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WHAT IS THE SHAPE OF AN ICEBERG?

THIS QUESTION is not quite so incapable of solution as the classical query, "How big is a piece of chalk?" Icebergs, it is true, have many shapes, but all exist in the same environment of air above and water below. All are gradually melting as they drift southward, and the manner of

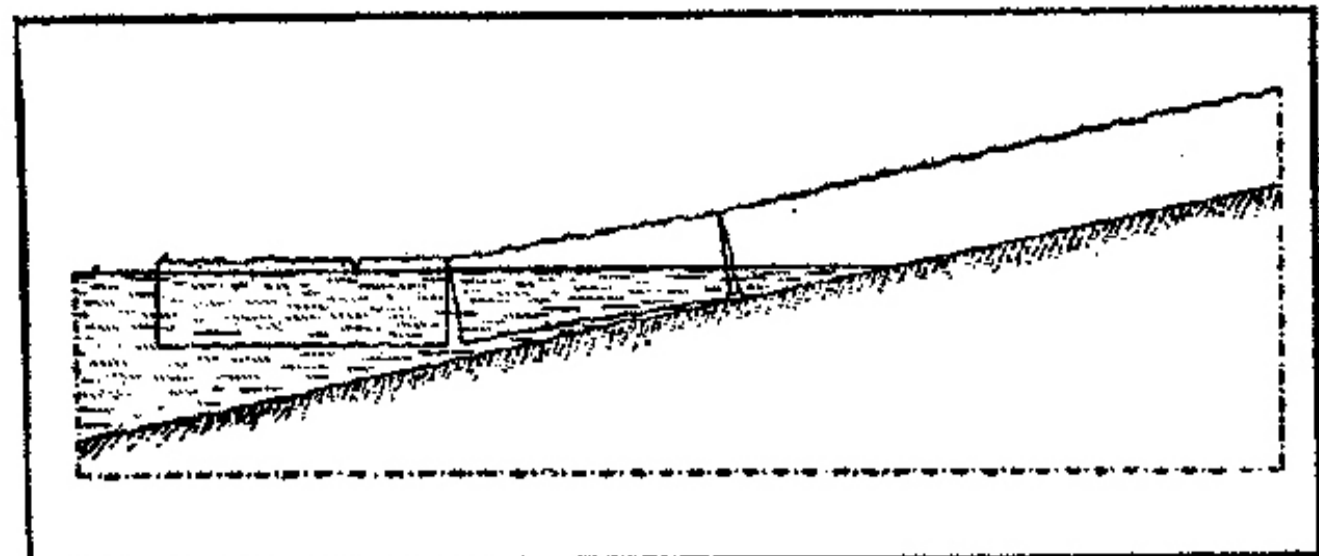


FIG. 1.—LONGITUDINAL SECTION OF A GLACIER.
Showing how icebergs break off.

this melting does not differ greatly from one case to another. So it comes about that there are certain things that we may know about the shape and extent of icebergs, above and below water, and it is desirable that these things should be known by

