

championship is played on a scratch basis. August 1st is a good time to schedule this event and the permanent trophy which your president donated can very well be put up as the major prize in this event.

If you decide to hold your championship on a medal play basis, make the president's trophy event a match play contest. Have your members qualify some Saturday afternoon and start the first round of match play the following Saturday, giving the contestants the privilege of playing their matches anytime before that they please. It would be well to limit the event to the sixteen contestants who qualify with the lowest net scores so that the event can be decided on the four following weekends: eight matches the first Saturday, four matches the second, semi-finals the third and final on the fourth.

(4) Local merchants and others may donate trophies to be competed for by amateur golfers, the only restriction being that the trophy should have no unusual intrinsic value.

As a general rule any trophy worth not over \$50 would probably be acceptable under the U.S.G.A. interpretation of an amateur. Cash prizes are of course out of the question, although it is common practice to give merchandise certificates to winners of club events.

If the merchants of your community are interested in donating prizes to be competed for by your members, it would be a very fine idea to build club spirit and member interest by accepting these donations and holding minor golf tournaments as frequently as possible. Hold a handicap golf event once a week on either Saturday or Sunday, whichever is more suitable to the golfers; whatever trouble it would take to put on these events would be repaid in increased play. Care must be exercised not to "club" local merchants into donating prizes as this can lead to complications in that these men will expect the club to trade from them in repayment for the donation they have given. Often a club can purchase more cheaply elsewhere but is unable to take advantage of the better price because it feels obligated to some merchant who has "come across" with a trophy. It would be well to have an understanding with merchants on this subject whenever they express a desire to put up a prize for competition at the club.

Codeball on the Green

*A recreation akin to golf—
the modern and fascinating
All-American kicking game*

Here's a proven revenue-getter for golf clubs—healthful enjoyment for golf widows and orphans

Sanctioned by the A. A. U. in 1929.

Among recent installations are courses at:

Foster Park, Ft. Wayne, Ind.
North Manchester College, No. Manchester, Ind.
Picturesque Swope Park, Kansas City, Mo.
Woodside Golf & Country Club, Des Moines, Ia.
Foster Park, Kokomo, Ind.
Lincoln Park, Rock Island, Ill.
Sportsmens Golf Club, Indianapolis, Ind.
University of Indiana, Bloomington, Ind.
Stadium Hills Golf Club, Ann Arbor, Mich.
Community Park, Dayton, Ohio.
Golf Perfection Fairways, Toledo, Ohio.

Additional courses now being planned for Cincinnati, Columbus, Newark and Piqua, Ohio. Now is the time to get the original franchise in your city.

Write us at once for detailed information.

CODEBALL COMPANY
of AMERICA
11 South La Salle Street
CHICAGO, ILL.

Aeration of Turf Is Important in Conditioning Program

By G. H. CALEY

Sup't, Waterford Woods Golf Course

THE GENERAL OUTLINE of the fertilizing and watering programs we have adopted is this: Watch the amount of grass that comes off each green; note its condition, color texture; aim to feed turf just enough to keep it growing. Water just enough to keep soil fairly moist. Keep soil in good physical condition as regards fertilizer. If you use fertilizers that are quickly assimilated, use less; fertilize often. We use Milorganite and while it is not a complete fertilizer, it is very easy to add what it lacks. We keep a complete outfit for applying fungicides ready, but did not use over 10 lb. of NuGreen the last two years, notwithstanding the fact that they were bad years for brown-patch, snow-mold, etc.

Small and large brown-patch both seem to me to be produced by unhealthy soil conditions, aggravated and sometimes possibly produced by over-fertilization and too much water or sometimes by too much humid heat which hastens development of serious conditions.

The brown-patch germ apparently is always with us, as are soil and other plant disease germs, ready to multiply to dangerous proportions when the right conditions are present. When we see an attack of snow-mold forming, we try to dry the spots, apply fungicide and when we can, aerate the soil which is possible with no frost. For top-dressing snow-mold we use coarse sand only. It holds your fungicide where it belongs, it provides temporary, quick absorption and positive drainage, and does not disintegrate as soil will. After the attack is controlled, work the sand down through the turf; we use a potato fork.

