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The Story of a Half-Million Cakes of Ice

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TO disabuse the minds of those who think all the romance has gone out of railroading or the transportation business, let us spend a few moments watching the annual ice harvest at the Pacific Fruit Express Company's natural ice plant at Carlin, Nevada, one of the largest in the country and the only one on the Southern Pacific Lines.

Carlin is a regular re-icing station for perishable shipments, the only one between Sparks, 283 miles to the west, and Ogden, 209 miles to the east. Here the bunkers of nearly 60,000 refrigerator cars loaded with fruits and vegetables are refilled every year, and, as each car on the average requires from 1500 to 2000 pounds of ice, the Pacific Fruit Express Company must

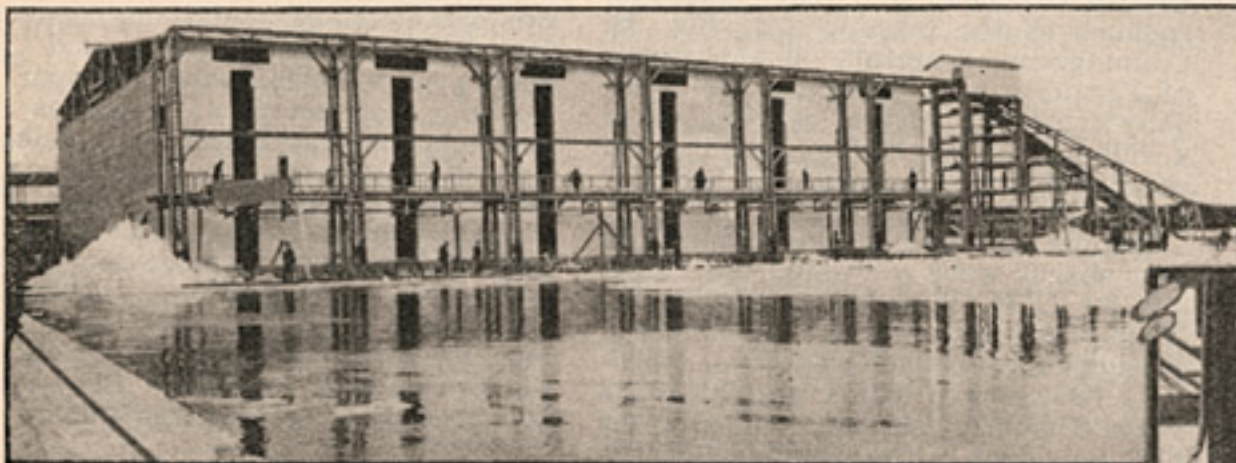
ing weather comes. The freeze usually starts in December and nature makes the ice according to her whim. This year the ice was about 14 inches thick; it is as clear as crystal and each freeze shows in distinct layers. Nights with a minimum temperature of 23° below zero account for the layers 3 inches thick, and from these they taper off to ½ inch or less, each as clearly defined as rock strata.

The harvest, or cutting, starts when the ice has been frozen to the required thickness; usually this is early in January. From 160 to 200 men are employed when the harvest is on, most of them for a period of three weeks, which means an extra payroll of some \$20,000.

Now for the actual cutting and

that there is no lost motion from the time the cake leaves the ice field until it is stored on end in the house. Mounting the incline, the blocks are swept of snow and loose ice on the surface by an adjustable brush, and at the top they are moved along a level conveyor or chain where men with picaroons at each room opening turn them into the rooms where they rush down a gravity chute to be caught by the switchers and conveyed to parts of rooms being filled.

Ten hours a day this work goes on. A good day's run is 3,000 tons, or 6,000,000 pounds cut and stored. Each cake of 14-inch ice weighs about 225 pounds, which means the handling of about 26,667 cakes a day, or over 44 cakes per minute. So a 60,000-ton harvest involves the cutting and handling into and out of storage into the bunkers of cars of over one-half million cakes of ice, and each one plays its part in providing cold storage for the thousands of cars of fruits and vegetables on their way to distant markets.



One of the large ice houses at Carlin where 54,000 tons of ice are stored away by the Pacific Fruit Express Company. The ice is harvested from a 50-acre artificial lake and is used to re-ice refrigerator cars containing perishables. Right, shows ice blocks being conveyed from the artificial lake to the storage house.

