PART THREE
HALF-TONE
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FOR ALL THE NEWS THE
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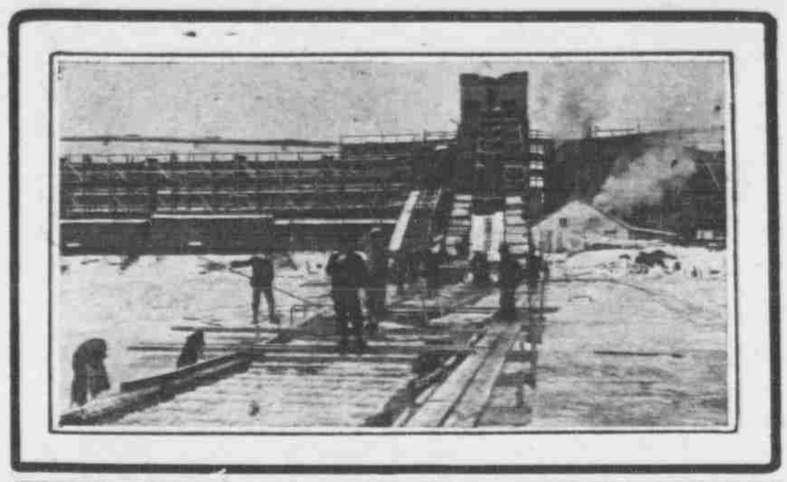
WHEN CUT OFF LAKE BECOMES A RICH HARVEST FIELD

Army of Men Now Busy Gathering Ice that Grows Over Lake's Surface and Storing It by Thousands of Tons Against City's Needs When Long Hot Days of Summer Come Again

Plowing The Ice



Chutes and Elevator

Breaking Up The Snow

Sawing Out A Raft

IN MEMORY OF WARMER DAYS

Guiding A Raft To The Chutes

Blocking Off The Rafts

AFTER the fisherman has packed away his tackle and the green of the cattail grass has turned to brown out on Cut-Off lake, when the muskrat has sealed up the doors of his mud cottage and the croakings of the bullfrog have ceased—after that the cold of the northland steals down and a delicate network of crystals creeps out over the water. That is the beginning of the ice coat that the lake is to wear, the first sprouting of the crop that is to give Omaha its sundaes and high-balls through the long sultry summer.

To one who has seen the shimmering lake under the summer moon in the gay days of the season, when the canoes push their inquisitive noses up among the rushes and lily pads, the lake would today present a most striking and interesting contrast. The merriment of the summer settlements has ceased and out there across the broad acres of the lake stretches the chill expanse of ice, the one greatest crop of the winter season. An army of workmen is toiling to put away so much as is possible of the fruitage of the cold into big storage rooms, and when sumer smiles again the ice man will be delivering it at your back door at so much a hundred weight—how much depends, and the ice man has a chilly heart.

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Scene of Activity

That lake today presents a picture of most unusual activity. An army is engaged in stripping the lake of its crystal covering. No less than 500 men are scattered over the checker board of squares that the markers are making in laying out the "field," as the lake is called by the ice harvesters.

It is a strange looking army, this array of ice harvesters. Its recruits come from the ranks of the country's unemployed. The typical ice harvester has no home, no country, no aspirations. He is what his foreman calls a "floater." He follows the seasons about in an uncertain sort of way, taking the work that offers for the time.

The bosses of the ice army are men of experience and training, but their troops are always just recruits. Some way each winter about the time that the ice is ripe for the cutting the workers show up about the Twelfth street employment agencies, expectant of a job. They time their visits to Omaha well. The "floaters," as they are known, have come to be a kind of a constant in the ice industry, always to be counted on when they are due. Just how or why they are there for the job no one knows, not even the wandering workman himself. There seems to be an intuition that guides this happy-go-lucky laborer in his journeys about the country.