Aerate for Brown-patch

For an attack of brown-patch, we try to remedy soil conditions right after applying fungicides. We use an iron rake on the spots, get the rake teeth into the turf at least an inch by stepping on rake head,

move the rake handle up and down and sideways to get air around the turf roots, leave the turf without further treatment until it is fairly well dried out and then apply top-dressing made of soil from top of compost pile (it is clean, aerated and free from excessive fungus organisms) mix with 40 per cent sand (plastering size sand). I like this method because I have provided what I think the sick turf needs, fresh dirt which admits air and sun. Still a mulch, if you please, to protect grass if the sun is too severe.

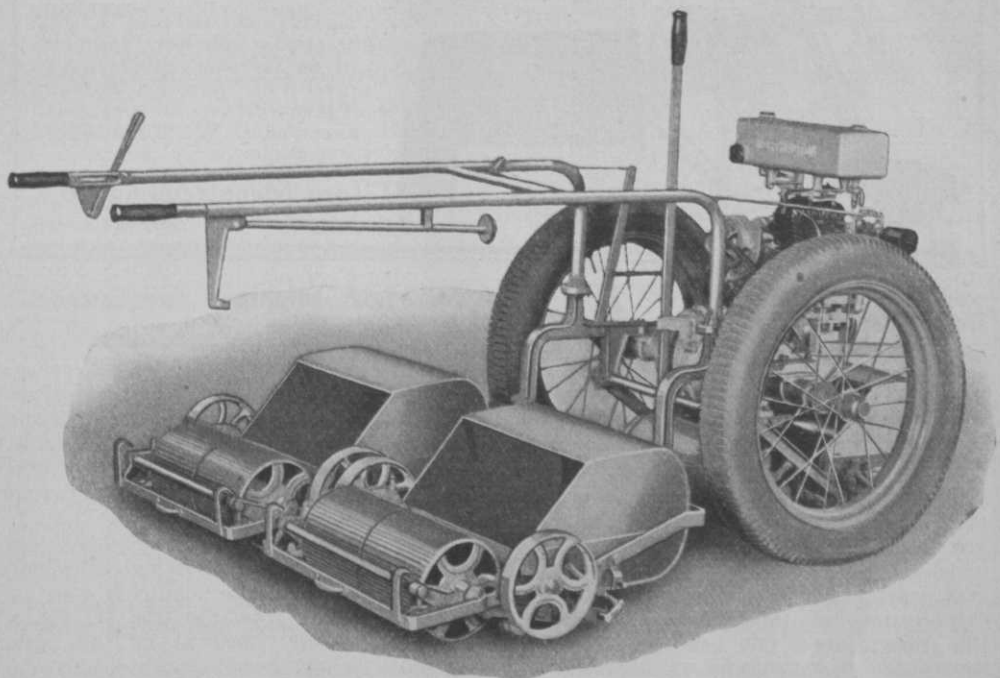
By aeration one is able to get fresh soil close to the feeder roots of the sick turf. We top-dress so that not more than $\frac{1}{8}$ in. grass shows above top-dressing. This allows the grass to escape at least two mower cuttings which saves the grass from losing more strength. I am also reasonably sure that the fresh loose dirt top-dressing acts mechanically and does the same thing to the mycelium growth as you do when you pole a green, only it is on the job 24 hrs. a day.

During an attack of brown-patch I would caution the greenkeeper to water the grass very lightly. If it has had the above treatment, so as not to spoil the favorable condition of the soil he has provided to prevent an attack, it is fairly easy to remedy soil conditions favorable to brown-patch. There are so many conditions to bear in mind when you are taking care of turf that I have given only those things which bear on the effects of too much fertilizer and water which can cause brown-patch and mold.

