

ANT-TEE-ANT

will keep new-cut Greens free of ant hills and worms and not injure turf. Trial order to make fifty gallons.

\$7.00 delivered or buy it of your dealer

Satisfaction or Money Refunded

The Royal Products Co.
214-216 S. Charles Street
BALTIMORE - MARYLAND, U. S. A.

Something New

Greenkeepers of golf courses and growers of fine turf generally will hail the advent of a new inexpensive, All-Purpose Spreader, just put on the market by the Root Manufacturing Company, 1051 Power Avenue, Cleveland, Ohio.

The Root spreader is operated by hand, with finger touch control, so that it is able to handle not only all kinds of fertilizers and topdressings, but grass seed as well. The makers claim that it can handle the finest bent seeds as light as three pounds per thousand square feet.

This new spreader is built for heavy duty work and has the feature of triple roll agitation, which prevents packing of the material, even though moist. The operator, walking behind the spreader can control the distribution with the result that there is no waste, which makes for economy.

This company has also put on the market a Weed Killer, which uses dry ammonium sulphate and is very efficient. This eliminates the use of liquid poisons and is a stimulant to the grass.

The spreader sells for \$50.00 and the Weed Killer for \$1.00, f. o. b. Cleveland. Complete particulars will be furnished upon request.

New Rotary Booklet

Double Rotary Sprinkler Company, Coco-Cola Building, Kansas City, Missouri, has just issued a new booklet on the Double Rotary Sprinkler, which shows by text and photographs the many advantages of this product.

The makers claim that the famous Double Rotary principle prevents any wasting of water; in fact it actually saves water as it covers a larger area most evenly and thoroughly.

By its rotating principle, the Double Rotary sprinkles a circular area up to eighty feet in diameter—more than five thousand square feet—depending upon city water pressure. Also easily adjusted to sprinkle smaller areas down to fifteen feet in diameter.

The Double Rotary Junior sprinkler, which sells for \$7.50, is especially designed to meet every need of the home owner. It is ample to take care of lawns and flower gardens and may be adjusted to meet all requirements.

Every sprinkler sold by this company is personally guaranteed by Lou E. Holland, president of the Double Rotary Sprinkler Company.

Soil Conditions and Root Development

(Continued from page 13)

In closing, it may be said that the studies here reported do not pretend to completely solve the important problem of root behavior. However, they do serve to emphasize the importance of roots in growing turf, and show certain of the relations existing between root occupation and soil conditions. It is hoped that further investigation will indicate treatments that may be adopted to improve root development, both for soils before grass is planted, and on turf that is established. An additional extremely important point to consider is the range of soil conditions that will facilitate the development of root hairs on roots that are present, and the absorption of water and nutrients.

Jacobsen Gives Figures

Jacobsen Manufacturing Company, 735 Washington Avenue, Racine, Wisconsin, is quite pleased with a letter from the Kilbourn Country Club, Franksville, Wisconsin, with regard to the experience they had with the Jacobsen power mowers. This is a course of twenty-seven holes with Washington Bent greens and has been in play for three years.

We quote the following from a letter written by the Green committee chairman:

"An accurate cost record was kept for all operations on the course during the season and you will note that the cost of greens mowing for twenty-seven greens amounted to only about \$15.56 per green for the entire season or approximately 13c per cutting.

"With power mowers it is not necessary to mow the greens more than five times a week, whereas if hand mowers were used, it would be necessary to mow them every day, the growth of the greens being so heavy that it would be hard to

mow a two days' growth with a hand mower. The turf actually becomes stronger by letting it grow one or two days each week without cutting. This does not interfere with the playing qualities of the course as days are selected when the play is not so heavy.

"We attribute the immunity of our greens to Brown Patch to the frequent brushing and top dressing of the greens, especially during the hot, dry weather. Brushing of the greens whenever the growth appeared stunted or during the early season when the growth was at its height, kept the greens from matting and improved the grain of the Bent. This is easily done with the brush attachment as furnished with the 24" Power Putting Green Mowers and also makes it possible to brush in thoroughly, light applications of good top dressing material. Frequent applications of top dressing is in our opinion, much superior to the use of chemicals and provides excellent cushion to hold a pitched ball.

Statement of the Ownership, Management, Circulation, etc., required by the Act of Congress of August 24, 1912, of THE NATIONAL GREENKEEPER, published monthly at Cleveland, Ohio, for April 1, 1932.

State of Ohio, County of Cuyahoga, ss.

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared Robt. E. Power, who, having been duly sworn according to law, deposes and says that he is the Editor of the National Greenkeeper and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, (and if a daily paper the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers, are:

Publisher, The National Greenkeeper, Inc., 405 Caxton Bldg., Cleveland, Ohio; Editor, Managing Editor and Business Manager, Robt. E. Power, 11609 Lake Ave., Cleveland, Ohio.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The National Greenkeeper, Inc., 405 Caxton Bldg., Cleveland, Ohio; Robt. E. Power, 11609 Lake Ave., Cleveland, Ohio; Frank H. Clark, 2848 Drummond Rd., Shaker Hts., Ohio; H. L. Richey, 5263 E. Fairfax Rd., Cleveland, Ohio; Frank H. Pelton, 19110 S. Woodland Rd., Shaker Hts., Ohio; F. E. Percy, 3159 South Moreland Blvd., Shaker Hts., Ohio; C. F. Lowe, Aurora, Ohio; Frank M. Power, 11609 Lake Ave., Cleveland, Ohio; M. J. Fox, 15002 Superior Rd., Cleveland Heights, Ohio.

3. That the known bondholders, mortgages, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

ROBERT E. POWER, Editor.

Sworn to and subscribed before me this 11th day of April, 1932.

H. W. Slack.

My commission expires Jan. 8, 1935.