

the berg and $3\frac{1}{2}$ fathoms nearer in. Nearly all the flat-topped bergs showed numerous crevasses in their cliffs near their summits, and these were always widest towards the summits, and were irregularly perpendicular in general direction. The flat tops of the bergs had usually rather uneven surfaces, being covered with small hillocks, apparently formed by the drifting of snow, or showing irregularities where they covered over the mouths of crevasses. The surfaces in fact, looked just like those of the "Firn" or "Névé," the cracked snow-fields at the heads of European glaciers, and appeared as if they would be equally dangerous to traverse, except by a party roped together. The second stories of bergs were always covered with snow, which had fallen on them after their emergence.

The stratified structure of the bergs is best seen in the case of flat-topped rectangular bergs, where an opportunity is afforded of examining at a corner two vertical cliff faces meeting one another at a right angle. The entire mass shows a well-marked stratification, being composed of alternate layers of white opaque-looking, and blue, more compact and transparent, ice. The late Dr E. L. Moss, R.N., Staff-Surgeon on the recent Arctic Expedition, describes a similar stratification as occurring in Arctic ice. He had opportunities of examining the ice closely at leisure, and describes each stratum as consisting of an upper white part merging into a lower blue part, the colour depending on the greater or less number and size of the air-cells in the ice.¹

Towards the lower part of the cliffs, the strata are seen to be extremely fine and closely pressed, whilst they are thicker with the blue lines wider apart, in proportion as they are traced towards the summits of the cliffs. In the lower regions of the cliffs the strata are remarkably even and horizontal, whilst towards the summit, where not subjected to pressure, slight curvings are to be seen in them corresponding to the inequalities of the surface and drifting of the snow. In one berg there was in the strata at one spot the appearance of complex bedding, somewhat resembling that shown in the *Æolian* calcareous sand formations of Bermuda. The strata were often curved in places, but always in their main line of run, horizontal, *i.e.*, parallel to the original flat top of the berg. The strata in the cliff at the level of the wash-line of a rectangular berg 80 feet in height were so thin and closely packed that they looked almost like the leaves of a huge book at a distance, for by the lap of the waves the softer layers had been to some extent dissolved out from between the harder. In one berg where the face of the cliff was very flat and seen quite closely with a powerful glass, the fine blue bands were seen to be grouped, the groups being separated by bands in which no lines were visible, or where these were obscured by the ice fracturing with a rougher surface, not with a perfectly even and polished one, as existed where the blue bands showed out. The cliff surfaces, where freshly fractured, showed an irregular jointing and

¹ Observations on Arctic Sea Water and Ice; *Proc. Roy. Soc. Lond.*, vol. xxvii. p. 547, 1878.