

# Re-turfing Florida Golf Courses

BY JOE A. ROSEMAN

*Manager, Fort Lauderdale Golf and Country Club*

**R**EBUILDING and re-turfing Florida golf courses may or may not be interesting to Northern greenkeepers. But my experience in this sand and swamp or lowland district may prove valuable to the greenkeeper who goes south to follow his vocation in that part of our country where only Bermuda and Carpet grass will live throughout the summer and neither of which will mat closely at any time unless given constant care and fertilization.

In this country where vegetation of all kinds attains an almost torrid-zone growth in the fall of the year, weeds, scrub palms, and a thousand varieties of plants appear to grow an inch or two every twenty-four hours during the rainy season.

It was my experience to recondition a golf course which had never been finished and lay dormant for more than a year. After having been complimented on the condition of the course with the statement that "there is no better turf in all Florida" than is now found on this course, the writer feels that he is qualified to offer for your consideration, the routine and methods employed. Visualizing that this one hundred and forty acres was covered with vegetation, the growth of which was so dense that a man could not travel more than two miles per hour, picking his way through the undergrowth, it is surprising to learn that two months from the day we started cleaning the property, golf players from Boston, New York, Cleveland, Pittsburgh and Chicago came to Fort Lauderdale from Miami to play on this course because it was in better condition and had a better lay-out than the courses they had been accustomed to play in Miami.

**V**egetation Cut With Sickles  
**E**MPLYING a crew of seventy-five laborers to cut with large sickles, the debris was placed in large mounds similar to straw stacks, sprayed with kerosene and set afire. Branches of trees were collected and the entire property raked by hand. New sand traps were constructed where necessary, to tighten greens and give the course a good appearance.

The entire course was disced using both teams and tractors so that the long runs of Bermuda grass were cut and the stolons rerooted themselves making the turf three or four times as dense as before. The ashes from the burned vegetation were spread on the fairways, tees and approaches to greens. Because the grass had been retarded by this wild vegetation, it was necessary to sow Italian Rye grass to fill in on the fairways and give an immediate turf for the coming winter months. This Rye grass produced a noticeable turf within two weeks and within six weeks from the day we started cleaning, the fairways were almost as green as those on a northern course. We knew however, that the Rye grass would not live beyond May first of the following spring but that the Bermuda



JOE A. ROSEMAN

grass stolons would have taken root and produced a carpet of grass over all the fairways after the next fall rains.

Exceptionally large water mains were installed twenty-four inches below the ground and from December fifteenth until February fifteenth, this course was constantly sprinkled without turning off a single faucet which accounts for the fact that a good turf was had in so short a time.





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Keep them smiling on your course with pipe that rust can't harm. **McWane CAST IRON PIPE** with **Precalked Joints** gives you the same permanence as the water mains in city streets. Eminent golf course architects are specifying it all over America for important courses where it must serve indefinitely without repairs or replacements. For lowest costs per year, use cast iron pipe always.

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Of all cast iron pipe, **McWANE** saves its users most: saves money in installing and maintaining; saves leaks because **Precalked Joints** are self-tightening; saves fittings because only **McWANE Pipe** can be economically cast to save big money in that feature. And—most important of all—

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## How Greens Were Treated

**A**LL eighteen greens were disced and floated and then a mixture of cottonseed meal, lime and Parisgreen was placed on them. The proportion of the mixture was:

100 pounds Cottonseed Meal

100 pounds Lime

3 pounds Parisgreen

to each green. The Parisgreen effectively eradicated grub worms, commonly known as the Army Worm, and various other forms of insect life. Bermuda stolons were then planted and Rye grass seed was worked into the soil with a gang of spiked rollers. The cottonseed meal and lime stopped the sand from blowing away and gave a firmness to the soil, if you could call it soil, because it is practically all clear white sand.

Having learned that other Florida greenkeepers were using tankage and black swamp muck, the writer decided to use a fertilizer which had given good results in the North. So we applied one hundred to two hundred and fifty pounds of this fertilizer on each green and kept these greens wet for the following two weeks after which they were sprinkled each night.