Out on the ice you will see him, distinctly different from the home loving type that may by chance be represented beside him. This typical ice man will have his feet tied up in burlap buskins most picturesquely fashioned from stray sacks found by the side of the railway tracks. The unique garment has no lines of beauty, but in its savage sort of way it is highly efficient in giving protection from the cold and a sure footing on the slippery surface of the ice.

This ice harvesting is rough work. It is face to face with the cold, no escape. But the busy laughing men, always moving, as much to keep warm as to satisfy the alert eye of the foreman, take little thought of the rigors that they must suffer. Out on the ice plantations there is always plenty to do. The ice must be harvested in season. There is no time for delay. The thaw may come and unless the firm cakes are stowed away in the house they will soon fade away into the calm waters of the lake. The perishability of the product engenders a feverish haste in the commands of the bosses which force the men to drive the work along at top speed.

Vastness of the Field

The vastness of the ice field on Cut-Off lake is itself an incentive to endeavor. A few hundred yards of distance on the painfully level surface is enough to make the figure of a man tiny in perspective. Once on the ice one feels that he will have to hurry if he is to get anywhere. Then there is a spur in the sparkle of shimmering snowflakes and the gleam of the clear ice below.

The ice field after the work is well under way presents the aspect of a mammoth checkerboard. The horse-driven marking devices lay it out in squares, the primary figure of the great geometrical design that the half ready acres of ice bear.

In the preparation of the ice for the cutting a striking process is presented, owing to the condition that exists this year. The heavy snowfall occurring at the same time with the freezing weather that coated the lake covered the crop with a crisp crust that served both as a protection from dirt and an encumbrance. To remove the snow crust the ice is treated with the action of a discing machine. This is just a disc harrow, the same kind that the Nebraska farmer drives over his fields to chew up the clods into a cultivatable surface.

With team and harrow the plowman winds his lonesome way across the ice ahead of the workers who are to follow. The sharp steel discs cut the snow into tiny bits, which are easily pushed aside by the scraper which follows. Then the ice is left clean and clear for the cutters, who tear it off in blocks to lay away for the season of need.

After the scrapers come the markers, the men who, with horse-driven tools, cut the ice into forms in which it can be handled. First of all a line across the area to be cut is laid straight and sheer. This is done by the use of a rope stretched taut like a chalk line and a narrow keen chisel mounted on a handle for convenience. This line becomes the base of operations that will stretch over the wide surface of the ice for many an acre. Guided by this base line the markers begin to cut the design of the big checker board. With plows which are in reality only saws, each drawn by a single horse, they cut other lines back and forth across the field, following with unerring hand the base line. Every cake of ice must measure just twenty-two inches on a side. This is the size of the ice cakes you are used to seeing on the rear end of the familiar ice wagon when it makes its expensive July visits to your block.

The first plow, a set of saw teeth set in tandem, cuts into the ice for two and a half inches. Then comes the second and yet a third, each cutting about an equal depth. So the marking process is continued until the ice is cut into squares with the defining lines extending more than half way through to the black still water below.

The ice is then cleared away for a space, giving working room in open water. Then the work of stowing away the crop begins with real regularity. Up an endless chain conveyor, driven by steam engines, the ice is hauled into the big storage houses, where it will lie protected from the attacks of the weather outside until drawn upon to meet the needs of summer.

Mathematics of the Work

The ice checker board is cut, or rather broken, along the lines of easy cleavage created by the deep scratches made by the marking plows. The first step in the process is to cut off big blocks or rafts of ice containing 256 of the primary squares laid out by the markers. This makes a "block," as the ice men have termed it in their own trade vernacular, measuring thirty-two squares long by eight wide. Drivers, men equipped with long pike poles like those that the lumber men use in the log drives in the forest streams of the north, push the floating blocks up to the conveyor, where they are reduced again to size which permit their easy handling in the conveyor system and in the ice houses. The blocks are first counted and laid off in the big checker board by the field foremen. A man with a coarse saw cuts out the blocks at the ends, leaving it attached only along one side. This edge is cracked loose by the use of the "spudders," heavy, straight, two-tined forks, by which the ice can be readily broken along the lines scratched in by the markers. With the block broken loose from the field it can be started down the channel toward the elevator. As a block contains often so much as twenty tons of ice it is not to be put in motion without an effort. The drivers strain and push at the block until its inertia is overcome. Once started the block is moved along with little effort and one driver frequently can push three or four of them. When the cutting takes the workers far afield the horses are pressed into service and long rafts of blocks are pushed up the conveyors along the channels left by the cutters.