Grub Danger Looms

Just a word about white grubs. The grub stage is a part of a three-year cycle. There were many beetles or June bugs on courses in southern Wisconsin last June. While the turf on most greens was too thick to allow the bugs to lay their eggs yet we have places on bunkers and fairways that are and were favorable for a big

WORTHINGTON



THE WORTHINGTON OVERGREEN SCOUT *"The Economic Wonder of the Age"*

For hundreds of clubs the Overgreen has reduced the cost of grounds maintenance sixty percent while greatly improving the standard of excellence.

It cuts 18 average greens in five hours with one man and with two men and two Overgreens in 2 hours.

The Overgreen units have brushes attached which brush the greens while cutting. This eliminates entirely the poling operation.

The Overgreen Tractor besides drawing the mowing units, will draw a spike disk, a compost distributor, a bunker rake and a roller. These operations by power are finished by one man in one-fifth the usual time required by hand.

The units may be at once detached and converted at will into hand mowers guaranteed unsurpassed by those of any other make.

Any of our Sales Agents are authorized to make demonstrations to establish these claims if requested to make them within a reasonable distance.

Worthington Mower Company

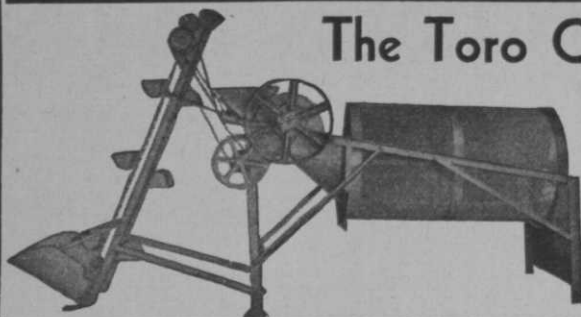
The Largest Manufacturers of Gang Mowers in the World

Main Office and Factory—Stroudsburg, Pennsylvania

SALES AGENTS: Chicago, 517-21 South Laflin Street; Montreal, 132 St. Peter Street; Cleveland, Hippodrome Building; New York, Chrysler Building; San Francisco, 52 Beale Street; Boston, 1 State Street; Los Angeles, 1795 Pasadena Avenue; Seattle, 709 4th Avenue; Philadelphia, 25 W. Hortter Street; Washington, 6900 Wisconsin Avenue; St. Louis, Valley Park, Missouri.

Agencies in All Principal Cities

The Toro Compost Machine



Grinds and screens in one operation. Handles the material as fast as your men can shovel it in. Nearly a thousand of them in use at very small upkeep cost. Write for full information.

Toro Manufacturing Co.

3042-3168 Snelling Ave., Minneapolis, Minn.

crop of grubs. We may have to use arsenate of lead next May.

In conclusion, I have found it possible to cure an attack of fungus growth quickly by the method we use. Remedy sick soil conditions before they get away from you. You do it with much less expense than it costs you to over-fertilize and hire men to work your sprinkling system overtime and then have to treat for brown-patch, etc. We do not use any more fertilizer or water or cut grass oftener than we can help and still provide a good place to play golf.

Everytime we top-dress we fertilize if the grass needs it. We use about 1 cu. yd. top-dressing to 1,000 sq. ft. about every three weeks. We are governed by the wear on the grass, and by the amount of rainfall. In the spring, top-dressing disappears faster because of the rains and because the turf is much more porous from heavy frost. Then too, the rate of grass growth determines to some extent how often we keep the grass roots covered. About watering: Some years we have gone until July 1st with only natural rainfall; at other times we have had to supplement rainfall as early as May 1st.

Western Michigan Greensmen Meet at Sparks Course

WESTERN MICHIGAN Greenkeepers' Assn. with 30 members and their wives in attendance met July 11th at the William and Matilda Sparks Foundation at Jackson. The morning was devoted to a trip through the new prison, after which luncheon was served at the clubhouse. O. J. Noer of Milwaukee gave one of his interesting turf talks at the meeting. The golf tournament in the afternoon was won by Floyd Hammond from the Ella W. Sharp park in Jackson. Several of the boys stayed to see the spectacular electrically lighted cascades at the Sparks park in the evening.

