

immersion, and, unfortunately, the height of the indices was not noted, it is not certain that it did not stand at  $31^{\circ}3$  before it entered the water. At 4 P.M. the weather, which had been hitherto fine, began to look threatening, and the barometer, which at noon stood at 29.182 inches, had fallen slightly, so after heaving in the trawl, sail was made to double-reefed topsails and courses on the starboard tack, the wind being N. (true), as it was expected to shift to the eastward; forty icebergs were counted from the deck at 4.30 P.M., but shortly afterwards snow began to fall, limiting the vision to a quarter of a mile, and necessitating getting steam up in three boilers ready for all emergencies. At 6.30 P.M., during a decrease in the snowfall, a very large iceberg was seen to windward, and so the ship worked up towards it under steam and sail, and when under its lee sails were furled for the night, the officers being as thankful to get behind this friendly breakwater as one sometimes is to get into harbour. The wind rapidly increased to force 9 by 8 P.M., and the barometer still falling, steam was raised in the fourth boiler in order to maintain the position under the lee of the berg. The night was an anxious one, but not so bad as that of the 24th February, as the wind was never so strong as to prevent the ship facing it, and it was only necessary to use full steam on one occasion. The wind blew in fierce gusts over the top of the berg, alternating with periods of almost calm, rendering it necessary to use great caution in the power of steam, which had to be constantly varied as the wind changed in force, giving the officer in the engine-room considerable trouble. After 8 P.M. the snow was succeeded by rain and a partial thaw for a time, the temperature rising to  $35^{\circ}$ . At 11 P.M. the barometer reached its lowest point, 28.785 inches.

On the 27th February, at 3 A.M. (daylight), the vessel left the friendly breakwater, the iceberg, and made sail to close-reefed topsails and foresail, steering to the northward, the wind N.W. by W. (true), force 9. At 8 A.M. the wind had moderated sufficiently to allow two reefs to be shaken out and reefed mainsail set, and at noon the force was 6 to 7, the ship being under single reefs and top-gallant sails. The average velocity of the wind at 8 A.M. was 28 miles per hour, during the forenoon 25, and in the afternoon 22; that is without allowing anything for the speed of the ship through the water, as the wind was nearly on the beam. The limit of vision during the day was about four miles. Numerous bergs were passed as the ship ran to the northward seven or eight miles per hour, but few were visible at any one time owing to the misty state of the weather. It was fortunate that this gale did not shift to the east and south, as had it done so all the ropes and blocks would have been frozen together after the sludgy snow that fell during the night. After experiencing two heavy gales whilst surrounded by icebergs, one can readily realise the great dangers which a sailing vessel must encounter in navigating these seas, and can to a certain extent appreciate the feelings of the purser of Wilkes' ship, who, when called upon for his written opinion as to the expediency of prosecuting their researches further south, immediately after they had successfully battled against weather somewhat similar to that experienced in the Challenger during the last