

tinued so as the ship ran to the eastward even at a distance from the pack. Their absence farther to the westward, between  $70^{\circ}$  and  $80^{\circ}$  E. longitude, except when close to the pack edge, was so marked that, coupled with their absence on the same meridians in lower latitudes as shown by the ice chart, it seems to indicate that there can be no land for a considerable distance south in that neighbourhood, and that a very high latitude could be gained there if desired.

The pack ice consisted chiefly of small salt water ice pieces, which could scarcely be called floes, from 30 to 50 feet in diameter; 100 miles within the pack edge Ross found them to be 600 feet in diameter. The single season's ice was about 3 feet in thickness, the hummocky ice, formed by several layers heaped one upon another and frozen compactly together, was from 7 to 8 feet thick, the upper surface of each piece being covered by a layer of snow about a foot in thickness. Scattered about in the pack were a few blue coloured berg pieces of all sizes, some of them frozen into the salt water ice. All the latter was much honey-combed by melting, but the ice was evidently still of sufficient strength to give a very dangerous blow if impelled against a vessel's side, or to a vessel forcing her way through the pack. A properly fortified ship could nevertheless have easily made way through it.

In the pack were numerous icebergs, but they were not in greater numbers than in the open water, and certainly not numerous enough by themselves to create the nucleus for the pack to form around.

A very large proportion of the bergs were, as stated, flat-topped and maintained their original balance. Very many were bounded by a single range of cliffs washed by the waves all round (fig. 122 p. 377; Pl. D. fig. 3). In some these ranges were evidently old and very much indented. Many were highly complex, combining two stories, lines of caves, talus slopes, and evidences of having been tilted to various angles from the original line of flotation once or twice (Pl. B. fig. 1; Pl. D. fig. 4); some were excessively worn and weathered, having apparently been long in warmer regions, and were pinnaced and broken up by deep gullies or channels bounded often by rounded ridges projecting at their mouths on either side. One much weathered pinnaced berg was passed which had its entire surface shining and polished as if it had recently toppled, and no fresh snow had fallen since this had occurred. Several were seen with the parts which had been below water partially exposed by tilting; the surfaces of these were always polished and smooth; but no berg was seen to tilt or turn over during the voyage. One was noticed divided into three separate columnar masses so far as the part above water was concerned, no connection between the columns being visible.

The platforms under water at the bases of the bergs often run out into spurs and irregular projections, and these may be dangerous to ships going too near. Soundings were taken on one of these platforms and gave 7 fathoms at some distance from