The 6,540 yard layout at Sparks Foundation is part of a 465-acre park development which Mr. William Sparks of Jackson is financing and which will be given to the city of Jackson when completed.

CONCEALED traps and bunkers have no place on the golf course because when they are out of sight they do not register on the player's mind as he is about to play the shot and therefore offer no mental hazard.



Bag Rack, \$5.50

**LEWIS
WASHERS,
TEE BENCHES
and
EQUIPMENT**



Tee Data Plate \$1.50



Showing Portion of Tee Ensemble

Tee Ensemble—lots of 1 to 10 \$10.25
" " —lots of 11 or more. \$9.75

G. B. LEWIS CO.

Dept. GD832 Watertown, Wis.

**SAVE YOUR GREENS
AND BANK ACCOUNT
WITH FUNGO
AND VEG-E-TONIC**



FUNGO

FOR BROWN PATCH AND SOIL VERMIN

The 2 in 1 compound that controls Fungous Diseases, Earthworms, Sod Webworms, Grubs, Beetles, etc. Applied either wet or dry. Will not burn or impair soil fertility. Very economical.

VEG-E-TONIC

Golfdom's "no filler" fertilizer. Dissolves in water, producing a "cool food" which does not burn or streak your greens. No "watering in." 21% Nitrogen, 13% Phosphoric Acid, 10% Potash. Prompt and lasting results guaranteed.



Small samples of FUNGO and VEG-E-TONIC mailed upon request. Write for our Monthly Schedule System of Green treatment. All free.

McCLAIN BROS. CO., 127 2nd St., Canton, Ohio

HELP! A POET?

Greenkeeper Gets Even with Kickers; Busts into Verse

CY J. O'TOOLE, greenkeeper at Thunder Bay G. C., Alpena, Mich., is a philosophical sort of a citizen. His course has been having snow mold, but Cy has cured it with a strong solution of ammonium sulphate sprayed directly on the infected areas after they have been well brushed. However, during the period of treatment play must be on temporary greens; complaints from his players followed.

O'Toole says that in some parts the opinion seems to be that a greenkeeper's literary capacity is limited to signing his name to the payroll. To enlighten those who entertain this delusion as well as to rebuke politely the uninformed critics of his temporary greens Cy puts up the case in two installments of verse. The Sweet Singer of the Michigan meadows, bats out the first part in the form of a lament entitled "The Golfer's Spring Song" in which the players growl fortissimo about the temporary greens and the reason for them,

giving Cy a shot of the same old stuff, "It doesn't happen on our lawns," following up with the high-powered home talent advice usual under the circumstances.

In the "Greenkeeper's Answer," he strums his lyre laughingly in these lines:

*You say your education
Will make of short duration
All the countless ills peculiar to our turf.
If I thought that such were truly
What I needed, I would surely
Be upon you like a ton of raging surf.*

*I'd ask you countless questions
And welcome your suggestions,
As I would a brand new mower for the
tees;*

*I'd use your pet contraptions,
And all your smart adaptations,
Till the soil of eighteen fairways graced
my knees.*

*But remember all my greens as
The background for such scenes as
"Two hundred golfers played the course
today."*

*While on your lawns, so neatly printed,
Were the signs that strongly hinted
That trespassers would go to jail to stay.*

KILL SOD WEBWORMS

EVER GREEN, the only truly standardized pyrethrum spray, is recommended by the University of Ohio for positive and economical control of webworm.

Other state and federal experimental stations also recommend Ever Green—because it is absolutely harmless to grass and non-poisonous.

One ounce of Ever Green will make four gallons of solution, one gallon makes 512 gallons of effective control for sod webworms. At

this dilution Ever Green is the cheapest pyrethrum spray on the market.

Supplies are available in all cities at seed houses, wholesale hardware jobbers and golf equipment concerns. Or write McLaughlin Gormley King Company, Minneapolis, Minn.

EVER GREEN
KILLS ANTS AND GARDEN INSECTS



America's Super Value Tractor



STAUDE GENERAL UTILITY TRACTOR

Outstanding in light weight, power, speed and economy. Made continuously since 1916. Sold on a money-back guarantee.

