

 Bumpy peat fairway before levelling. 2. Discing two ways. 3. Thoroughly disced fairway ready for rolling and levelling. 4. Peat fairway more than six years after discing and levelling.

## Leveling Bumpy Peat Fairways

## By O. J. NOER

Fairways on peat soil in northern regions where the ground freezes to a depth of several feet or more become a vexing problem within a few years after the golf course is completed. Newly drained peat does not settle to a compact soil until after initial decomposition has taken place. Peat has a tremendous water-holding capacity. Huge mounds develop as the water in it freezes and expands during late fall and early winter. When the ground thaws in the spring and the mounds subside surfaces become uneven. They are not bad at first but become very bumpy and uneven after a few years. The fairway mowers scalp the top of the bumps and are unable to cut grass in the low spots between them. Golf balls are hard to find because most of them lodge in the low spots and are covered by long grass. Playing anything but winter rules is impossible, and walking over the rough terrain becomes a chore.

Some of the courses in the Minneapolis-St. Paul district have extensive peat areas on fairways. The greenkeepers, and others, have experimented in search of a leveling method which would be reasonable in cost and not seriously interrupt play.

Rolling with heavy power rollers used for road work was tried with indifferent success. Covering with loam soll to a depth of several feet was proposed and tried in a small way. It was a satisfactory method except for cost.

The turf on peat fairways contains a high proportion of stoloniferous bent grass. Leonard Bloomquist of Superior Golf Club in Minneapolis decided to experiment on part of one fairway and rely upon stolons of the old bent grass sod to produce new turf on the leveled fairway. The experimental area was cross-disced with a farm disc until the turf was cut into small chunks and the surface soil was loose so it could be moved with a drag. A spike-tooth harrow, with the teeth tilted backwards, was used to level the surface. Then the fairway was rolled lightly to press the chunks of grass into the soil. Growth of the stolons was fostered by timely rains or

(Continued on page 90)