Its Last Breakage

Before the ice reaches the conveyor belt it must be reduced several times to more convenient sizes. This is accomplished by groups of men stationed at points along the channel close to the point where the ice is delivered from the lake water to the endless chain elevator. At the first station, usually about a hundred feet from the place where the conveyor chain comes rattling up from the water below, men with "spuds" crack the blocks into strips measuring two of the primary squares in width and four in length. This work is done without arresting the motion of the ice as it swings into the last turn of the channel. The men become remarkably deft with the tools and but a single motion suffices to throw the blocks around the bend in the channel and break off the smaller cakes. The cakes of ice are kept flowing into the ice houses in a continuous stream. The loss of motion would mean the loss of energy and in plants where during the season perhaps a hundred thousand tons of ice are handled every operation must be reduced to its lowest and simplest terms. The labor represents practically the whole cost of the ice and so whatever economy there is to be accomplished must be in the best possible utilization of the labor on the ice field.

With this second subdivision the cakes of ice are floated along into a more permanent channel which delivers them to the conveyor. The sides of this channel are lined with heavy planking so that the constant grind of the passing cakes will not wear the edges away. The ice for perhaps the entire summer supply of a big storage concern may all go through this narrow channel of about ten feet in width and the moving miles of floating ice would soon tear away the naked edges of the passage. The sides of the channel are lined with platforms and runways, with here and there a crossing wide enough to give secure footing for the pike men, or drivers, who urge the floating cakes along.

The ice is close upon the conveyor when it is subjected to a final subdivision into cakes containing but two of the primary squares. Then with a final shove the pike men force the ice into the range of the reach of the conveyor belt, which is constantly rising from the water at the end of the channel. Up the chute the conveyor pulls the cakes at high speed, dumping them off onto inclined planes, which whirl the ice into the "runs" or platforms that run along the sides of the ice houses, reaching the open doors of the storage room, where the ice reaches its resting place for the rest of the winter.

At stations along this route stand men ready to keep the ice from jamming up into heaps, obstructing the passages. The steady movement of the slippery stuff means a great deal of activity and dextrous effort. These men are equipped with sharp-pointed pike poles like those used out on the lake in the big channels, but they are lighter and with shorter handles. The ice goes sailing down the chutes into the storage rooms at a high rate of speed. At the end of the chutes it is delivered to the packers, who put it up in piles which as the harvest advances mount close to the roof. These piles are separated by several inches of air space which allows drainage and ventilation when the ice slowly melts through the summer season.

The men who stow away the ice within the houses are the skilled laborers of the harvesting force. They are paid the top wages, which means that they receive about 25 cents an hour. As the ice passes along the chutes into the houses it is subjected to inspection and defective or dirty cakes are thrown off and discarded. When the house is filled the top of the big mass of ice is covered with a layer of hay or straw several feet thick to protect it from the heat that filters through the roof. The preservation of the ice depends on keeping it insulated from the heated atmosphere outside. The big ice houses are double walled, with an air space of twelve inches between. This layer of air suffices to keep the light and heat from penetrating to the inner wall which lies next to the ice. With this protection the ice simply cares for itself.

Snow Helps Much

The snow which covered the first crop of ice this season, while it meant more labor and expense, insured a finer quality of ice than has been cut from the lakes of eastern Nebraska for many years. The snow blanket effectually covered and laid the dust of the roads and fields about the lakes, preventing contamination of the lake's surface from that source, and again it covered the young ice as soon as formed and prevented the accumulation of stray particles of matter in the ice itself. When the protective covering of snow is swept aside it leaves the ice clean and clear.