Pneumatic Tired Wheels

For paved roads, quickly take off steel tractor wheels, put on Ford pneumatic tired wheels.

\$495
Up to \$725



E. G. STAUDE MAK-A-TRACTOR CO.
2696 University Ave., St. Paul, Minn.

Portraits of the Champions

Exclusive, actual photographs of more than 40 Open and Amateur champions, made by the expert who covers every major championship. Perfect for locker-room, grill and pro-shop decoration.

5" x 8"—black and white...	\$1
7" x 11"—sepia	\$3
11" x 14"—sepia	\$5
16" x 20"—sepia	\$10

Write for complete details

GEORGE PEITZCKER

5646 Clemens Ave. St. Louis, Mo.

*But now an early parting
Is called for, as I'm starting
To look for other cares within our means.
Still I fear, with all our gassing,
In the springs that will be passing,
You'll still be playing temporary greens.*

Manion, Culbertson Combine to Issue "Contract Golf"

AS IF THERE weren't enough ways for a golfer to lose his shirt in a match, Jimmy Manion, the boy sharpshooter from down St. Louis way, has blossomed out as the author of a refined and murderous system of links competition entitled "Culbertson's Contract Golf."

The basic idea of this new form of golf contest is somewhat akin to contract bridge in that a side "bids" the number of strokes it thinks a given hole will require. If opponents think they can negotiate the hole in fewer strokes, they "bid" lower. Bidding continues until neither side wants to shave another stroke off the last hazarded estimate. Like in bridge, unsuccessful bidders may "double" if they think the final bid is lower than is reasonable. "Redoubles" may be made by the bidding side or player.

Thus is the "contract" arrived at on each tee. Points are awarded for successful filling of a contract, and likewise points are awarded to the opponents if the bidders fail to make their contract. The number of points either side wins depends on the number of strokes over or under the contract it takes the bidders to hole out their final putts. It doesn't cost much and you don't win much if the final total of the two players is within a stroke or two of the contract figure, but a side takes it on the chin plenty if it varies greatly from its original estimate. As many as 80 points can be lost by a side going 10 strokes over its contract; as many as 60 points can be won by a side shooting 5 strokes under its contract.

Manion's book is pocket-sized, which is just as well because the table of points won or lost is fairly complicated and the book should really be carried along out on the course for consultation. Besides the table, the book contains full descriptions and hints on how twosomes, threesomes and foursomes play "contract golf," and a number of humorous drawings suggestive of the tight situations and unfortunate

strategic positions in which players of this cut-throat brand of "gaming" can find themselves.

The book is priced at \$1.00 and may be obtained through all book stores or from the publishers, Bridge World, Inc., 570 Lexington Ave., New York City.

Add to Life's Mysteries; Why Should Mower Last Forever?

FOR THE LAST three months GOLFDOM has been studying maintenance cost records and consulting greenkeepers, chairmen and manufacturers in an effort to get some information on length of economical life of fairway mowers.

It must be confessed that difficulty of getting enough figures has defeated us, although records on about 25 clubs obtained to include the 1931 season show 3 to 4 years is the longest span of thrifty operation that ordinarily can be expected. Apparently, regardless of care and operating conditions, repairs and the blind item of time paid for during repairs on the course, make mowers due for replacement after 4 years' service anyway, as a matter of decided thrift. However, it is not unusual to see fairway mowers that are operating in their eighth year.

In commenting on the struggle we made to get enough definite figures to arrive at a conclusive statement, one of the well known men in the mower business said:

"It surely is a cinch that if you can convince any number of golf clubs that it doesn't pay to run along for years with a lot of old junk you are doing a noble job for budget economy.

"I could tell you of any number of places where we have sold equipment that has been in hard use not merely the 3 years you strike as an average, but sometimes 4 and 5 years, and when it comes to replacements the buyer puts up a terrible howl, seeming to be of the opinion that a mower should wear indefinitely.