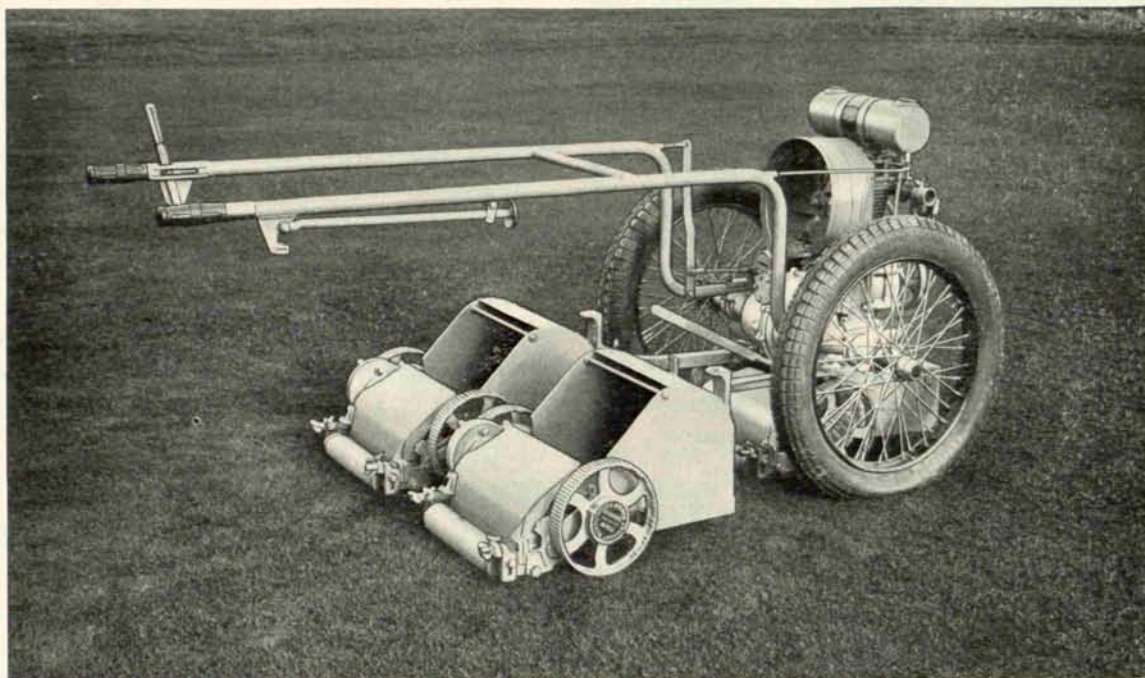
The reader will understand that a new green in Florida, unless it has a foundation of clay, dries out within five hours from the time the sprinklers stop so we kept the sprinklers working day and night for the first two weeks. This same fertilizer was used on the tees and approximately seven hundred and fifty pounds was spread on each seventy linear yards of fairway.

My experience on this job, which had to be done in a hurry, convinced me if I should ever build a new course in Florida, I would find some clay before building the greens and if possible secure clay to mix with the sand on the fairways. If one should be able to secure clay for the base of the greens that is about 12 inches below the surface, 75% of the moisture would be retained instead of passing through the sand as it does and leaving the young grass roots without very much nourishment. Lacking this clay, it is necessary to use as much cottonseed meal, lime and such fertilizers as we could obtain which would make the grains of sand stick together and hold some of the water.

