The New Toro Trojan Sets An Unequalled Standard
In Fairway Mower Construction

By A. F. Moyer, Chief Engineer

The new Trojan 30-inch Cutting Unit is designed to operate at either high or low cutting speeds, depending upon the desire of the Superintendent. Not only is it exceedingly light running, but it is exceptionally sturdy.

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The new Trojan 30-inch Cutting Unit is a worthy successor to the Super Mower. Like its predecessor, it has the same sturdily constructed frame, of 8-inch diameter, but with six blades instead of five. The unit is a completely new design, which has been worked out and tried out under every conceivable condition and every new feature is a thoroughly proven success.

Chief among the objectives in bringing out a new cutting unit is the trend toward higher cutting speeds. The possibilities in this direction are materially extended by this new unit, without sacrificing the quality of the cutting job.

Other desirable features attained are increased ability to dip down into the hollows, and to rise over smaller ridges in the ground without scalping. Every small undulation in the turf is faithfully followed, even at high speed, without jumping, skidding or bobbing.

The Trojan is characterized by a close-coupled construction, with a short wheel base from the drive wheels back to the reel and to the rear roller. This permits the cutter to follow the undulations. Sixteen inch drive wheels are used, provided with protruding lugs which penetrate the grass and obtain a firm tractive grip in the root system of the turf, thus overcoming slippage and producing a positive, clean cut under the most difficult conditions. The rear roller is large — 3 ½ inches diameter — thus being adapted to high speed and following the ground without bumping or throwing the unit. Roller brackets are attached outside of the unit side plates, having a long range of adjustment and including corrugated locking means with graduations to insure equal adjustment.

Internally, 100% Toro quality is maintained. The one-inch steel live axle shaft runs in long sleeve ball bearings, within a oil-tight housing. A train of liberally proportioned gears is used — accurately cut and hardened from S. A. E. oil hardening gear steel. Each drive wheel has a long hub with oilless bronze bushings on the axle shaft, and is engaged through spring actuated dogs to a ratchet hub, one on each end of the axle. The drive wheels are demountable, and when in position their large disk-shaped hubs form oil-tight enclosures for the ratchet dogs. Adjustable cork packings, easy running and of small diameter, engage the wheel hubs and seal the gear case and bearing housings against oil leakage or entrance of grit.

On one end of the reel shaft, the reel pinion is mounted to slide into or out of mesh with the stepped intermediate gear in the gear case. The gear case cover carries a single lever for throwing the unit into or out of gear in this manner, and a spring detent is provided to retain the pinion in either position.

The six blade 8-inch reel has a 1 ½ inch shaft solidly encased in three intermediate spiders after assembly, and securely pinned. This gives a reel free from assembling strains, and rigidly sustained against running out of true after it is put into service. Double row SKF self-aligning annular ball bearings, with cork seals, carry the reel.

An ingenious assembly (pat. applied for) is employed, of the reel and bearings with the bed bar, forming a unit with three point suspension in the mower frame, carried at the reel bearings and at the center of the bed bar. This feature was first employed on the Toro Silver Flash mower and has been uniformly successful. A very simple, sensitive and positive adjustment of the bed knife is provided, in an easily accessible position. Because of the patented suspension, no possible strain or shock on the frame of the cutting unit can disturb the adjustment of the bed knife. All blades are of special alloy air hardening steel, and the bed knife is of the double edged, semirigid, semi-flexible type, with great resistance to wear, always remaining true, smooth and sharp. After severe tests, malleable iron was selected as material for the bed bar, because it will sustain from three to four times as great a hammer blow without permanent distortion. This means that the units will always continue to cut clean for the entire width of cut, because the bed bars will not become sprung in the center.

Every working part of the unit turns on anti-friction bearings, with oil-tight seals having the lowest possible friction. The large diameter of rear roller, with dust protected, hardened and renewable bearings, runs with a minimum of resistance. A low gear ratio from axle to reel contributes to easy cutting. In every respect the Trojan is light running, and cannot be excelled by any unit which cuts all of the grass.
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We have always believed that there is a demand for the highest grade of Grass Seed—Grass Seed that could be depended upon, and the results have fully justified this belief.

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Everything for the Golf Course

35 Cortlandt St. New York City
February, 1931  
The National Greenkeeper  

This Is Real Labor-Saving Equipment for Any Course

Hills are taken easily by the FAIRWAY Tractor, as shown in this picture. Even though the rough is thick and tangled here, the FAIRWAY and its 7-foot built-in power mower are doing a good job of cutting.

If you are looking for real labor-saving equipment for your course, the McCormick-Deering FAIRWAY Tractor will answer every need. Definitely designed to provide economical power for all golf-course work, the FAIRWAY Tractor is one of the best investments you can make. It gets work done in a hurry—and it has long life ahead of it.

