

at great Depths.—Between the Tropics, the temperature of the ocean diminishes with the depth; in the Polar seas, on the contrary, the temperature augments with the depth. In the temperate seas, comprised between 30° and 70° of latitude, the temperature of the water gradually decreases as the latitude increases, until about the latitude of 70° ; when the temperature begins to rise, as before mentioned. Hence, about the latitude of 70° , there exists a zone or band, at which the mean temperature of the ocean is very nearly constant at all depths. The temperatures of particular parts of the ocean, however, have been observed to be much influenced by the depth and extent of the water; particularly in high latitudes.

We have already mentioned the influence of the saline matters of the ocean upon the *freezing point of sea-water*; and we have now to point out the important consequence of this property, in the economy of nature. In its natural state, sea-water freezes at about 28° or 29° ; but when it has been concentrated by previous freezing, the congealing point is reduced to 15° or 16° : while water saturated with salt, it is said, does not freeze at a temperature above 5° . Besides this property of lowering the freezing point of sea-water, the saline matters also increase its specific gravity; and affect its point of maximum density. Hence, from these circum-