

stances, and from their immense depth and extent, the waters of the ocean resist freezing, still more effectually than even running fresh water; and are indeed rarely frozen, except in latitudes where the most intense and unremitting cold prevails.

*Of the under Currents of the Ocean, existing between the Equatorial and Polar Regions.*— That the diminished temperature of the waters of the ocean, at great depths near the equator, could not have been acquired in the torrid zone, is evident; nor, on the other hand, could the comparatively high temperature of the waters, at the bottom of the Polar seas, have been acquired in the frigid zone; at least this high temperature of the Polar seas, cannot be caused from without. Hence it has been supposed, that there is a constant interchange going on between the waters of the Equatorial, and those of the Polar regions; though there are considerable difficulties, at present, as to the means by which this interchange is effected. These difficulties arise principally from some uncertainty, with respect to the point of maximum density of seawater; which does not appear to be satisfactorily established. Whether in the profound, and comparatively quiescent abyss of the ocean, the process of diffusion, or the central heat of the earth formerly alluded to, exert any influence, we have no means of determining. But