exposed part is of lighter, less compact ice, and often further lightened by excavation of caves, and presence of crevasses.

So large a proportion of the bergs being required to be immersed, in order that the bergs broken off from the parent ice masses should float in stable equilibrium, with their surfaces originally uppermost maintained still in that position, it is necessary that the pieces thus breaking off, supposing their upper surfaces to be square, should be at least as wide as they are thick. If this were not the case, if the density of the ice masses were uniform, the bergs would necessarily topple immediately they broke free, and this fact would be shown by their stratification being vertical to their plane of flotation. This, however, seems never, as far as I could judge from the bergs I saw, to occur. Tilting only takes place after bergs have been long weathered. The bergs seem nearly always to be of large area in proportion to their thickness, and to maintain their original balance for very long periods. No doubt the much greater density of the ice composing the lower portions of the bergs tends to keep them in their original position.

The waves, partly no doubt because of the water at the very surface being warmed by the sun, and partly no doubt by heat resulting from their motion, cut a wash-line all round the bergs, which appears as a concave groove-like channel with a polished inner surface, just at the water-level.

When bergs rise to a higher level, or tilt, these wash-lines remain marked on them, as straight polished streaks, visible from a great distance, giving evidence of the former lines of flotation of the bergs. Sometimes, several ancient wash-lines are visible on one berg, and where the cliff surfaces on which they are scored are protected at their base from the waves by secondary cliffs or projections, they may remain intact for very long periods.

The wash-lines being hollowed out at the bases of the cliffs, these latter soon overhang, and large masses split off along the lines of joint and cleavage, and fall. The masses evidently split off tolerably evenly from the whole height of the cliffs, for these are nearly always, when thus still water-worn at their bases, perpendicular, and on our firing a shot at a berg cliff, the ice split off in this manner from the whole height of the cliff.

When there are crevasses at the level of the wash-line leading into the ice from it, the wash of the waves hollows out caverns, which resemble in general form caves cut in the same manner by waves on coast-lines, and have their mouths wide at the levels of the wash-lines.

The presence of caves is a proof that a berg has floated at