#### OCTOBER, 1939

# **Skating Rink Care**

CKATING fields are classified by the O landscape maintenance men according to the nature of the care that they requireinto lagoon or natural water areas, and artificial fields. The lagoon areas are, of course, taken care of by natural freezes, dependent entirely upon the weather. The artificial fields are made when the temperature reaches 28 degrees or lower. The area selected has been previously graded or leveled (usually a recreation field or level piece of lawn space, located near some shelter) and when there is enough frost in the ground to seal the pores so that water will not trickle down through the soil, intensive work is begun to build up the ice sheet.

Laborers do this work at night so that they will have the advantage of the coldest hours in the twenty-four for the difficult work of covering the ground with this preliminary ice sheet. The method used is the same as that used in spraying a lawn in the summer. The men have long hoses, equipped with rose sprays with which they spray the ground thoroughly so that the ice sheet becomes level. One night of freezing will usually do the necessary sealing, after which the spraying is continued back and forth, starting at one end of the area and continuing to the other, at which time the first portion has very likely frozen, so that another period of spraying is in order.

## Work Fast in Freezing Weather

In this way, by spraying back and forth, possibly one-half inch of ice can be secured on the second or third night after freezing weather sets in. By the time this much ice has been built up, all the uneven portions of the field have been completely covered, so that no grass or little patches of soil project up through the ice; then it is ready for use, and the skaters are permitted on. In mild weather, when the temperature hovers around 32 degrees, the ice gets soft and yields to the scraping of the skates, so that more or less slush accumulates on the surface. In such cases, the first operation is to remove this slush and then start in another period of spraying, efforts being made to build the ice sheet as quickly as possible while the freezing weather lasts.

The slush is removed from the ice by scrapers. On lagoons or natural water

# By George Ehmann Chicago Park District

areas, it is possible to use over-sized scrapers drawn by a one and a half ton truck. The equipment has been developed over thirty years or so of working on ice fields by park and recreation people and by the natural ice harvesters, especially of Wisconsin. In the event of snow, the snow should be cleared from the ice as soon as possible.

As to lagoon or natural water areas, the nature of the weather determines when such ice will be ready for use. A near zero spell of a few nights will probably freeze the ice to sufficient thickness, namely, in the neighborhood of six inches, after which it is safe for the use of skaters.

### **Test Ice for Safety**

In order to determine when the ice has reached the proper thickness, every day during the winter season a worker bores holes at many different locations on the ice and measures its thickness. Owing to certain natural conditions it often happens that one area of a lagoon will have the six-inch layer which is required for safety, while other spots will be barely frozen over and unable to bear the weight of one man.

In lagoon or natural water ice, when repairing cracks caused by expansion and contraction of the ice, it has been found difficult to get cold water to make a sufficient bond to cause a permanent repair in that crack, whereas warm water melts sufficient ice from the sides of the crack to bind the two portions when the water cools and then freezes. It is similar to a process of welding. However, if there are great temperature changes thereafter, the ice will crack again, usually along the same lines as the previous cracks, so that on the lagoons, one of the features that has to be included in the caretaking is that of repairing these expansion and contraction cracks. Special equipment is used to plane off the little bumps and scratches caused by skates so that the surface is evened off as nearly as possible to a table top surface. This work is done at least twice a week.

These planes are usually drawn by teams shod with special shoes that are equipped with frost nails or ice calks. The reason that teams are generally used is that sufficient traction cannot be secured by light motor trucks to pull these planes.