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# *The* NATIONAL GREENKEEPER

Official Organ of The  
National Association  
of Greenkeepers of  
America

## The Battle of 1931

A resume of what the greenkeepers fought for and won. A season  
of unusual climatic conditions

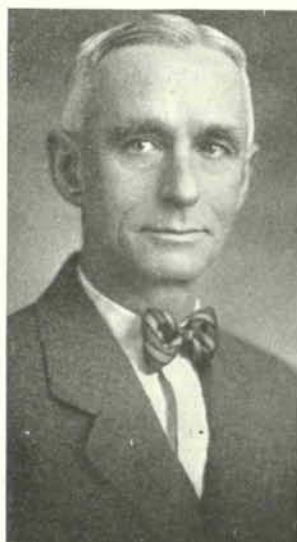
By JAMES A. SMITH

**T**HE season of 1931 will always be remembered by those who have been responsible for the maintenance of turf upon golf greens. The brunt of the fight has naturally fallen upon the greenkeepers and that they were ready and could stand punishment has been satisfactorily proven. Heat and humidity seemed constant during the nights of the past summer and while these conditions existed their work received their constant attention.

Such climatic conditions brought on trouble with which they were familiar. The symptoms were at once recognized, the remedy was known and the trouble was quickly under control. There never was any doubt of the outcome because now the better class of greenkeepers are men educated for this or any similar type of battle.

This year even the fairways required scientific attention. The trouble was new to most of them but they knew where and how to get the information they needed in this emergency. With a suggestion as to proper treatment, they were familiar with the method of application, of the proper medication and where treatments could be applied, results were entirely successful.

The greenkeepers have won what appears to have been their first great battle, by their eagerness to educate themselves.



JAMES A. SMITH

*Who for many years has been engaged in turf culture and conditioning of soils. He combines both the theoretical and practical sides of greenkeeping.*

Will they get all the credit they so richly deserve for this fight? Ten years ago the fight would have been lost as quickly as it started.

That the greenkeeper is now an educated, thinking man is evidenced by the following reasons which have been given by them for their trouble this year. Sit down in the shade of the tool house with one of them and you will be surprised to learn how clearly he is thinking.

### CONDITIONS WHICH FACED THE GREENKEEPERS

1. Poorly drained greens or those in poorest physical condition suffered most. These are not properly aerated and hold stagnant water often too near the surface. The physical inability of many

soils to provide properly digested nourishment is apparent even when supplied with normally, proper feedings because of this lack of aeration.

2. Too closely cut foliage or foliage destroyed by over-medication did not provide sufficient evaporation from the turf to bring up the feedings which might have been prepared for them in the soil below.

3. A few with but a limited knowledge of proper dosage, grew panicky and promptly murdered their greens with poison too freely administered. But few of these greens have as yet fully recovered.

4. Watering at night during the very hot

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## Market Place and Buyers' Guide---

### Mowing Equipment

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Pennsylvania Lawn Mower Works  
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Stumpp & Walter Co.  
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Peter Henderson & Co.  
J. M. McCullough's Sons Co.  
Illinois Grass Co.  
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J. G. Peppard Seed Company  
Lawn Equipment Corp.  
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### Seaside Bent

Seaside Bent Company

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### Tee Mowers

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## Wayside Plant Food

Wayside Gardens, Mentor, Ohio, are receiving many inquiries for their "Plant Food," for use on golf courses and estates this fall.

This product is a real foundation fertilizer and only one application a year is necessary as it lasts from twelve to sixteen months. Being organic, results are the same on all soils.

Wayside Gardens "Plant Food" is made for the specific purpose of feeding grasses or plants low at the roots, which helps to build a thick sod and consequently a very dense and sturdy growth.

This fertilizer is ideal for late fall top-

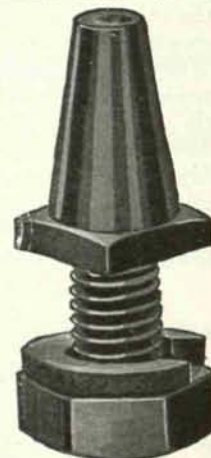
dressing, especially on turf which has been thinned out and starved through the hot summer months.

## R. H. WHEELS are stronger

For all Fordson Tractors



Rims do not bend—50% better traction—rounded edges—easier steering. Hundreds used for replacing old, injurious wheels. Sold in singles, pairs or full sets.



## R. H. Tractor Wheel SPUDS

quickest to put on or take off. Increase tractor efficiency and cultivate turf... that's why more than half the U. S. and Canadian clubs use them. Durable and low priced. All sizes for all purposes. Sample spud and circular on request; advise make of tractor and purpose for which intended.

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GENEVA - - - OHIO

Immediate Shipment

Prices Reduced September 1st.

## The Battle of 1931

(Concluded from page 5)

weather increased the humidity as well as the fungi. Greens dried out before night. With early morning watering during hot weather, quickly recovered.

5. Balanced feedings during the hot, humid weather, tended to toughen the turf and in a measure make it more nearly brown patch resistant. The most satisfactory complete fertilizer seemed to be the one carrying a heavy percentage of Phosphorus with comparatively light Potash additions. The nitrogen percentage seemed safe if it equalled the total of phosphorus and potash.

6. After improper drainage as well as improper physical condition, a growing tendency to over nitrate feeding was the prime cause for serious trouble. Delicate foliage on turf was grown at a time when a strong, vigorous turf was most needed. Heavy nitrate feedings from Ammonium Sulphate or from one of the organic feedings which during hot, moist weather, could break down by putrefaction and



become too readily available, should be watched more closely at that season.

