

that the ice around the ship's hull must be broken only down to a certain depth. The table specifies that depth. I think it will be very useful both to navigators and to persons who spend the winter at arctic drifting stations.

- Ice was used a long time ago as the cheapest building material - it served to create river crossings, erect ice palaces, and even to build... cannons capable of firing one shot.

- But all these structures have one shortcoming in common: they thaw. I first became interested in the problem of utilizing ice for construction a long time ago, during the first winters I spent in the Arctic. How to assure a particular strength and durability of ice?

- The method of sprinkling water under pressure first permitted me to obtain a stronger surface, whereas the addition of a mixture of sand and clay to the water further increased the strength of ice. It was still dependent, however, on temperature. It was a refrigerating chamber that helped me and my students to create an "eternal", non-thawing structure.

- As often happens in science, the solution proved to be quite simple. The method of volume freezing - this is the name we gave to it - permits one to build on shelves ice structures of most varied forms, dimensions, and functions. This requires no great expense or special equipment. One has to build only a structure of metal tubes in the form of a multi-layer lattice. The latter is lowered into the sea and cold arctic air is blown through the tubes. The tubes immediately become covered with an ice crust, and within one and a half or two months a