

the sea, they break up into fragments like a gigantic obelisk, and shatter everything into ruin.

Ice whose surface has been levelled by the thaw becomes fragile and friable. Mountains of ice have been known to split in twain from summit to base when only smitten with a hatchet by a sailor engaged in anchoring his boat. The crevasse swallowed up the unfortunate man, and the blocks projected on every side sank his skiff. In Prince Napoleon's expedition to the north of Europe in 1856, his followers amused themselves by firing loaded guns at the mountains of ice and snow to break them into pieces.

The snow accumulated on these floating islands melts in the spring time, and forms in the hollows basins of fresh water, which prove a welcome resource to the whalers.

The winds of the Arctic Seas are remarkable for their variability. Their force diminishes greatly when they pass over a field of ice : sometimes the ice seems even to repel the breeze, and turn it in a contrary direction. The warm southern winds grow cool as they sweep over the frosty expanse, and give up their humidity in the form of snow. In these chill bleak regions clouds cannot form : the atmospheric vapours are condensed into snow, without passing through any intermediate condition.

Whirlwinds of frozen snow are justly dreaded by the seaman who is forced to traverse the ice on foot, or in sledges drawn by Eskimo dogs. Dense showers lash the unfortunate traveller's face, penetrate his mouth and nostrils, freeze together his eyelids, and blind him. The cold wind changes his skin to blue, and lashes him in the face like the thongs of a knout. In these regions the temperature sometimes sinks more than  $18^{\circ}$  below freezing-point, and is never more than half a degree above it. The lustre of the white mantle which everywhere covers the soil is so great that in polar regions one is forced to wear blue spectacles, or vizors, covered with iron-wire, when one wishes to traverse their plains of eternal ice.

A very frequent optical illusion in the polar regions makes ob-