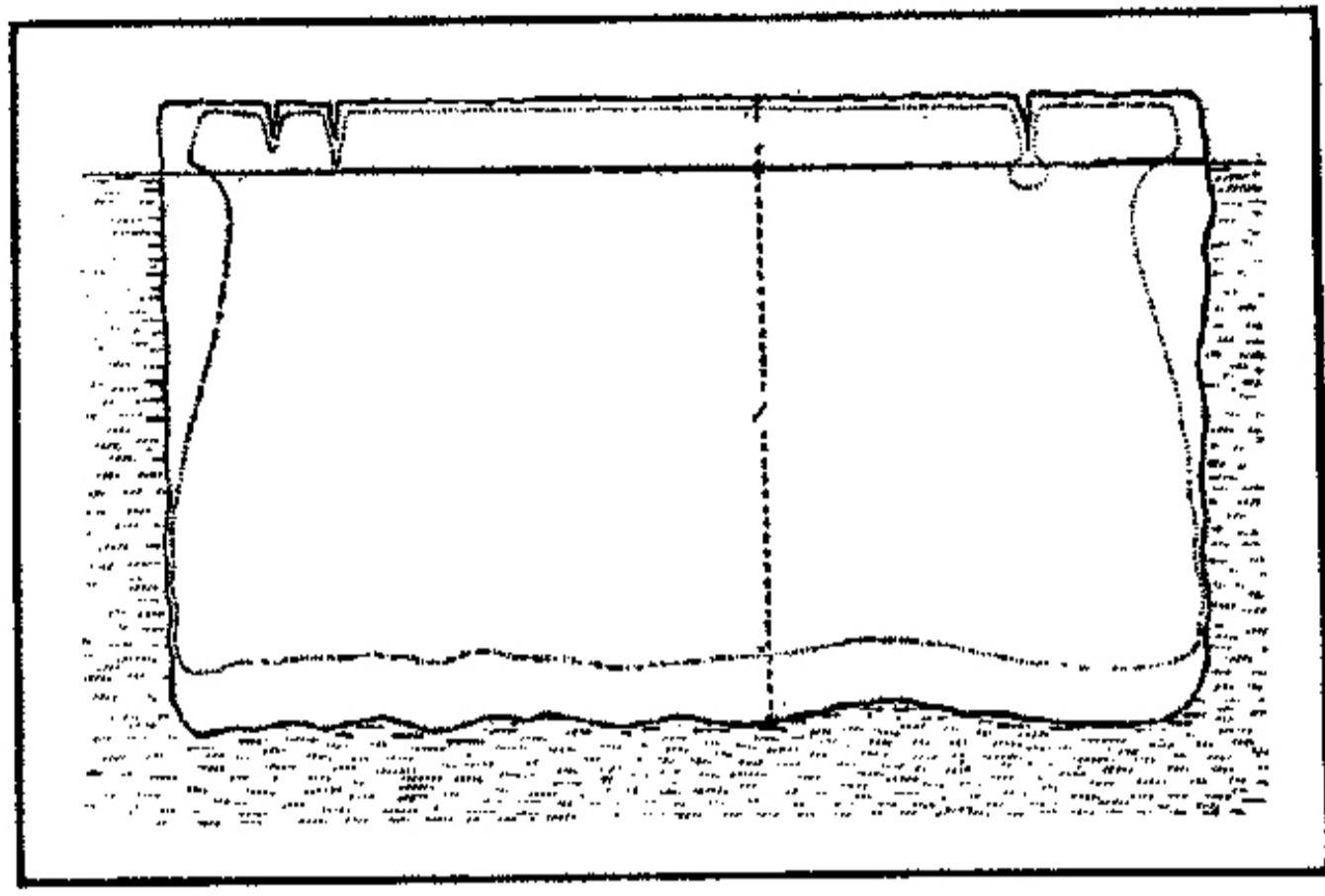


FIG. 2.—HOW AN ICEBERG BEGINS TO MELT.