"The man who thinks he ought to have a new automobile about every second year will buy mowers for his club with the idea that 8 or 10 years' life is not too much to expect from such machinery."

MOSS ON fairway or green is almost certainly the result of poor drainage or less commonly, impoverished soil. The cure is obvious.

WINTER HARDY — ACCLIMATED RHODE ISLAND CREEPING VELVET **BENT** **GRASS SEED** AND FAIRWAY MIXTURES

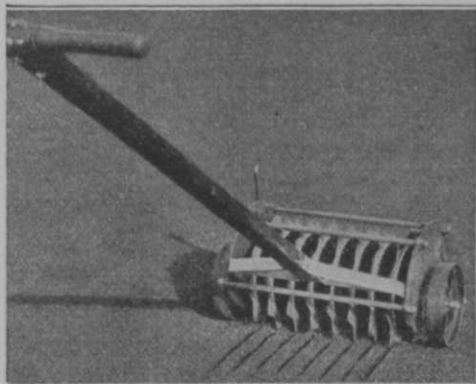
of highest quality for lowest price that seed of equal quality has been offered for in more than a generation.

NATURE HAS WRITTEN A PRESCRIPTION for your course. Right here in southern New England is the natural home of the entire family of the Bent grasses, the principal member of which, namely R. I. Bent, derived its name from this, the smallest state in the union.

You can grow NATURE'S OWN INSURANCE into your turf by using FRESH, VIABLE seed which grows in YOUR latitude in YOUR country.

SAVE for your club the middlemen's and seed dealer's profits. Buy your seed direct from the grower.

A. N. PECKHAM,
KINGSTON RHODE ISLAND



The TORO Zenith Disker

It cultivates putting greens without marring their beauty . . . opens the soil for light, air, moisture and top dressing. Cuts the running stooling grasses and weeds without injuring the turf. Write for full information.

Toro Manufacturing Co.

3042-3168 Snelling Ave., Minneapolis, Minn.

CREEPING BENT

STOLONS OR SOD

METROPOLITAN and WASHINGTON

We can supply you with either, *But*—we recommend Metropolitan, because of its better resistance to small brown patch. Just ask any greenskeeper who had experience with either of them last summer.

•
*Metropolitan Outsold Washington
Ten to One Last Fall. That is
Something to Remember.*

•
We also have available this fall a small quantity of Velvet Bent Stolons and Sod.

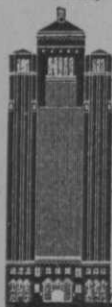
PRICES ARE THE LOWEST THEY HAVE EVER BEEN.

THE FLOREX GARDENS

NORTH WALES, PA.

Make New Friends at the Allerton

Horseback riding, swimming, skating, golf, bowling and many other special parties.



Complimentary house dances, bridge parties, concerts, etc., weekly. R. C. A. radio speaker in each room. An Intercollegiate Alumni Hotel.

1000 outside soundproof rooms. 10 floors for men, 7 floors for women and 4 floors for married couples.

RATES

Single	Double (per person)
Daily \$1.75 to \$4.00	Daily \$1.50 to \$2.50
Weekly \$10.50 to \$25.00	Weekly \$8.50 to \$12.50

PHILIP E. COBDEN, Mgr.
701 N. Michigan Ave., Chicago

ALLERTON HOTEL

WHAT PRICE a good pro in maintaining club interest during these times of brisk competition for members between neighboring clubs? Evidence of how competent pro service in this respect is valued by the pro's employers comes from *Tea Leaves and Tee*, house organ of the Penobscot Valley C. C., Bangor, Me.

The paper says of Penobscot Valley's pro, Larry Striley:

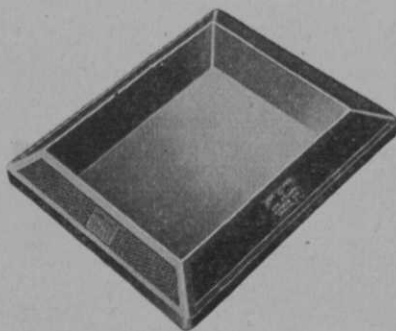
"Our thoughts revert to the season now closing and as we dwell ever so slightly we cannot help but be impressed with the service Larry Striley has rendered this club in creating and maintaining the constantly increasing interest in this department. Clubs almost without exception have operated with adverse results. The interest in golf at our club was never so high as at present. This is something that does not occur by chance.

