



# NEWS LETTER

March, 1930.

Vol. 2, No. 3.

WINTER

SCHOOL

NUMBER

## MY CREED

*Happiness is the only good.  
The place to be happy is here.  
The time to be happy is now.  
The way to be happy is to  
make others so.*

—Robert G. Ingersoll.

We are pleased to dedicate this issue of the NEWSLETTER to the Winter School for Greenkeepers at the Massachusetts Agricultural College. The work being done by Prof. Dickinson and his colleagues is being more and more appreciated by greenkeepers and green committee chairmen. More and more greenkeepers and assistants here in New England should avail themselves of this opportunity to use their Winter months to better themselves by studying and discussing greenkeeping problems at the Winter School. Applications must be made early as enrollment is limited.

We congratulate the Winter School upon the very able and interesting exhibition held on March 15 and 16. Such exhibits and the forum discussions are well worth while.

We hope that YOU and your GREEN CHAIRMAN will be present at the April meeting to hear Dr. Fred J. Sievers, Director of the Massachusetts Experiment Station. If you wish more experiment work locally, come and find out how it can be done.

This NEWSLETTER is published monthly by the Greenkeepers Club of New England, and sent free to its members and their Greens' Chairmen. Subscription price ten cents a copy, or a dollar a year.

GUY C. WEST ..... Editor  
312 Mt. Pleasant St., Fall River, Mass.

MARSTON BURNETT .. Business Mgr.  
330 Waltham St., West Newton, Mass.

March, 1930. Vol. 2, No. 3.

### MARCH MEETING

One of the best meetings ever held by the club was the March meeting, held at Horticultural Hall, Boston. Many green chairmen were present, as were also the Winter School Class for Greenkeepers from Amherst with Professors Dickinson, Markuson, and Cubbon of the Winter School Faculty.

Prof. Markuson, when called on by President Treat for a few words, said that there were new wrinkles coming up all the time in drainage. There is perhaps a question as to whether certain parts of the course should be drained or not. Drainage is usually last of things to be taken up on an old established course, and one of the first on a new course.

Dr. Cubbon said that trying to teach the class of Greenkeepers Soils and Fertilizers with no chemistry background was much different than teaching the regular four-year work. Greenkeeping classes are interested in subject. In mixing fertilizers, if you mix your own, you know what goes in. Mixing now is less necessary than formerly. The old idea that phosphorous is never lost out of ground may not be true on green where so much watering is done.

The main speaker of the meeting was Prof. Lawrence S. Dickinson, who spoke on "A New Phase in Large Brown-patch Control". This address was the same that he gave at Louisville at National Convention, and which was voted the high light of the Convention. The biggest point about this talk is that it gives a practical method by which large brown-patch may be forecast, and means of control. The main points of Prof. Dickinson's talk follow:

"I have received during the last five years many tips from Greenkeepers concerning brown-patch, and they all pointed to one thing, as did also the work I have been doing at Amherst.

This work has been verified by laboratory work at the college and experimentation at the Boyce-Thompson Institute, and results have been approved by the Institute.

Brown-patch is a fungus, prevalent everywhere on plants, (potatoes good example), and it attacks bents more easily than other grasses. There are three stages in the disease which are important to us:

**Scelrotic;** this is the resting stage, and is prevalent in most soils. Entirely harmless at this stage, but very resistant to destruction. Remains dormant until conditions favorable to their development appear. Corky in texture.

**Critical;** mycelia break forth in this stage from scelrotia. This is the stage where control is possible by breaking up these feeding roots, or by applying fungicides.

**Parasitic;** this is the injurious stage in which the fungus actually enters the grass leaves.

In Amherst out of 248 days, brown-patch was expected twelve times, and came each time as expected. It comes following a severe change in air temperature; 64-68 degrees necessary for scelrotic stage to change to critical, a rise to 73 degrees will then bring on the parasitic stage. In critical stage, waiting for environmental conditions to be favorable for parasitism, it can be broken up by poling, hard washing, or like method. It can also be controlled at this time by application of fungicide. Brown-patch works at any time during the twenty-four hours; it simply depends on environmental conditions. After it reaches the parasitic stage it works very fast; 83 degrees is optimum range for parasitic stage.

