

Plant



Coos County

State Sealed and Certified

NOW

and be

Free

from

Putting Green Problems

SEASIDE BENT CO.

1108 Post Street, Seattle, Wash.

THE J. M. McCULLOUGH'S
SONS CO.

316 Walnut St., Cincinnati, Ohio

Eastern Dealers May Secure Spot Delivery in New York City. Call Radway's Tested Seeds, 115 Broad St., Bowling Green 9-3373.

COLUMBIAN GREENS PERFORATOR IS NEW INVENTION

FOR many years there has been a recognized need for an implement suitable for the cultivation of putting greens, and many attempts have been made to produce such an implement. These attempts have met with success in varying degrees, due chiefly to the fact that the usual implements have not been capable of penetrating the soil to a sufficient depth to give the desired results without tearing up the turf to such an extent as to mar and injure temporarily the smooth surface required of these areas.

It is important that the compact surface layer of putting greens resulting from the constant trampling by players and workmen, be perforated at frequent intervals in order to permit the entry of water, air and plant food to the soil which contains the feeding roots of the grass, and to allow the escape of gases which form underneath this layer. The importance of a deep root system is generally appreciated in turf maintenance but if this practically impervious layer is not opened up occasionally so as to permit these necessary elements to get down into the soil that must support these roots, it is impossible for the grass to develop a strong healthy deep root system, and to accomplish this successfully deep penetration is necessary.

The Columbian Greens Perforator is designed and built especially for this work. This machine weighs approximately 300 lbs. It is equipped with two handles so that it may be drawn back and forth across the green without the necessity of turning. It requires two men for efficient operation.

It covers a swath of about one foot at each trip across the green and it requires approximately one hour to perforate an average size green. It is equipped with a transport carriage which lifts the knives clear of the ground for turning and moving from one job to another. It is equipped with eight independent oscillative members which contain the perforating knives and which are removable or interchangeable.

In the standard equipped machine each of these members contains 10 knives (two rows of five each). The machine may be had, however, with 21 knives in each member (three rows of seven each), or if desired it may be had with both sets which may be interchanged to suit the particular need for different conditions encountered. If the greens are very hard the units with 10 knives will be most satisfactory as they penetrate deeper, but in case of fairly soft greens the 21 knives will do a more complete job. The knife-like perforating instruments are so shaped as to facilitate penetration with a minimum of pressure and withdrawal with a minimum of draft, thereby minimizing the weight necessary

for deep penetration as well as the manpower required for efficient operation.

It is possible with this implement to perforate putting greens to a depth of two and one-half inches without disturbing to any appreciable extent the smooth surface required of these areas, say its makers, who add that the feat is impossible with the ordinary spiked roller of the fixed spike type. This is made possible by the oscillative members in which the knives are set. These units, by their oscillative motion, allow the spikes or knives to enter the turf in a practically perpendicular position and as the central unit passes over this knife-bearing unit the knives are forced their full depth into the ground and then withdrawn in this same perpendicular position thereby preventing the usual lever action which picks up the turf and roughens the surface.

Fee Courses Ask for Some Answers *(Continued from page 49)*

buildings, as well as the purchase of considerable first-class course maintenance equipment.

9. The best method of handling capacity play is to have the starter arrange foursomes at four-minute teeing-off intervals. Occasionally when people are holding up foursomes it is advisable to have course rangers ask the dilatory ones to permit others to play through. Reservations are made either at the starting tee or at some convenient point downtown for Saturday, Sunday and holiday starting times.

About the only tough part of this municipal golf course operation is that some of the starters indulge in petty graft in allotting starting time preference. However, I would say as a general thing, the



Humus-Fertilizer

**Both
in
One**

Driconure establishes a new standard of fertilizing values. Cow feces and urine, absorbed by peat moss and concentrated five times, it gives both quick-acting and long-lasting results. Every spec is good food and humus. There is no waste—and it stays in the ground until it is used—does not leach away. As a fertilizer alone it is better—and less expensive. The peat moss humus makes it doubly valuable.

Get complete details and prices for Fall use.

Atkins & Durbrow, Inc.

G-165 John Street New York, N. Y.
Also Importers of G. P. M. Peat Moss



DIAMOND Steel Center TRACTOR SPUDS

Long wearing and sharp until completely worn out—because of hard tool-steel center—outside wears away faster. Made in all sizes to fit any size or make of tractor. If your dealer can't supply you, write direct for sample or literature

**DIAMOND CALK
HORSESHOE CO.**
4702 Grand Ave.,
Duluth, Minn.

SAIL to the P. G. A. Championship

Fare \$3.50

Staterooms from \$1.00 and Up
Many with Bath and Shower

NEW YORK AND PROVIDENCE

Steamers leave New York, 6 P. M. (DST)
from Pier 11, foot of Liberty Street.

Steamers leave Providence, 7:30 P. M. (DST)
from Colonial Wharf

COLONIAL STEAMSHIP LINES

TRUE METROPOLITAN and WASHINGTON CREEPING BENT STOLONS

Cheaper than you can grow them. I will have a supply of excellent Stolons of the Metropolitan and Washington Strain of Creeping Bent, which will be ready for fall delivery, beginning about the middle of August. Let me book your order now.

DR. H. B. PACK, Post Office and Telegraph Address,
3406 Fort Ave., Lynchburg, Va.