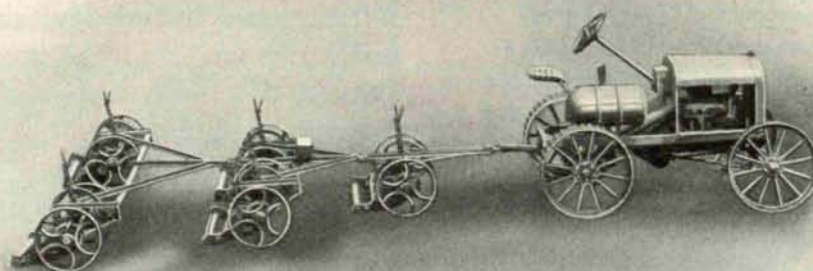


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Power and Hand Putting Green Mowers      Rollers  
Tee Stands      Tee Markers      Ball Locators



The "Overgreen" will cut an average green in less than 10 minutes. The most remarkable machine offered for reduction in golf maintenance since Worthington gave to the world the fairway gang mower. Light, efficient. Price, 36 inch swath, \$400.00; 50 inch swath, \$425.00.  
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The Jacobsen Power Putting Green Mower is outstanding in its capacities for cutting, brushing, working in top-dressing and rolling the greens with perfect results with less labor and less cost. America's foremost power mower engineers have endowed it with improvements found on no other mower. It is a tested and proven product.

A brush attachment gives it a distinctive advantage as a means of keeping the grass from matting, in aerating the soil, working in top-dressing and keeping the green in perfect putting condition.

Other improvements include auto-type differential, separate clutch control for traction and seven-blade high speed cutting unit, self-sharpening reel, Timken roller bearings, enclosed gear drive, powerful motor. All working parts of a simplicity and standardization that assure uninterrupted service under all conditions.

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—and hundreds of  
others.

Due to the fact that so much water is necessary to keep the roots damp, the surface of the ground is inclined to become sour from this constant sprinkling but the mixture of cottonseed meal and lime corrected this condition through applications made every two weeks. We always included the Parisgreen in this mixture to keep out the grubs and bugs.

## Sand Too Porous for Root Growth

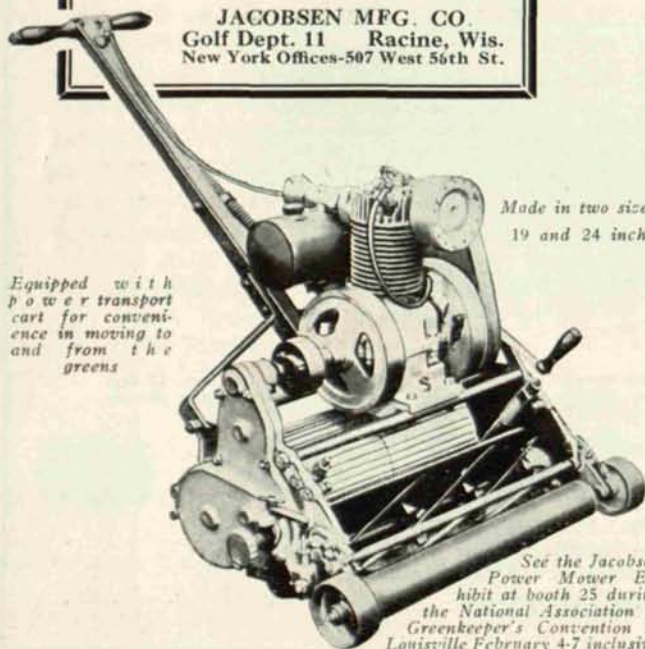
THE sand seems to have a lot of food required for turf life, but it is so porous that grass cannot live until it has rooted itself six or eight inches below the surface and it cannot root itself unless the sand is kept moist. Chemical fertilizers are of some value because they seem to make the sand pack about the grass root but black dirt is almost as valuable as gold.

I would say if any greenkeeper can obtain sufficient clay, black dirt or a fertilizer which will make the grains of sand stick together, then keep this so-called soil damp enough to permit of seed germination and growth for about two months, he will have no trouble in securing a dense turf for the reason that the sunlight is there day in and day out. And when he has used Parisgreen in the proportion of three pounds to two hundred pounds of cottonseed meal and lime mixture, there will be no bugs, worms or vermin to destroy his turf.

It is natural however, to expect that angle worms will accumulate as the putting green soil becomes thicker and richer but they are easily removed and the greenkeeper may rest assured that he has a good turf when angle worms are found in it.

