reality happens ? In consequence of the above anomalous properties of water, this mischief is entirely prevented ; and not a particle of ice can be formed in a lake or other collection of water, till the whole mass is cooled down to the temperature of 40° ; at which temperature, the specific gravity of water is at its maximum.

These properties of water operate in the following manner. On the application of cold to the surface of water, the cooled portion sinks, and its descent forces up a portion of warmer water to the surface, which after communi-