

On three occasions we saw discolourations of bergs. In one case there was a light yellow band on one surface of a cliff high up, possibly the result of birds' dung which had fallen on the snow when the layer was formed; it was too high up to be due to Diatoms.

On another occasion two bergs were passed at a distance, which showed conspicuous black-looking bands, apparently dirt bands. In one of the bergs there were two or there such bands, very broad, parallel to the blue bands, and separated by considerable intervals, in which the berg showed the usual stratification. In another, two black bands existed at one end of the berg and one at the other. Both were parallel in direction to the blue bands, but the stratification at the end where the two black bands were, was inclined at an angle to that of the remainder of the berg, as if a dislocation of a part of the berg had taken place. These bergs were too far distant to allow of the exact nature of the black bands being determined.

In none of the numerous bergs did I see any bending or curved vertical bands, giving evidence of a former differential motion in the mass, such as are to be seen on every land glacier. How far the absence of these characteristic lines of motion may be explained by the fact, that only about the uppermost tenth of the entire height of the bergs is seen, I do not know. A berg 200 feet in height above the water, when floating, must, if it were of symmetrical form and equal density throughout, have an actual height of about 2000 feet.

A mass detached from the edge of the barrier, and then showing lines of motion might, whilst floating, receive a sufficient addition of weight by successive falls of snow to sink it entirely below water in supporting the new structure.

Moraines and large rock masses would become hidden by such snow accumulations, both towards the free margins of the continuous glaciers, and also after the bergs containing them were detached; and a berg laden with rock need not expose it to view until after long thawing or capsizing.

The accumulation of rock and stones in the form of definite moraines is, of course, a phenomenon which can only be produced by the accompaniment of thawing or evaporation of ice in combination with its motion. If both these processes occur to very small extent in the ice of the glaciers, whose free edge forms the Great Barrier, the rocks and stones received from the overhanging cliffs inland, or supporting beds, will be distributed evenly throughout the mass, and never be concentrated at all. The crevasses seen in the upper parts might be produced after a berg is set free by the greater