We made another application of our northern fertilizer this last fall even though the Bermuda grass had matted very closely on the fairways, with the result that golf players who live in Miami the year round are coming to Fort Lauderdale because, as they tell us, the turf on this course is so much better than on any of their older courses.

A second application of this northern fertilizer was placed on the putting greens and Italian Rye grass sown on the greens November first to fifth so that on December first, the putting greens compared very favorably with those of our metropolitan golf courses.



Equipped with power transport cart for convenience in moving to and from the greens

Made in two sizes,  
19 and 24 inch.

See the Jacobsen Power Mower Exhibit at booth 25 during the National Association of Greenkeeper's Convention in Louisville February 4-7 inclusive

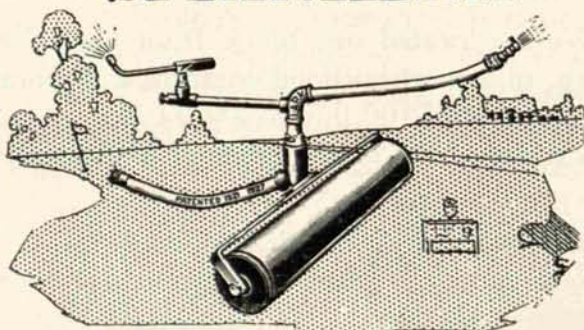


## Good Turf Must Have Moisture

THE sum and substance of this experience merely proves that a good turf is dependent upon having a soil which will retain the moisture; one which is not so light that it can be blown away yet light enough to be aerated, compact enough to permit of stability to the grass root and one having sufficient food to afford sturdy growth of turf. To this combination, add fresh water and the sunshine which is ever present, and there will be no secret to growing a good turf in Florida.

You will understand that all putting greens must be reseeded each fall with either straight Italian Rye grass or a mixture of Italian Rye, Red Top and Blue Grass or Italian Rye and Red Top only. This seed, if planted and mixed right in with the ever present Bermuda grass at the rate of about one hundred and seventy-five pounds per green, will give you a good putting turf from December first until May first, after which only the Bermuda grass will survive but the Bermuda is thoroughly well matted by this time and gives a fairly good putting surface in the summer.

## THE LARK SPRINKLER



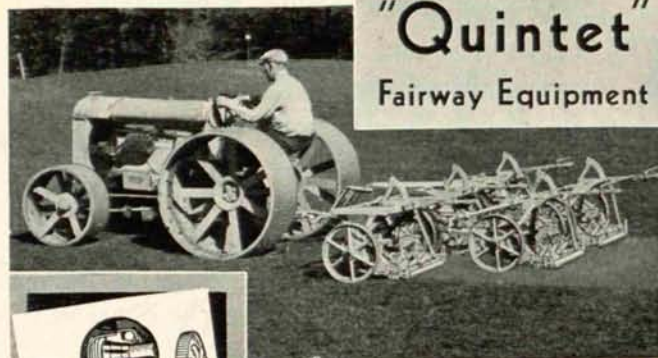
Thousands of greenskeepers throughout the world have placed the responsibility for perfect greens right where it belongs—upon the reliable, efficient LARK SPRINKLER. The LARK sprinkles *evenly* from center to outside circumference on any pressure. We will send a Lark postpaid for a 15 day free trial. Write for one TODAY. Price \$15 each in United States.

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F. & N. Mowing Equipment for Golf Fairways—made by the world's largest mower manufacturers:

The F. & N. TITAN Mowers included in this equipment are designed and built especially for rough, rugged service on all kinds of fairways.

The patented, interlocking frame and cutter bar construction keeps the mowers in rigid alignment—it prevents the mowers from becoming loose-jointed and wobbly.

The gears are CUT from drop-forged steel, heat-treated, and revolve on genuine Timken Roller Bearings in a constant bath of oil.

The five blades are made of special analysis chrome vanadium steel—the toughest known.