If temperature comes from below optimum range, to get break from scelrotic to critical, it must remain between range for twelve hours, and must rise gradually to 73 degrees optimum. If it comes from above, going down quickly, thirty minutes is ample time to cause breaking out in critical stage. If once broken up, brown-patch will not come again until 68 degrees is reached again; if temperature remains above 68 degrees there will be no brown-patch. A sudden drop to 64-68 degrees, followed by immediate rise will cause attack. Parasitism appears to start at 73 degrees. If rise is fast to 90 degrees there will be very little parasitism.

Moisture apparently has nothing to do with starting critical stage, it does play important part in parasitic stage;

parasitic growth is rapid in moist, slow in dry. Heavy watering with cold water in afternoon or early evening may bring temperature conditions ideal to brown-patch development. Mornings or late evenings are best times to water as far as brown-patch is concerned. Apparently a green highly fertilized with nitrogen is more susceptible to parasitism. Acidity or alkalinity within reasonable ranges do not affect amount of parasitism. Humidity has nothing to do with brown-patch except as it affects temperature.

A thermograph is not necessary at every green. Have one at office, and correlate the temperatures at each green with this instrument by a series of thermometer readings at each green.

The first brown-patch was reported in about 1773, but it is only in the last ten years that we have been selecting grasses and forcing them so much. Hence it is only in the last few years that we have been troubled so much with brown-patch."

The practical significance to the greenkeeper of this talk and the work Prof. Dickinson has done is that it is now possible to forecast accurately the appearance of large brown-patch, and to use control measures at these times. This will make possible a great saving in cost of fungicides and labor applying them. It is also shown by this investigation that it is possible to control large brown-patch by poling when fungus is in critical stage. Poling early in morning destroys the activity of mycelia that have developed during the preceding twenty-four hours. Fungicides will also control if applied soon after short mycelia have grown, preventing further development. This work gives us what appears to be the first real suggestions of practical importance since brown-patch became so prominent.

## BROWN PATCH

### Johnny on the Spot

I attended the last meeting of the Greenkeepers Club held at Horticultural Hall, Boston, Mass., March 3; we had for our speaker one of great knowledge in horticulture and laboratory research work of various kinds. He spoke exclusively on brown patch, how to bring it about and how to watch for it to come. He also told us that brown patch most always is brought about through quick changes of temperature,

and showed charts of temperature readings and all that. He also said that brown patch had been in existence for 75 or a 1,000 years, on potatoes and other vegetables, but did not explain when or where it was first noticed in greens or on golf courses, or what brought it about in the first place. All these in which we Greenkeepers are most interested (laboratory work is one thing and practical training another) in every day work.

I might say in my experience in years of Greenkeeping that I had never seen brown patch or even heard of it until about five years ago. At that time it affected my course very badly and we lost great portions of our greens. Great round spots appeared all of a sudden, the grass turned yellow and finally died out all together. Some spots were as large as two feet in circumference. The only thing we could do was to cut out these spots and to replace with healthy green sod. All this trouble I would blame to certain kinds of chemical fertilizers, which we put on as prescribed by experts, at a rate of 12 pounds per green every two weeks. This, to my mind was the cause of all the disturbance in my greens; after all the unnecessary experience we have not used this fertilizer on our greens again, and have had no trouble with our greens since. Personally I think that brown patch can be brought about at any time if certain chemicals are used.

I do not believe that we ought to sit up nights and watch for this disease to come, or go around from green to green and take the temperature readings. The only thing to do is to keep the ground in normal condition and not try to get the soil too acid.

We know of some courses right here in Boston that have never been affected by brown patch. We also know that these same courses have the finest of velvet and creeping bent greens. After this information lets think for ourselves.

Alex Ohlson.

O. M. Scott & Sons Co. of Marysville, Ohio have printed a very fine report of the Greenkeepers' Convention at Louisville. This bulletin gives a report of all the discussions, and gives a fairly complete report on all subjects which dealt with the technical side of turf development. A copy of this report may be obtained by writing the company.