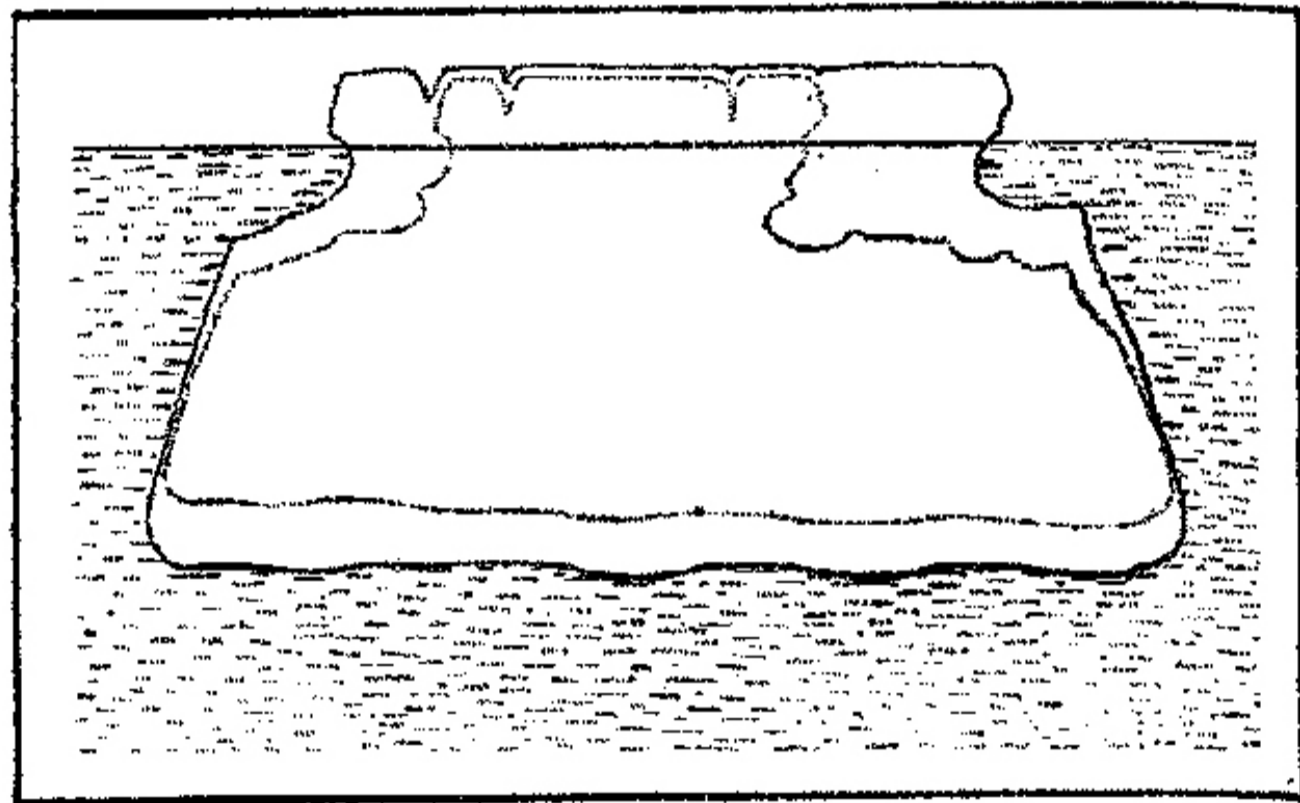


FIG. 3.—MORE ADVANCED STAGE OF MELTING.
Showing how the lower surface gradually rises.

this melting does not differ greatly from one case to another. So it comes about that there are certain things that we may know about the shape and extent of icebergs, above and below water, and it is desirable that these things should be known by all, particularly by the masters of vessels, as the *Titanic* found out to her sorrow. Some of them are pointed out and illustrated by C. Janet in an article on "The Probable Form of the Submerged Part of Some Icebergs," contributed to *Cosmos* (Paris, August 1). He writes in substance:

"The volume of the exposed part of some icebergs is sometimes very considerable. As the total volume of an iceberg is at least nine times that of the part out of water, and as most icebergs have reached a more or less advanced state of fusion by the time that they are first observed, we may conclude that among the blocks given up to the sea by the fronts of certain glaciers some must be of very great size.

