

NORTH ATLANTIC ICEBERGS.

ICEBERGS are a great source of danger to transatlantic navigation from March to August every year. This is the season in which the expected proximity of these dread masses of ice demands from the mariner an increased vigilance. Sometimes, but very seldom, bergs have been fallen in with much earlier. On New Year's day, 1844, a berg was passed by the *Sully* in 45 N. 48 W., and this year, on January 3, one was reported in almost the same position. The northern ice barrier is broken up by the increasing power of the sun's rays as he travels northward along the ecliptic. Fields of ice, sometimes having an area of one hundred square miles, are detached, and a free exit afforded for the imprisoned icebergs. Icebergs and field ice are borne to the southward by the cold current that follows the bend of the land from Labrador to Florida. Field ice is formed on the sea surface during the Arctic winter, but bergs have their origin far inland, and are the growth of years. Greenland glaciers glide gradually down their gentle slopes into the sea, and the upward pressure of the water breaks off their snouts to form the icebergs of the North Atlantic. Some hardy Norwegians are about to cross Greenland, and intend to make a special study of the movements of the coast glaciers and this setting afloat of bergs. Ancient glaciers have written their story on the mountains of Great Britain, and bergs were formed a little way off the west coast of Ireland during the glacial epoch.

There exists a marked difference in form between the bergs of the two hemispheres. Arctic bergs are of irregular shape, with lofty pinnacles, cloud capped towers, and glittering domes; whereas the southern bergs

are flat-topped and solid-looking. The former reach the sea by narrow fiords, but the formation of the latter is more regular. It is well to give these splendid specimens of Nature's handiwork a wide berth, for they frequently turn somersaults, owing to the wasting away of their immersed portions. Immense pieces of ice fell from a berg on to the deck of a ship that had approached too close to it while in this transitory state, carrying away her masts and maiming some of the crew. Again, ships have been sunk by colliding with submerged portions of bergs, extending from their visible volume like reefs of rocks from a bold sea coast. Hayes compared one that he saw to the Colossus of Rhodes. His ship could have sailed under the arch of ice formed in the heart of the berg.

North Atlantic bergs are neither so large nor so numerous as those met with in the Southern Ocean between the Falkland Islands and the Cape of Good Hope. In 1854-55 an enormous ice island was drifting in about 32 S. 24 W. for several months, and was passed by many ships. It was 300 feet high, 60 miles long, and 40 miles wide, and was in shape like a horseshoe. Its two sides inclosed a sheltered bay measuring 40 miles across! A large emigrant ship, the *Guiding Star*, sailed into this icy bay and was lost with all hands. A similar, but smaller, mass of ice was met with in the North Atlantic by the *Agra*. She ran into a bay formed in the centre of an iceberg, in 42 N., which was $1\frac{1}{2}$ miles across, and she experienced great difficulty in beating out again.

A cubic foot of ice weighs about 930 ounces, but the same volume of sea water weighs 1,280 ounces. Hence ice floats on water, and but