## A FIELD METHOD OF PREPARING COMPOST

In the Fall, (September if possible), the piece of land which is to be prepared for compost is covered with manure. The amount of manure is generally governed by the money left in the budget, but if possible put on as much as you can conveniently plow in. Plow the field deeply, turning the sod completely upside down. Disk harrow thoroughly and prepare a seedy bed by planking or spike harrowing. In October plant the field with rye. The rye will make three or four inches growth before the ground freezes. This cover crop will keep the soil from washing and will take up and hold considerable soluble plant food. In the Spring when the rye is eight to ten inches tall, plow it under. If you can afford to do so put another coat of manure on the field and disk this in. During the Summer, as soon as a crop of weeds appear, harrow them under. Keep the soil clean, do not wait until the weeds seed. In the Fall plant rye again, and plow it under in the Spring, and proceed as before. This Spring plowing brings up the bottom soil once a year, and by the Fall of the third year the loam will be fairly weed free. The fourth Fall plow the field late, just before the ground freezes, and leave in furrows. This late Fall plowing will kill grubs which have been brought to the surface and do not get in the soil again before freezing takes place. Do not add any manure after the first Spring, as it will add a quantity of weed seed.

### Screening

In July and August when work on the course slows down somewhat, this compost is screened. A Toro soil screen on trucks is used. Starting at one end of the field this screen is moved along screening the soil for a width of about twelve feet, leaving the screened loam in a long pile on one side and the tailings on the other. Reaching the end of the field, the screen is turned and worked back again, the tailings going onto the first tailings pile and the loam in a long pile on the other side. One hundred yards of this compost is put into the soil shed for greens use. During the following Winter, one hundred bags of poultry manure, (100 lbs. each), is spread evenly over it and the pile turned. This will heat, and should be turned before the manure fire fangs. Turning the pile three times is generally sufficient.

This heat seems to kill most of the remaining weed seed, and the poultry manure also adds considerable plant food. This compost is taken to the greens in the Spring, and with it is mixed the proper amount of sand.

By making compost in the field each year, and keeping it fallow for three years fairly clean compost can be obtained. Keeping it under cover makes it possible to have it dry up to the time you wish to use it. The poultry manure seems to kill weed seed; some ammonia may be lost, but by handling carefully it is not necessary to burn the manure. A rotary screen on trucks seems to handle compost nearly as fast as if it were scooped up into piles. The area method of preparing compost gives a faster action of bacteria in the soil, and is much more economical per ton of compost as nearly all the work can be done by machinery.

Frank H. Wilson, Jr.  
Charles River C. C.

## HOW ABOUT IT?

What is the relation between the size of the grass seed and the texture of the grass?

Why are acid fertilizers recommended?

Along what lines are you planning to experiment this season?

What is the "frequency" of a lawn mower and how does it affect the smoothness of the cut?

Does the overstimulation of a green by excessive use of quickly available nitrogen cause a weak growth which is more susceptible to insects and diseases than a green fertilized with a slower acting balanced fertilizer?

Are you planning to do a little planting around the course this Spring with a thought of some landscape development?

Have you worked out your fertilizer program for this year? Are you working along the lines of a definite fertilizing plan for fairways fertilizing?

Have you any ideas which will make this NEWSLETTER better?

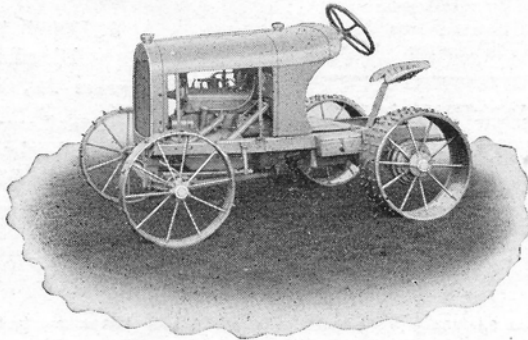
Do you remember to notify the Employment Committee when you hear of a club needing a greenkeeper?

Are you a cooperating member?