Every part of the mowers is machined and fitted as accurately as the parts in finest automobiles.

BEST OF ALL, the revolving reel embodies the patented F. & N. Self-Adjusting Device. This does away completely with troublesome bearing adjusting—and assures smooth operation and first class mowing results for the life of the mowers.

The new all-steel gang frame is still stronger, lighter, more flexible, more convenient and efficient in operation. It fits any tractor, and handles mowers in gangs of three or five.

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## The F. & N. Putting Green Mower

For producing those velvety smooth greens so essential today, greenskeepers who have used the F. & N. Putting Green Mower say that it is the finest ever produced. It is lighter and easier running than ever. It embodies self-adjusting SKF reel bearings, alemite oiling, etc. Rubber-tired carriage for transporting is furnished with it.

**The F. & N. LAWN MOWER CO.**  
RICHMOND, IND. U.S.A.



## Minikahda's Work Buildings

By CHAS. ERICKSON, Greenkeeper  
Minikahda Country Club, Minneapolis

IN THIS day and age of efficiency in golf course maintenance it is necessary that the tools and equipment used on the course be properly housed and suitable quarters provided for the greenkeeping crew. I think, therefore that the accompanying photograph and description of the new work buildings at Minikahda will interest the readers of the NATIONAL GREENKEEPER.

At the extreme left of the photograph you will see the trapshooting house, with the big platform and dugout for the traps. Next in line, and in the background, is the caretaker's house.

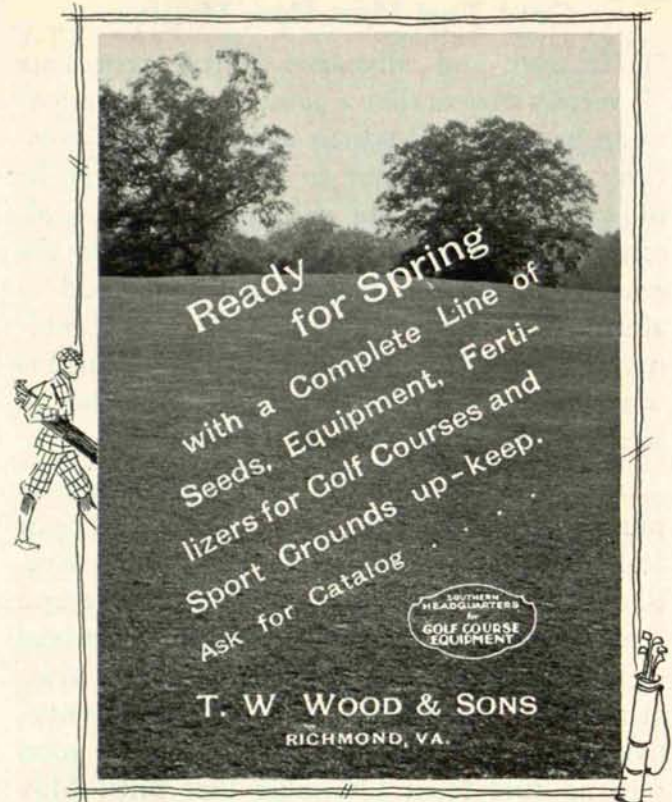
The third or largest building in the group is the main tool house, which is 28'x80'. This building is partitioned into five rooms. First the office, second the lounging room for the boys, third the shop. Adjacent to this is a space for equipment which is used often, namely, small hand mowers, shovels, etc. Next in line comes a large room in which is stored the fertilizer and the larger pieces of equipment, such as rollers, plows, in fact equipment which is not used so often. However, there is plenty of room in the tool house and by keeping the equipment inside it keeps it in first-class condition, as well as neat and clean.

Directly in front of the tool house is the tractor shed, which is 16'x32'. It is equipped with doors on both sides so we can drive the tractors either in or out. There is plenty of

room in the center of this shed for oil and grease, etc., for both tractors.

The tool house described above, is complete with respect to water, sewer, basement and furnace, in fact it is strictly modern and up-to-date. I am very proud of my place and like it especially well as it is located quite a little distance from the course and in this way we do not interfere with the players.

