

than in the open sea, and that near a shore the cold increases with the depth. But Humboldt objects to this statement as a general law; for although the temperature of the tropical seas, and the Mediterranean, and Baffin's Bay, does diminish with the depth, yet in the Greenland seas and in the Arctic Ocean the temperature increases with the depth. The experiments made in the south seas during Krusenstern's voyage of discovery tend to establish the law that the cold increases with the depth. Saussure estimates the mean temperature of the sea at 53° , but it appears to range between 26° and 68° of Fahrenheit's thermometer.

MARINE ICE.

It was once much doubted by geographers whether the waters of the ocean could be frozen, but the voyages which have been undertaken in polar regions have entirely removed this doubt. Bays and inland seas, situated in sixty degrees north latitude, are entirely frozen over during the winter season, and in seventy degrees the sea is covered with fields of ice. The more enclosed the water, and the greater the projections of land, the more readily will ice be formed; and it is on this account that the Baltic, the Gulf of Bothnia, and other inland seas, are frequently frozen, when the ocean in the same latitude is altogether unencumbered. In about the eightieth degree of north latitude the ice becomes fixed, and during the winter months presents an immovable mass, having a porous and diaphanous structure. When the spring returns it begins to melt, the mass is broken, and an uncertain passage is opened to the adventurous mariner. But the summer soon passes, and the vast surface is again covered with a thick crust of ice, over which the polar bear wanders, in search of that sustenance which seems to be denied all creatures in this inhospitable region.

ICEBERGS.

An iceberg is an island of ice, sometimes immoveably fixed upon some projecting mass in the sea, but more commonly floating from place to place, according to the action of the winds and currents. Icebergs are usually very perpendicular on one side, and on the opposite have a more gradual sloping direction. Their height is variable, and some of them have an elevation of two hundred feet above the level of the