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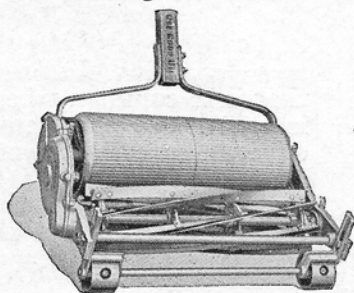
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## WINTER SCHOOL EXHIBITION

The Fourth Annual Golf Course Maintenance Exhibition was held at the Massachusetts Agricultural College, Amherst, on March 15 and 16. There were demonstrations with talks by students on Saturday from 11 A. M. until 5 P. M., the subjects covered being—Botany, Pumps and Hose, Proportioner, Cleaning Grass Seed, Mowers, Fertilizers, Buying Grass Seed, Greenkeeper's Office, Small Equipment.

At 5.30 at a meeting in the Auditorium, there were addresses of welcome by President Roscoe W. Thatcher and Mr. Roland H. Verbeck, Director of the Winter School. Col. John Morley of the National Association of Greenkeepers spoke concerning the forming of the National Association. Mr. Fred Burkhardt said a few words on the value of acquaintance with fellow greenkeepers. He said that he would attend the Winter School, old as he is, if he lived nearer. He advised all who could, to attend. President Whitehead of the Connecticut Association also spoke. Motion pictures were shown of "Laying Lumbricus Low," and "Holding the Japanese Beetle."

In the evening there was a question box discussion, with Mr. James Sullivan of the Watch City at the bell. (Some of the questions and answers will be discussed in succeeding issues of the NEWSLETTER.)

On Sunday morning there were talks by instructors on various subjects: Pumps and Proportioner, Grasses, Fertilizers, Equipment, Office of Greenkeeper.

In the afternoon, following a visit to the turf plots, there was a joint meeting of the Greenkeepers Club of New England and the Connecticut Greenkeepers Association. A joint Summer meeting was discussed, and it was voted that each president appoint a committee to confer later. A question box discussion followed.

Comment among visitors seemed to show that this show was better than usual, at least display part was better arranged, and interest on the part of the visitors was more pronounced. In the forum meetings, there was a certain tendency among many not to answer questions. However, such shows and discussions are interesting and helpful to all who attend.

## WINTER GREENS

Not long ago we had an inquiry in regard as to how many New England courses were using their greens during the Winter, how many were using temporary greens, etc. As this subject is of interest, we are giving you the benefit of a little investigation along this line. Of twenty-five greenkeepers interviewed, two clubs shut up during the Winter, one used regular greens year round, fifteen used temporary greens entirely in Winter, and seven used temporary greens at such times as when regular greens were very soft.

The location of the course, character of soil, drainage, kind of grass on greens, etc., doubtless have considerable to do with this question. It probably is best for clubs with new greens to close them during the Winter, and not use them at this time until the turf is strong and well matted. Care should be taken at times of first frosts in Fall, as often play or work on frosted greens will do much more damage than play on them during the Winter.

Probably the best example of year round play in the Boston district is Wollaston, and Mr. Crowley has given us the story of how he keeps his greens open year round in the September NEWSLETTER. Some Cape courses keep their greens open all year also.

Here at Fall River we establish Winter greens in the late Fall, cutting holes in them and putting in a set of old cups. We use these greens only when the regular greens are very soft, and in the Spring for a few days while we are working on the regular greens preparatory to opening them for the season. We have our holes in the regular greens toward the front of the greens, and change them at least once during the Winter. We find in this climate that we have an opportunity to do this as we get rain frequently when others not very far away get snow, and this rain takes the frost out of the ground for a day or so.

By using care to change over the flags to the Winter greens when the regular greens are very soft, we find that we can give any hardy players the pleasure of putting on fairly good greens a large part of the Winter, with practically no detriment to the greens.

G. C. West

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## DON'T PAD THE PAYROLL WITH TEMPERAMENT

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"If he looks alert—that's greatly in his favor. If he looks determined—fine. If he seems to know his business, post it in the credit column too. But unless he sizes up as a cooperater—**don't give him the job.** For without that attribute his other assets will turn to liabilities when he begins to assert himself within your organization.

The keener he is the more ways he will discover to promote his own selfish advantage at others' expense. The more wilful he is the more forcefully he will push his private interests. The better he knows the business the less amenable he will be to those controlling influences by which alone does he stand any chance of being shaped to a mould that will fit without friction into the delicate human machine you are trying to manage.

The lone-hand genius does better on his own. The more brilliant he is the greater the damage to any organization so blind to human values as to take him on.