"Aside from providing suitable playing facilities, something more is required, and it is in this respect we wish to add a tribute to Larry for his untiring efforts, his un-failing courtesy, his attention to details which have resulted in a season comparable with the best we have ever enjoyed.

"Along with his services, he has found time for a few rounds of golf and although restricted in time for play, in the Maine Open championship at the Wawenock Country club, just staged, finished fourth after a decidedly discouraging start; with an ordinary break he might just as well have been sitting with the championship crown. We who know him best recognize him as a champion. The P. V. C. C. has a real asset in Larry; one of the game's finest sportsmen and friend."

HARD RUBBER FOOT-BATH IS SHOWER DEPT. NEED

Trenton, N. J.—A hard rubber foot bath container filled with an inexpensive 10 to



Hard rubber foot-bath tray

15 per cent solution of sodium thiosulphate is being extensively adopted as standard equipment for prevention of dermatophy-



Toro Top Dresser

A great labor-saver . . . proved out on hundreds of golf courses. Revolving agitator, flexible brush, large hopper that can be tilted to any angle, insuring uniform flow. Write for full information.

TORO MANUFACTURING CO.

3042-3168 Snelling Ave.

Minneapolis, Minn.

tosis, popularly known as athlete's foot. Jos. Stokes Rubber Co. of Trenton make the bath tray generally used by the better clubs. It is 26½ inches square and 3 3/16 inches deep. Being made of hard rubber, it is not effected by the chemical in the treatment.

Practice is for bathers to immerse their feet before and after showers. The solution gets spattered on the floors of locker-room and shower departments and keeps down the growth of fungus responsible for the disease.

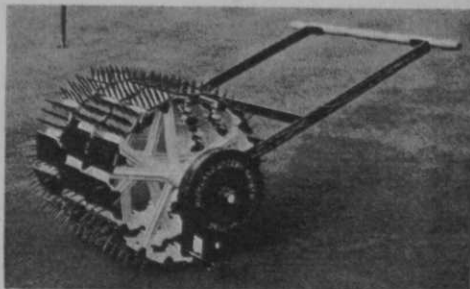
Despite much warning publicity on athlete's foot, the disease this year seems to be having more than its usual run of misery, and certainly calls for attention from those who are operating first-class golf clubs.

NEW GREENS SPIKER AERATES WITHOUT TEARING

Mansfield, O.—Richland greens spiker, a new product of the Richland Greens Equipment Co., 11th floor, Farmers Bank building, has spikes on loosely hung heads so arranged that spikes enter the green at a slight angle and leave at the same angle. This design gives a slight stirring action beneath the surface and leaves a round un-torn hole on the surface.

Penetration of ¼-inch holes is variable from ½ inch to 1¼ inches. The device

works either forward or backward, has no springs and requires no oiling. It consists of three sections with 7-inch faces, 24 inches in diameter. To each of the sections are attached 15 heads and in each head are 12 spikes. Provision is made for applying extra weight to the device. With-



Richland greens spiker

out the extra weights the Richland Green spiker weighs 400 pounds. The weight is carried on the spikes so there is no rolling effect. Transport wheels for conveniently taking the spiker from one green to another are provided. This arrangement and ability to operate backward and forward makes possible a great saving in time, state the Richland people.



