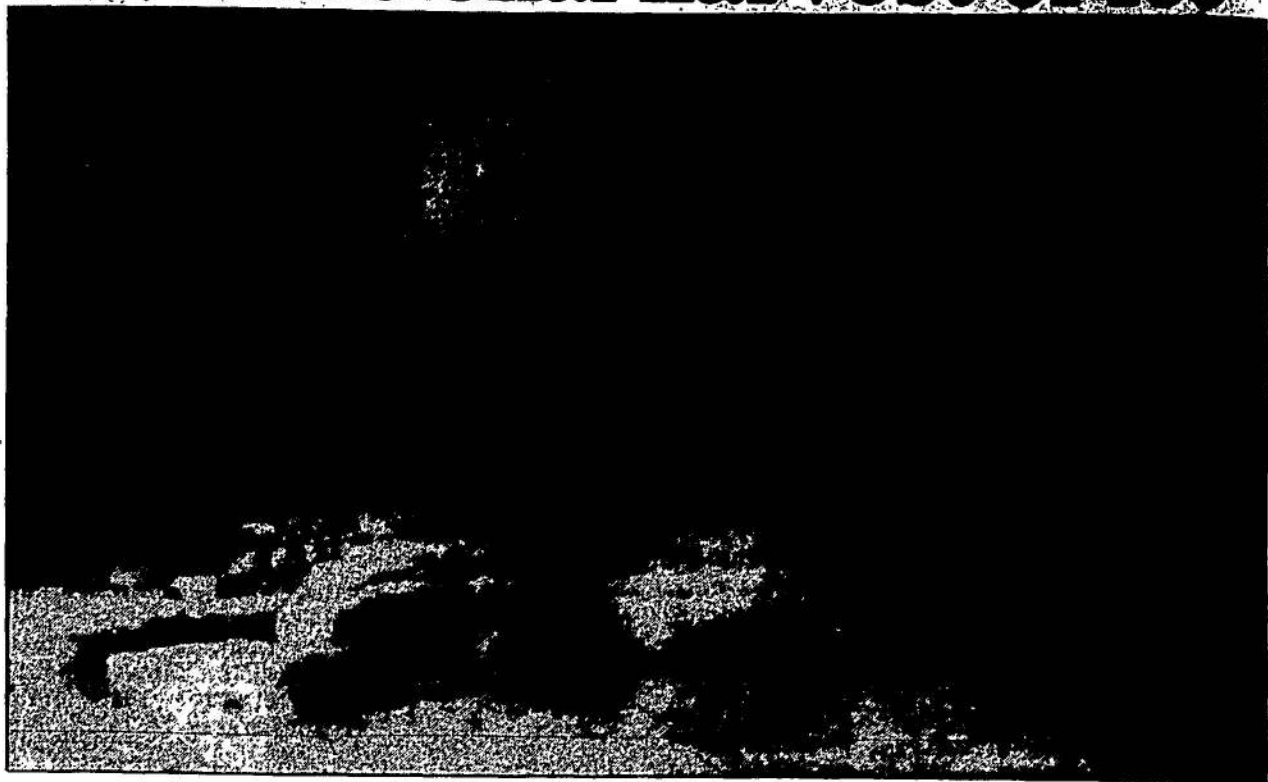


Refrigeration puts freeze on the traditional harvest of ice



The thickly frozen surface of Forge Pond creates a fertile harvest for ice workers at the turn of the century. Wooden rollers form a conveyor belt for the blocks of ice, lifting them into the storage facility at the site of what today is the town beach.

Photo courtesy of June W. Kennedy

Big pond business slides into obscurity early in century

Compiled by Gordon B. Seavey and June W. Kennedy

Thomas S. Hittinger of Belmont, who had been cutting ice on Fresh Pond at the Cambridge-Belmont line for a number of years, purchased an ice harvesting site at Forge Pond in Westford in 1864.

He was shipping ice to Caribbean ports by sailing vessels (often glad for the ballast) through Boston. Only 35 miles away from the Hub, also having good rail facilities, he built a second plant in Westford.

The new building of rough sawed pine timbers and boards, covered perhaps more than an acre and was 30 feet high with double walls. Sawdust, of which there was plenty available from nearby saw mills, filled the air space between the walls. This produced the necessary insulation to hold the ice from melting.

Small doors at floor levels on the pond side of the rectangular building allowed the newly-harvested ice to enter and be stacked, one layer on top of another.

Gravel was the only floor and there were no windows. Doors were placed on the opposite end of the building so when summer came, the cakes could be pushed out into freight cars waiting on the siding. Broken cakes were discarded in a pile so many a villager had free ice for the asking.

The late Fred Fisher said, "It felt good on your bare feet, too."

Notwithstanding the simplicity of design, the ice harvesting building on Forge Pond cost Thoms S. Hittinger \$65,000 in 1864 — a tremendous sum in those days.

For comparison of prices, the coal needed to fire a steam boiler could be shipped from Boston for 60 cents a ton. The boiler, the only mechanical power used in the entire process, was used to rotate a heavy link chain, with crossbars spaced every six feet, to pick the heavy ice cakes floating in the water.

Another \$3,000 went for tools and other equipment.

Even today a fisherman or scuba diver might find an old ice pike or chisel which some harvester accidentally let slip

through his hands into the icy water.

When the water had frozen to the desired thickness, best at 12-14 inches, urgent calls went out to crews patiently waiting orders. Things had to be organized quickly for nature is fickle and storms or mild weather could damage a harvest.

Scraping by scoops

First an area, perhaps a dozen acres, would be marked off. If the ice had a snow covering of any depth, this would be scraped off by horsedrawn scoops. A driver would guide a plow-like tool, a steel blade about four feet long with descending teeth, along a straight line. This would gouge a groove about two inches deep the full distance of the field. He would then return parallel to the original groove, with a marker arm to guide him, cutting a new furrow two feet distant.

When the area was so grooved, a new set of furrows, four feet apart, would cross all the others (like marking a pan of fudge) producing rectangles 2' x 4'. Men