

A Science Service Feature

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? WHY THE WEATHER ?

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Authority on Meteorology

FACTS ABOUT ICE

Ice becomes very strong and hard at low temperatures. In the middle of the eighteenth century a czarina of Russia constructed a marvelous ice palace, near which were several cannon made of ice. These were loaded with gunpowder and balls of ice and iron, and were discharged without injury, though the thickness of the ice was only four inches.

In the middle ages quartz, or rock crystal, was supposed to be a hard variety of ice formed on high mountains.

Surface ice formed in quiet water on the surface of a pond or lake is so strong that when it is an inch and a half thick it will support a man; when six inches thick it will support a horse and wagon; when 18 inches thick it will support a railway train.

Professor Barnes, the well-known Canadian authority on ice, tells us that the dangers of beverages in which ice has been mixed as compared with those cooled externally have been greatly exaggerated. "Ice," he says, "is a far safer food than either water or milk. The trouble comes from improper harvesting of natural ice from localities infested with weeds and dirt, which become frozen between the ice crystals. In the manufacture of artificial ice there is usually an opaque core into which all the foreign matter from the water has been thrust and in which it is retained. In natural ice frozen from a flowing river or deep lake all foreign matter is expelled on the under side, and it is only the top dressing of snow ice that contains the impurities."

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