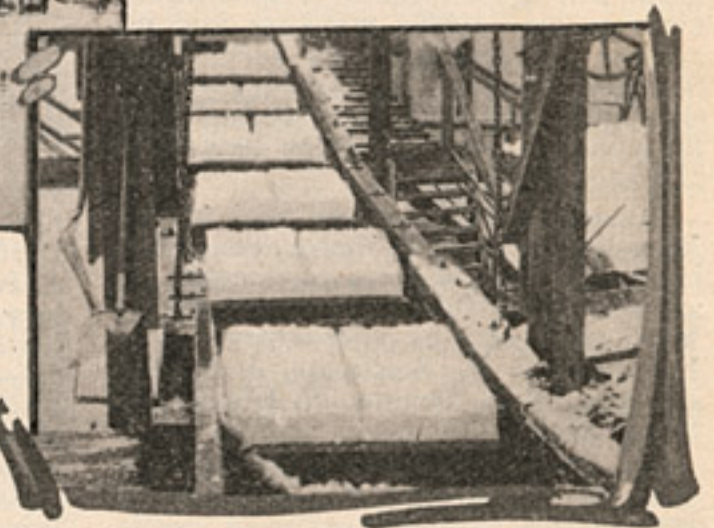
provide a supply of between 50,000 and 55,000 tons annually besides 5,000 tons additional for the Southern Pacific's Salt Lake Division store department, passenger train and station requirements.

Now let us see where this large supply comes from. First greets the eye a large covered icing platform over one-half mile long, with room to ice 67 cars on each side at one time. The adjoining storage houses and temporary stacks look large enough, and are in fact, to hold 54,000 tons of ice. The largest of them contains 14 compartments or rooms, each with a capacity of 2200 tons, so 30,800 tons of ice can be stored in this house alone. But there is no ice manufacturing plant to be seen, and this brings us to the interesting problem of harvesting the year's crop of natural ice from an artificial lake. This lake, which adjoins the ice houses, is made by impounding the water from a creek that flows into the lake basin and pumping water from the Humboldt River by means of three centrifugal electrically-driven pumps operated by the Company's power-generating unit, which consists of two large semi-Diesel engines, and furnishes all the power and light for the entire plant. The lake is about 3200 feet long by 600 feet wide, area—approximately 50 acres, and has a depth of from 3 to 5 feet at the time freez-

storing. First the ice is marked in straight lines 22 inches apart to a depth of some 2 inches, by means of a small machine that looks like a cultivator. Next comes the power saw, a four-cylinder gasoline engine with a wicked-looking lumber saw hooked on behind, which has a guide to follow the marking lines and cuts the ice to a depth of 9 or 10 inches. A stream of ice chips spurts out behind the saw for thirty feet—much like a shower of sparks.

A man called the "Face-Spudder" follows the saw several cuts behind, with a heavy two-pronged steel bar and with regular measured strokes divides the ice into long strips of two cakes width, which are now ready for floating through the channel and to their storage resting place. The channel, made by nailing parallel stringers along the shore of the pond, leads to an incline chain conveyor where the ice is caught on wooden bars and conveyed to the various storage rooms.

The long strip of ice is floated to the channel entrance by horse power, where men called spudders, with long steel bars, stationed at intervals, keep it moving steadily and break the ice with deft and sure strokes—first into 8, then 4, then 2, and then single blocks. Each man has his particular job so



BAKERSFIELD SHOP MEN GET DIVIDEND FROM S. C. P. L.

Shop Craft's Protective League Local No. 12 at Bakersfield was in such healthy financial condition at the end of the last year that a dividend of \$1.05 was paid each member as a Christmas gift out of the treasury surplus. This amount represents three months' dues of each member and totaled \$350.

W. P. Edgar, president of the local, who is serving his fourth term in that office, doubts if any other labor organization has ever done this. Other officers are: M. L. Giddings, secretary-treasurer, serving fifth term; J. L. Snodgrass, vice president; and F. E. Baker, committeeman for the machinists and chairman of the grievance committee. Mr. Edgar is also serving his fifth term as committeeman for other carmen.

Membership of Local 12 consists of the six shop crafts, apprentices and helpers of the Bakersfield and Mojave shops. It was organized in August, 1922, and, according to Mr. Edgar, has 100 per cent membership.