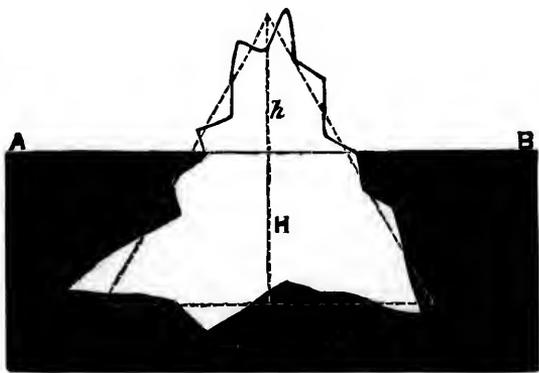


That bergs, instead of descending in parallel sides beneath the surface of the water, rather extend outwards in the form of a broad base, depends on the assumption that the disintegration is carried on at a greater rate above water than below.

Apart from these theoretical considerations, it would seem from actual observations, that although icebergs have occasionally been seen in low latitudes to ground in deep water, as mentioned by De la Beche in his "Geological Observer," where one is recorded as being stranded in 720 feet of water on the Banks of Newfoundland, the bulk of them is only to be seen upon the shoals. In fact the grounding of icebergs is used by both the fishermen of Newfoundland and Labrador as a means of finding out shallows which may be used as fishing-grounds.

If a berg is seen to ground some distance out at sea, its bearings from the land are at once observed, and it is in this way that many of the banks have been discovered.

If, instead of taking such an extreme case as the one to which I have been referring, where the generally peaked appearance of a berg, as seen above water, might be imagined as standing on a wide-spread flat base beneath the water, we consider the portion of the berg beneath the water as being a general continuation of that above, even in this case it will be seen to be very improbable that the ice extends to the great depth which is usually assigned to it.



For example, in the accompanying figure let A B be the surface of water in which we see a piece of ice floating as indicated by the black line, the general direction of that beneath the water corresponding to that which is above. Approximating to such a figure, draw on the "give-and-take" system a many-sided pyramid, or in the limiting case a cone approximately equal in volume to that of the supposed berg. This is shown by the dotted line. We have given that the position of the cone beneath the surface of the water to that which is exposed are to each other in the ratio of 8 to 1.