We are located one block from Lake Calhoun, in a neighborhood comprised of homes ranging from \$200,000 to \$300,000. In fact, this is one of the beauty spots of Minneapolis.



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Seeds, Equipment, Fertilizers for Golf Courses and Sport Grounds up-keep.  
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GOLF COURSE EQUIPMENT

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RICHMOND, VA.



NEW WORK BUILDINGS AT THE MINIKAHDA COUNTRY CLUB



# The Green Section Meeting

BY E. W. DOTY

Treasurer, Cleveland District Golf Association



E. W. DOTY

THE Green Section of the U. S. G. A. met at the Hotel Biltmore, New York, Friday afternoon, January 11. It was not a particularly interesting session, the good work of the Green Section apparently being confined to what is done somewhere else.

One interesting and instructive talk was by Professor F. H. Hillman, of the seed laboratory of the United States Department of Agriculture. He was introduced as the man who knows more about grass seed than the man who invented seed. And he made good on that announcement too. He went into the history of the development of bent grasses so minutely that it went over the heads of all of us listeners; but all the same Professor Hillman's lecture, if printed, will afford greenkeepers and chairmen of Green committees a sort of Bible on seeds that will be very helpful.

There are more than eleven varieties of bent grass and their names are given to them in the trade and among growers and users, such as Colonial, German, Rhode Island, etc.

One of the delegates announced that he had solved the origin of the brown patch, at least to his own satisfaction. He said it was caused by the spider. The spider weaves its web on the surface of the green and the dew forms in the green and the web. Out comes the sun and dries up the dew and the web crumbles and drops into the grass carrying the death-dealing bacteria with it and the brown patch appears right there. This experimenter said he had transferred these webs when wet and placed them in designs of crescents and stars (thereby emulating the well known specialist as to design), and the brown patch would appear in the new place, showing the design he planned.

In other words get rid of the spider and you will get rid of the brown patch; as there's a million, million spiders around every golf course, the greenkeeper's work from now on is to be that of a hunter rather than a mower.

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Some of the best courses in America are Armco drained. Architects prefer this pure iron product because they can confidently recommend it as both efficient and enduring, therefore the most economical. Its record of 24 years in service is unequalled.

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# We're Off For Louisville

DON'T FORGET WHEN YOU BUY YOUR TICKET—ASK FOR A CERTIFICATE

Present yourself at any ticket office at least 30 minutes before train time.

Tell the ticket agent you are going to Louisville to attend the National Greenkeepers' Convention and ask for a reduced fare convention certificate.

If your wife or children accompany you get certificates for them also.

Buy your full fare ticket to Louisville—the reduced rate applies only on the return trip.

On arrival at Louisville report at once to Harry A. Burkhardt, Chairman of the Registration Committee at the National Association of Greenkeepers of America. Registration Booth in the Golf Show.

Leave your certificate with him until Friday and it will be validated by the Special Agent.

Call at the Registration Booth Friday afternoon and get your certificate for the return trip home.

When you buy your ticket home present your certificate to the ticket agent in Louisville and you will get a full fare ticket for half fare, thereby saving you 25 per cent of your total railroad expense.



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It is constructed with two braids, special three ply cord yarn, extra thick black smooth rubber cover that will withstand the roughest use.

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### Davies Promises Food

"Food what is food" is what George Davies the Louisville mainspring promises greenkeepers, golfers and in fact everyone who is able to buy a ticket for the Annual Banquet of the National Greenkeepers' Association, Thursday evening, February 6 at Hotel Kentucky.

"I feel sure the boys will come", writes Davies to the National Greenkeeper, "when they see what I have for them to eat. We're going to have a real Southern dinner—one that will make your mouth water. Friday night is the Stag Midnight Show and wait until you see what I've got ready for that. The stag show is free to members of the Association and certain invited guests."