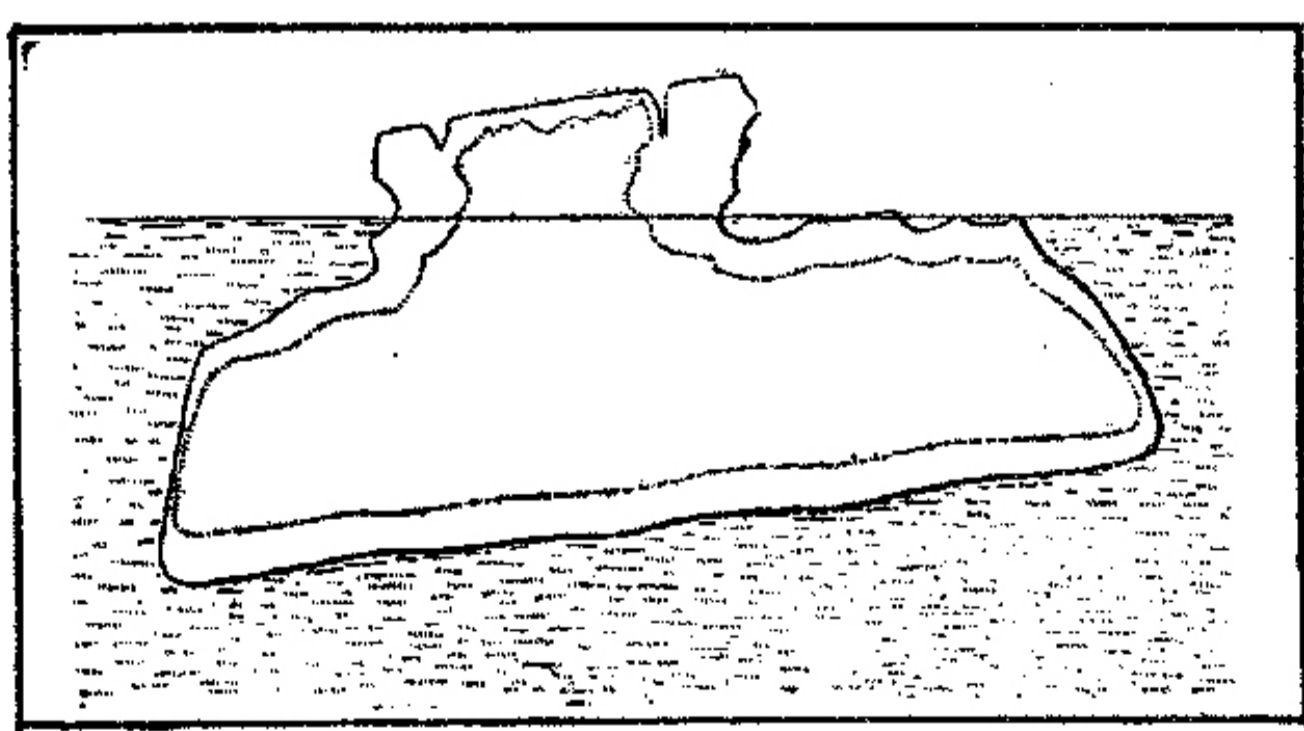


FIG. 4.—STILL MORE ADVANCED STAGE.

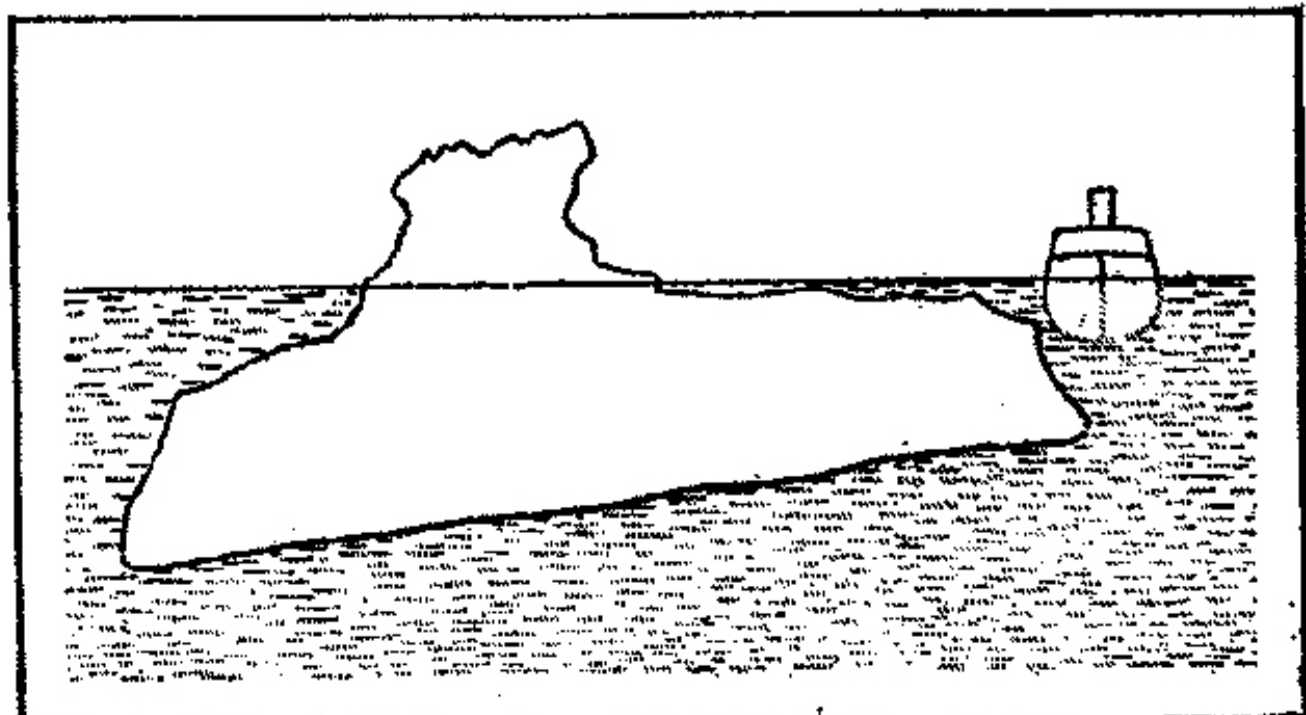


FIG. 5.—A VERY DANGEROUS STAGE.
The visible part of the iceberg now has a height about equal to the submerged part.