PEORIA

ILLINOIS
500 Rooms—500 Baths
Rooms start at \$2.50 for one; \$4.00 for two. 400 car garage. H. Edgar Gregory, Mgr
HOTEL
PÈRE MARQUETTE

HEADQUARTERS HOTEL

Women's Western
Golf Association Tournament

August 22-27, 1932

From \$2.50 SINGLE

3.00 DOUBLE

ROOM and BATH

HOTEL
PICCADILLY
45 ST. WEST of BROADWAY
NEW YORK
NEW · MODERN · REFINED

THE MOST EFFICIENT ON THE MARKET
SAFE :: SURE :: SMALL
EASILY SET :: RUSTPROOF

AT \$2.00 EACH
postpaid

"CME"
MOLE TRAP

MY SPECIAL OFFER IN
JULY GOLFDOM IS
GOOD BALANCE 1932
Manufactured by
C. E. GRELLE, Green Hills, PORTLAND, ORE.



Extensive, growing practice of aeration in conditioning greens has given the Richland device a receptive market and its performance has won warm endorsement by greenkeepers, say the Richland officials. Several of the leading golf course equipment dealers have been appointed territorial distributors. Price of the device is \$175.

NITROPHOSKA WINS DECISION IN INFRINGEMENT CASE

New York City—U. S. Court of Customs and Patent Appeals has sustained contention of the Synthetic Nitrogen Corp. that its trademark (Nitrophoska) was infringed by use of Ammo-Phos-Ko, trademark of a competitive product. Case first was dismissed by Examiner of Interferences, which decision was reversed by Commissioner of Patents.

GETTING THE BEST OF SOD WEBWORMS


Green-committee chairmen who have suffered the agony of seeing their putting green devoured by sod webworms — and have been equally harassed by the complaints of members "to do something about it"—can now breathe a sigh of relief. Science has come to the rescue with an insecticide that is obtained from a flower—Pyrethrum. Pyrethrum flowers, which are grown on a large scale in Japan and Dalmatia, are one of the most curious plants

LYMAN CARRIER
PRODUCTS
GRANGER, IND.

GENUINE
COCOOS BENT SEED
LECCO
COMPLETE GRASS FOOD
WASHINGTON
STOLONS and SOD

LYMAN CARRIER
GUARANTEED PRODUCTS
FOR BETTER TURF

Prices and literature upon request.
Write today.



known. In appearance they closely resemble the common American Daisy, but concealed in the *achenia* is a strange toxic substance which, while non-poisonous to human beings, has a deadly effect on insects that come in contact with it.

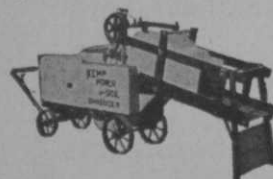
Suitably prepared in liquid form, Pyrethrum offers an easy and dependable way to rid putting greens of sod webworms, and without the slightest injury to the grass or soil.

In a test made last year by Mr. W. B. Noble, Bureau of Entomology, U. S. Department of Agriculture (Bulletin of the U. S. G. A., Green Section, Vol. 12, No. 1, January, 1932, pages 14-17) it was found that with the proper type of Pyrethrum extract, a 100 per cent kill was secured at a dilution of 1 fluid ounce to 4 gallons of water. The method of application is extremely simple, as the solution can be sprinkled over the infected greens with an ordinary watering can. Within a few minutes the worms wriggle to the surface and soon die, thus furnishing visible evidence of the deadly effects of the spray.

A leading developer of Pyrethrum insecticides is McCormick & Co., Inc., of Baltimore, Md., whose product is sold under the name of "Red Arrow." Two of the outstanding advantages of "Red Arrow," as stated by McCormick, are, "first, that it is very highly concentrated, and second, that it is scientifically combined with soap—

A Better Course at Less Cost

SAVE money in first cost, labor, fertilizer and upkeep with a KEMP Power Soil Shredder. A complete machine, it shreds and sifts in one operation—the finished product ready for use.



Different sizes with built-in gas or electric motor, or without power for operation with tractor. Write now for details. KEMP MANUFACTURING CO., Dept. 1983, Erie, Pa.

KEMP Power SOIL SHREDDERS



**DIAMOND
CALK HORSESHOE
COMPANY**

4702 Grand Av., Duluth, Minn.

The Diamond Steel Center Tractor Spud is sharp until completely worn out. Won't destroy turf.

Write for details.