7. Over stimulation to foliage development, because of this one-sided fertilization should be classed as one of the major causes for the extent and duration of the fungus attacks. Where the feeding balance was maintained, this over-stimulation was impossible.

8. Deep and rather infrequent watering with the best available sprinkling equipment, with hand watering of the greens edges.

9. Seeding fairways to turf which the soil most easily grows rather than trying to compel it to grow one unsuited to the soil conditions in which it must exist.

10. Another year with the knowledge they now have and with funds available, the webworm will be less of a menace and should be controlled.

These and many more are actual suggestions from greenkeepers I have had the pleasure of hearing this summer. There will be many new problems possibly in 1932, but if they are thinking straight and as directly as they are, we need have no fear of the future so far as their responsibility is concerned.

## Ohio Humus Installs Drying Plant

For the past fifteen years there has been a steadily increasing demand for a type of organic matter known as humus (completely decayed vegetation) for the reconstruction of soils and for use by the producers of fertilizers as a basis of all high-grade products.

Many of the best of these organic products are capable of holding approximately 175% of water, and this moisture retaining power has been of the greatest value in the reclamation of wornout soils, especially when decay has advanced beyond the peat stage to the formation of humus.

As the majority of these products on

the market are taken from but partially drained lands, the moisture content of shipments has average from 50% to 75% for each ton of humus shipped. This would mean that the purchaser would pay freight and delivery charges upon 1000 to 1500 pounds of water for each ton received.

The atmospheric moisture will remain at an average of 10%. Should a fertilizer manufacturer use an organic product containing 50% of moisture in the manufacture of a complete fertilizer, due to the average of 10% moisture in the air, his product would rapidly lose weight.



FAN FOR REMOVAL OF VAPORS FROM DRYING DRUM

Within a few months, a 100-pound bag of fertilizer could show a loss of 40 pounds in weight.

To make more economical shipments of this product to the users on golf courses or estate, and to reduce the moisture content to 10% to protect the fer-

tilizer manufacturers, a drying plant has been built and equipped with all modern machinery near Findlay, Ohio, by the Ohio Humus Products Company, utilizing probably the finest hardwood humus deposit to be found in the United States.

All operations must be made mechanical and automatic with accurately adjusted equipment. Hardwood humus, as the name would imply, is wood in an advanced stage of decay but still retaining its original cellular construction. This must be recognized as an almost perfect nonconductor of heat and offers the big problem in drying.

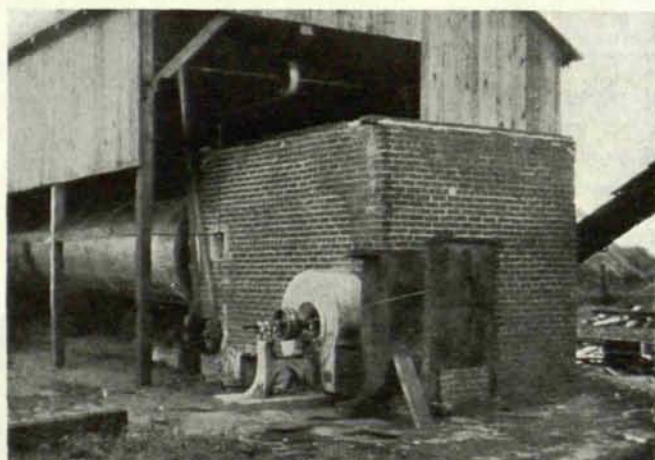
As the humus enters the dryer, it requires a heat of 3000 degrees F to overcome its peculiar power as a nonconductor of heat. At certain stages, without proper heat control, it becomes inflammable. Thermostatic control must protect it at this point and thereafter until it leaves the drying drum and starts on its way on cooling conveyors to storage.

At certain ranges of moisture content, it is susceptible to spontaneous combustion and these ranges must be carefully watched in the finished product. Once thoroughly cooled, it is safe for shipment, thoroughly sterilized against weed seed contamination, and is a perfect medium for use by the producer for our necessary legume bacteria in the farm, garden or golf course.

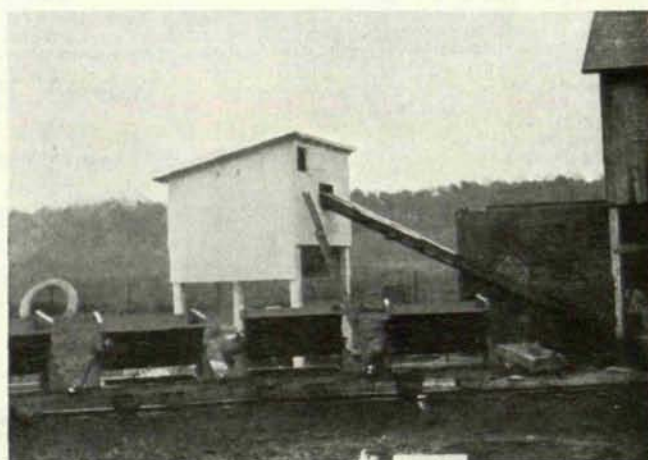
## Toro Opens New Office

Toro Mfg. Company announces the appointment of a new Toro distributor in the Cleveland, Ohio, district. His name is Merritt C. Johnson, and he will operate under the name of the Cleveland Toro Company, with headquarters at 2160 E. 28th Street, Cleveland, Ohio, Phone—CHerry 5161.

Mr. Johnson will be ready to serve Toro users with a complete stock of equipment and full shop facilities for overhauling and repair.



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