Your business line of battle is just as strong as its weakest sector. Whenever you have scintillating selfishness at work behind the scenes—at the top, at the bottom or at any point between—you are wide open for one of those savage drives that Old Man Adversity, in any form, knows so well how to organize against the unsuspecting.

Loyal cooperation by mediocre units will win you more profit year in and out than any amount of gallery play by disorganized stars.

Pick them first for their cooperative spirit. Given that, their every other virtue will have double value. Without it they will only serve as wrenches in the gears."

"Credit Where Credit Is Due."

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## THE TARIFF ON BENT SEED

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We are indebted to Mrs. E. E. Patison of the International Seed Service for part of the following information regarding recent developments in the bent grass seed tariff situation.

Last Summer the House fixed the duty on bent grass seed at ten cents a pound, an eight cent raise from existing rates. This was reported to the Senate, and the Senate Committee agreed, but when bill reached floor of Senate, Senator Metcalf of Rhode Island offered an amendment, which was adopted, putting duty up to forty cents a pound. There was no real opposition to the amendment.

There is yet hope to repeal this amendment, and even to get figure back at two cents per pound. All golf clubs should impress upon their Senators the fact that this duty is unreasonable, and would be a burden upon every club in the northern half of the United States.

It is estimated that annual imports of bent seed are about six hundred thousand pounds, while two hundred thousand pounds are produced in this country.

The Greenkeepers Club of New England has already through a committee for this purpose, protested to all New England Senators. All golfers should note with interest in the following weeks what their Senators do concerning this tariff duty. Are they helping to increase the costs of golf for him, or are they trying to keep golf course costs down?

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Kemp Shredder has four screens, different sizes, dependent on use to which compost is to be put. No trouble with rocks. Compost pile built this year contained seventy cords of loam, thirty loads sand, sixty-five cords manure, refuse, etc., cut down by hand, and screened after two years or more composting. (Needham).

### SOME PARTY

An invitation was extended to Greenkeepers, Professionals, and Green Chairmen of the New England District to attend the first annual implement exhibition and banquet of the Ideal Tractor Company of Brookline on March 3. This invitation was not meant as a sales proposition, but merely an advertising scheme and to make a better acquaintance between the Ideal Tractor Company and the Greenkeeper, and the other way around. Our hosts had gone to a lot of trouble in establishing a show room in their quarters. Every machine was arranged neatly on the floor-space so it could be easily inspected, small tools and other implements were placed about the show room to make a perfect setting. One table full of parts of various putting green machines, nicely decorated with cigars and your favorite kinds of cigarettes.

After the exhibition we were escorted to Hotel Statler Banquet Room where we found five tables set, finely decorated, ten places at each table, about 25 waiters in attendance. The dinner was a most excellent one, fruit cocktail, tomatoe biske, tenderloin steak, with mushrooms, ice cream, cake, coffee, candy, nuts and favors. A programme of high-class entertainers was in order, five girls and four fellows that were very fine singers and dancers, one-slight-of-hand entertainer, second to Houdini. All in all a very enjoyable evening was had by every one present. Our hosts had guaranteed 50 dinners at a price of \$3.50 per plate. "But only four lone Greenkeepers showed up." The company had spent about \$300 to feed four. Just think of four Greenkeepers consuming 50 dinners in one evening and having 10 people to entertain them. "It was some party."

Alex Ohlson.

We would like any of you who are using any new material this season to note carefully the results obtained, and send them to NEWSLETTER with a little dope about the test. Let us know the results with these new chemicals such as CASIM for crab grass control, PERFECT for chickweed, and how any new fertilizers act for you, such as COLLOIDAL PHOSPHATE. The results of your experimentation printed in the NEWSLETTER may help your fellow greenkeeper. Remember that this NEWSLETTER exists as a clearing house of information.

The Board of Directors met with President Treat on January 27, meeting at the new equipment building in order that they might see the new Hardinge grinder. This machine grinds the front edge of ground blades, inside surface of ground blades, and reel blades. It has an advantage in ease and speed in change from grinding blade to reel. It is designed around cup grinding wheel instead of disc grinding wheel.

There are several members who have not returned the cards with names and addresses of their green committee chairman. Will they please cooperate?