Banquet Menu  
Fourth Annual Convention  
National Association  
Greenkeepers of America  
FEBRUARY SEVENTH  
1930  
Kentucky Hotel, Louisville

Dandelion Cocktail  
Chickweed Hearts      Hellish Crabgrass  
Roast Young June Bugs      Giblets and Bent Sauce  
Candied Weed Seeds      Dollar Brown Patch  
Canadian Plantain      American Top Dressing  
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If you will bring a small sample of soil, say six ounces, to the Golf Show, we will be pleased to examine it and so far as may be possible suggest the necessary correction.

In our exhibit we will have ample laboratory equipment and a force competent to operate it so that you may be able to see what might be wrong with some of your soils.

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**GREENKEEPERS' GOLF SHOW,  
LOUISVILLE, KENTUCKY  
February 4-7, 1930**

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when all putting green mowers  
had side wheels. Today, roller  
types have replaced them all—  
every greensman knows why!

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are the only roller type fairway mowers made. They offer 12 exclusive features of vital importance to healthy, economical turf maintenance.

Write for Roseman "Owner's Opinion" book; it tells why progressive greenkeepers are using and recommending this modern equipment.

The design, material and workmanship of Roseman Mowers make possible the most liberal of all mower guaranties—ask for a copy.

A deferred payment plan on Roseman Mowers and Tractors makes it possible for smaller clubs to share with ALL CHAMPIONSHIP courses, the advantages of Roseman equipment.

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Makers of Roseman Hollow Roller Type Mowers  
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810 Church Street  
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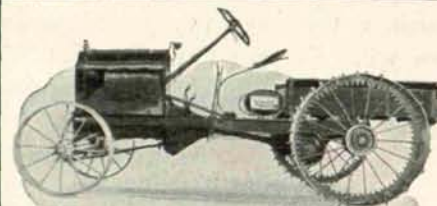


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## Staude Golf Course Tractor



Model  
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**\$695**

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2630 University Ave. St. Paul, Minn.

Model  
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**\$475**

F. O. B.  
St. Paul

### Matt Bezek Elected

By A. L. BRANDON

THE Mid-West Greenkeepers Association met January 6, at the Great Northern Hotel, Chicago, with John MacGregor presiding. After the various business was disposed of, the election of officers for 1930 took place.

The following were elected: president, Matt Bezek, Beverly Country Club; first vice-president, Pete Stewart, Lake Shore Country Club; second vice-president, John MacGregor, Chicago Golf Club; secretary, A. L. Brandon, St. Charles Country Club; treasurer, Fred Kruger, Olympia Fields Country Club.

A rising vote of thanks was extended to the new and to the retiring officers.

The next meeting will be January 29; the attraction will be a speaker on golf architecture, also final plans for attending Louisville will be discussed.

### Up and Doing

"Up and doing" is the slogan of the new administration of the Mid-West Greenkeepers Association whose headquarters are in Chicago. The new president, Matt Bezek of the Beverly Country Club has appointed a committee consisting of A. L. Brandon, chairman, John MacGregor and Jack Langell, which committee has sent out letters to all the Green committee chairmen and greenkeepers in the Chicago dis-

trict urging them to attend the Louisville Convention and Golf Show.

"This Conference and Convention," the letter states, "together with its multitude of exhibits concerning golf directly and indirectly is primarily, an educational event. With this thought in mind we urge you to send your greenkeeper or grounds-man to the Convention. His attendance may save your club hundreds of dollars—through the introduction of better methods. If he has any particular problem to solve, he will return with its solution."

The Mid-West association is to be congratulated upon its energy and willingness to do something for their fellow-greenkeepers throughout the country.

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#### "Friend" Sprayers

for all Golf Course Spraying



Showing small "Friend" sprayer at work with "Friend" Golf Spray Gun. A fine, penetrating spray is forced downward into the soil, which permits the delicate grass roots to consume the nutrition without being overtaxed—thus promoting natural, vigorous growth. Equally effective for destroying dandelions.

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MFG. CO.**  
Gasport, N. Y.

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