



As many as 175 men were employed in 1881 in the ice business run by Thomas S. Hittinger at Forge Pond. Ice was moved over Stony Brook Railroad to Lowell, Boston and then run down south on freight cars. (From the WESTFORD RECOLLECTIONS Series)

## Westford Recollections

by June W. Kennedy

### Harvesting natural ice

A business long down the drain  
Part I

In Grandpa's day there was great excitement when in late January or early February Jack Frost breathed heavily to freeze the local ponds and rivers about a foot in thickness. It was time for the harvesting of natural ice. There was no mechanical refrigeration as we know it. Ice was needed to preserve food-stuffs in hot weather... and nature was the only one who produced the coolant.

Farmers depended greatly on an adequate supply of ice. Dairy farms were prevalent in those days and in warm weather milk had to be cooled quickly to protect it. Pasteurization was unheard of, and the milk had to be kept cold until it reached the consumer, perhaps three days later, while still sweet. Then the housewife would stash it away in her natural oak finish icebox or chest, hoping it would be consumed before turning sour.

Many farmers had their own ice houses, about the size of a single-car garage, near the dairy barn, which they filled themselves each season from the nearest pond. Any body of water over ten acres was fair game to all comers. Bernard Wilder recalls, "On our Parker Village farm in the mid-twenties, we Wilder boys relished ice harvesting time when word went to all the neighboring farmers that the ice was thick enough to cut. Ice had to be cut, hauled on sleds and put into individually owned ice houses for the coming summer to cool the milk, not to mention the homemade ice cream. No one farmer owned enough equipment, so neighbors pooled their horses, sleds, wagons, saws, bars and labor. We'd fill six to eight houses with a guess of about 50 tons of ice. Saturdays during this time were excitement plus!"

There were many small "ice house" ponds in this area. The folks from Parker Village harvested on Baptist or Heart's Pond in South Chelmsford. The Connells and the Shugrues in the north part of Westford cut ice on Long-sought-for-Pond; "Boney" Blood, the Wrights and the Browns cut ice on Forge Pond.

Small companies served local homes and businesses in limited areas. They did their deliveries by horse and wagon right from the ice house. Wallace W. Johnson cut ice for many years on Burge's Pond, which was spring-fed. Everyone considered this the best!

A smallish man, it was amazing how he could sling cakes of ice, some weighing perhaps 200 pounds, from his ice house, to a canvas-covered horse-drawn wagon, and into an ice chest. Hand held ice-tongs held the cake on his back; his body was protected with a heavy rubber blanket folded at the bottom to catch the drippings.

Everyone knew the ice man. Twice a week he'd leave a 25 or 50 lb. block depending which card was in his customer's front window. Many of the local children were fascinated with Mr. Johnson's glass eye which never moved...but he

was a most welcomed friend!

It was hard work for little money. Fred A. Brown recalls his daughter spending time at the end of each day wrapping dimes and other change dumped from the little canvas bag he used as a purse.

#### Big business at Forge Village

Commercial ice harvesting was on a much larger scale. One of the larger establishments was at Forge Pond, on six acres of flat land now used as a town swimming area and beach. This was an ideal location as the 212-acre pond offered an ample source of supply. A spur track from the railroad made shipping to distant places an easy matter when the time came to release the stored ice.

Ice harvesting was a simple operation but it took lots of muscle aided by horsepower. Farmers in the area were eager to rent their animals and hire themselves out for this was exciting work. Life on the farm in the winter was fairly quiet and the extra money was greatly needed. Teenage, husky boys found that they could pick up a few dollars, too. Also, it was too cold to work in the quarries in the winter, so many of these men found seasonal employment in the ice industry. Harvesting had to be done quickly with an eye to the weather and on the thermometer.

Thomas S. Hittinger of Belmont, who had been cutting ice on Fresh Pond at the Cambridge-Belmont line for a number of years, purchased the site at Forge 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 pondside 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 caked 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. Fred Fisher said, "It felt good on your bare feet too."

#### Ready to cut

Notwithstanding the simplicity of design, the building cost Hittinger \$65,000, 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.

#### Large area

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 horse-drawn 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 distance.

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 feet. Men with hand saws, pumping up and down could cut a narrow section through the entire thickness to open a channel through the middle of the field.

This would meet with a channel already cut leading out from the shore. It was to be through this "main" channel that the ice cakes would glide to the immersed portion of the powered chain. In the meantime, out on the field, men had been sawing the area into large sections, forming great ice floes. Each furrow at the edge of the floe had to be caulked with snow so that water wouldn't enter into, freeze and seal the grooves. Furrows, when struck with a sharp pointed iron rod, would split the floe wide open, breaking it into neat, smaller sections. This was termed "barring off."

Long strips of two-foot ice, all properly grooved at four-foot intervals, would be poled into the main channel toward the shore and the waiting chain. They would be barred-off again (A favored chore) into the proper 4-foot length. Then pushed over the moving chain, a crossbar would pick up a cake at a time, perhaps as many as 70 per hour, for the ride up the incline.

\*Credit to Gordon B. Seavey for this article.

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