Several courses treated their greens this year for snow-mould, using either calogreen or corrosive sublimate.

Bill Lindsay is now located at the Manchester Country Club, Manchester, N. H.

### TABLE SHOWING APPROXIMATE OF SEEDS IN ONE POUND

Authority U. S. D. A. Department Circular 406

Date: January, 1927—Computation by E. O'Neil

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| Bermuda Grass      | 1,775,000 | Orchard Grass        | 521,700   |
| Canada Blue        | 2,495,000 | Red Top              | 4,990,000 |
| Kentucky Blue      | 2,150,000 | Italian Rye          | 226,800   |
| White Clover       | 680,500   | English Rye          | 226,800   |
| Crested Dog's Tail | 862,000   | Short Seeded Rye     | 317,600   |
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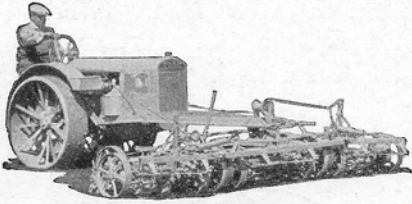
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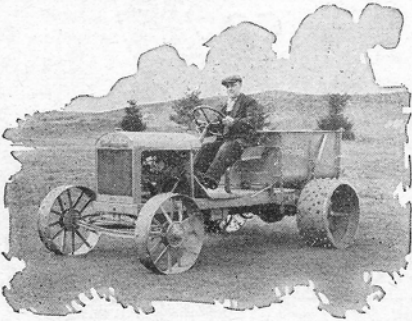
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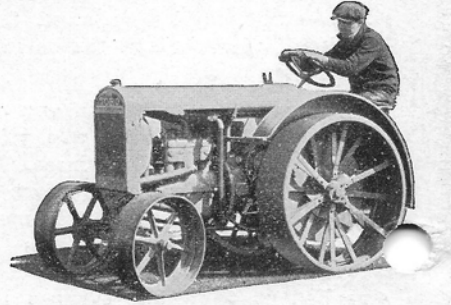
# FOR EVERY GRASS CUTTING PROBLEM THERE'S AN EFFICIENT TORO MOWER



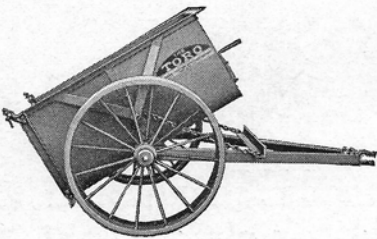
THE Toro Universal Tractor has a wide range of usefulness in that it can be used for general utility work, such as construction, grading, stump pulling, hauling, mowing or any work that a tractor of this type is called upon to do.



THE Toro Standard Golf Tractor pushes five 30-inch Toro super mowers, cutting a twelve-foot swath, and will completely cut the average 6500 yard eighteen-hole golf course in sixteen hours.

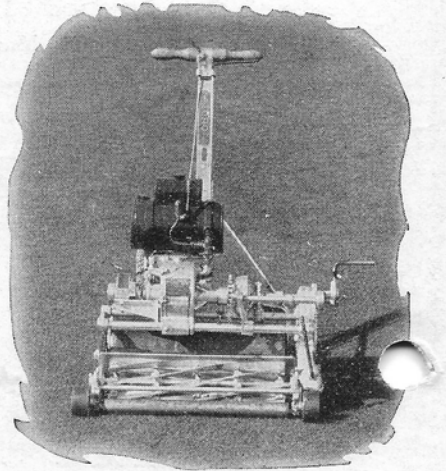


THE new Toro Junior Tractor equipped with a dump box, is a highly desirable tractor adapted to a wide range of work. The electrically welded steel body holds one full yard and makes it a convenient machine for all classes of hauling and general construction work on large areas of turf.



THE Toro all steel electrically welded dump wagon has a capacity of one full yard and will dump clean without injury to the turf.

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TORO grass cutting machinery has made a world wide reputation as being the finest and most modern equipment of its type. Precision workmanship and the most approved heat treating and hardening processes are standard in the manufacture of all Toro products. The Toro Manufacturing Company plant,

located in Minneapolis, Minnesota, is regarded as being a model in the industry.

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