The visitor to Cut-Off lake finds a mirth-provoking reminder of the gay days of summer on the water. At regular intervals about the shores of the lake are signs bearing a warning to each and every person that he must not swim in the lake without a bathing suit. With some hundred acres of ice about, a landscape covered with snow and the breezes driving a temperature of 4 degrees below zero into one's anatomy, the suggestion of at least the protection of a bathing suit seems almost unnecessary.

When once the ice field is marked off into squares the harvesters are put to considerable pains to keep the lake from undoing their work. When the blocks are cut out of the field the exposed edge of the ice is in danger of being overflowed by the water, which in freezing fills again the cuts of the checker board made by the markers. To prevent this a gang of workmen is kept busy making little dams of snow in the ends of the tiny cracks cut by the markers next to the water's edge.

The finest of the natural ice produced is that taken from the second cutting, when the weather continues cold enough to freeze over again the area stripped of the first crop. The second crop of ice has a wonderful purity. The big translucent slabs of blue are bright and clean.

What Omaha Uses

The consumption of ice in Omaha is high. The dealers estimate that about nearly half a million tons are annually required by the city and its industries. The packing houses require thousands of tons of ice in the refrigeration of the trains which carry their products out to the world. Then a great city is to be supplied at home. The natural ice is much cheaper than the artificial product. The big ammonia gas freezers produce ice at an average cost of between $1.75 and $2 a ton, according to the statements of the manufacturers. The natural ice can be stowed away for the summer at less than half of that when weather conditions are favorable.

The annual ice harvest gives employment to about 1,000 men in and about Omaha and frequently at a time when other work for the laborer is hard to find. The big packing houses of South Omaha and the dealers of the city, including the refrigerating plants, all take advantage of the ice crop to store up the winter's cold. The ice houses about the lakes within an easy radius of Omaha cover many acres of land. Most of these big ice houses are served with their own special system of railway tracks, over which the thousands of tons of ice must be handled in its distribution to the consumers.

Today finds the ice harvesters at work on Cut-Off and Seymour lakes in large numbers, while another big force is cutting the crop at Ashland for the use of a big packing concern. The ice cutting began this year much earlier than is usual and the storage companies will probably be able to fill their houses. The large production of natural ice they intimate may have a tendency to keep prices down in the summer. The natural ice crop is always, however, reinforced with several thousand tons daily of artificial ice.

Habits of Exercise of the Several Presidents

THE present occupant of the White House and his immediate predecessor are the only presidents that have been given to regular and systematic exercises.

As to the early presidents, they lived in an age when tennis and golf were unknown in this country, and not one of them would have thought of boxing or single stick as a mode of exercise. The Virginians all rode on horseback, and George Washington, an active outdoor person all his life, although he thought himself old when he entered upon the presidency, was still fond of riding.

It was as president in New York and Philadelphia that he first found himself a regular and permanent resident of a considerable city, though he took what opportunity he could to get away to Mount Vernon, and once there, resumed his regular outdoor life, riding and walking for hours daily over the plantation. In New York he drove out in his state coach, rode on horseback and occasionally walked the streets with that great stride of his that all men who saw him ever after remembered, but he must have missed his accustomed open-air life of camp and plantation. His health was ordinarily good in spite of his changed mode of life, though he nearly died of anthrax in New York.

The Virginians who followed Washington in the presidency, and John Adams, liked to get away from the seat of government to their country homes, where they all lived much in the open air, though not one of them was so active a man as their great predecessor. The truth is that Washington, whom most persons think of as born to luxury, probably endured more genuine physical hardship than the poorest man that ever occupied the chair.

Jefferson, like the other Virginians, rode on horseback, but it is probable that he went on foot to his first inauguration in spite of the picturesque tradition of his tying his horse to the fence about the capitol grounds. He took his greatest pleasure at his plantation.

All the early presidents after the removal of the capital to Washington appeared freely and unattended on the streets and upon foot, for the smallness of the population prevented them from attracting crowds. John

(Continued on Page Three.)