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The nearest branch, distributor, or dealer will be glad to show you the FAIRWAY and demonstrate it for you. You will find that it will be real economy to use the FAIRWAY. Write us for information.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Avenue  OF AMERICA  Chicago, Illinois
(Incorporated)

The Golf Tractor  MCCORMICK-DEERING  FAIRWAY
NEW IDEAL ROUGH MOWER OBSOLETES ALL OTHER METHODS

An average-sized, eighteen-hole course proved a season's saving of better than 50% in rough cutting costs with the new Ideal Rough Mower. Moreover, rough was in better shape all season. Built on the long-proven Bulldog Fairway Mower principle. Cutting blades give the desired length of rough. Already proven in service. Ask for the names of clubs already using Ideal Rough Mowers—their opinions are our best story on this new member of the great Ideal line.

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Easily handled as a hand mower, the new Ideal Power Greensmower provides the extra help of a smooth-flowing reservoir of power. Seven keen blades operate at greater, smoother speed—to give smoother greens. Ball bearings give effortless action. Weighs less than 100 pounds—costs less than $200.00. It makes larger machines seem clumsy, and more expensive ones unnecessary. Ask for a demonstration of this companion to the famous Ideal (hand) Greensmower—the lightest running hand machine in the business.

ONLY THE BULLDOG CAN PERFORM THIS WAY!

Only the Ideal Bulldog dared to be different from all others—as a result it cuts smooth and even under any and every cutting condition. Tough, heavy grass?—the pushing action of the units makes them cut clean. Down or across hillsides?—the pushing action of the units keeps them from swaying or bouncing. In a tight corner?—the entire mower can back up (no other can). Crossing road or rough?—the Bulldog picks up its cutting units and rides on the broad caster wheels! There is nothing to equal the Bulldog.

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IDEAL GRASS CUTTING EQUIPMENT
THE STAGE IS ALL SET FOR COLUMBUS

By COLONEL JOHN MORLEY, President
The National Association of Greenkeepers of America

On February 3-6, the city of Columbus, the capital of the Commonwealth of the State of Ohio, will throw wide open the famous doors of hospitality for the greenkeepers and golf club officials and all others interested in the production of fine turf and in golf course maintenance from all parts of the United States and the Dominion of Canada.

The stage is all set and practically all arrangements are complete to give to the golfing world the largest and best Golf Show, Conference and Convention ever held. Never in the history of golf has there been a greater array of talent and support. Under the supervision of Jos. Williamson, greenkeeper of Scioto Country Club, who is general chairman of the Entertainment committee, there will not be an idle moment. This large gathering of turf experts is sponsored by the National Association of Greenkeepers of America.

The world at large knows only from outward expression what goes on within. A large gathering of greenkeepers at our Annual meeting, Conference and Golf Show will be the outward expression of their interest in the National Association. Let us get together at Columbus meetings in such numbers that the attention of the whole world of golf will be directed our way. Every greenkeeper should attend, not only to add his support to this organization, but to acquaint himself with the various labor-saving devices which are being manufactured to assist him in his work.

This is the fifth year of the Greenkeepers' Golf Show and Educational Conference. The exhibits and demonstrations are large in number and great in interest to any man who has charge of golf maintenance. Raising good turf is not all that is demanded of the greenkeeper today. He must be a good business man and a good business man knows what there is on the market to increase efficiency in his particular line. There are several new pieces of equipment ready for inspection as well as fertilizers and many other supplies you should know about.

Practically all leading manufacturers of golf course equipment and supplies are exhibiting this year and the Show room at the large Auditorium will be a lively and colorful scene. It will be like a large general store devoted to golf equipments which have been erected over night.

Greenkeepers everywhere profit by the practical
The year 1930 will go down in history as one of the worst so far as industrial depression is concerned. We have witnessed practically all civic and fraternal associations reporting large losses in membership and finance. We are happy to report that our association instead of showing a decrease in membership and finance shows an increase. Of course, in part, this is due to the fact that a number of experienced greenkeepers who are eligible to membership in our association have begun to see the handwriting on the wall and have come to realize that it is to their interest to become a member of our fraternity.

They also realize, "that in union there is strength." They have observed that all around their territory golf club officials are fast sifting the chaff from the wheat. During the past year we have lost a number of members who have not been keeping step with the times and we find that a number of them have gone into other lines of endeavor.

When golf first began to be played generally in this country the greenkeeper was the club's last worry—he cut the grass, raked the leaves and smoothed the bunkers. He was just a little above a common laborer, who was anathema to the member who lost his golf ball in a long rough. As the golfing clan grew players learned of fine old courses in the east and in Europe—courses kept in such fine condition there was no comparing those back home. Fairways were like lawns; putting greens were luxuriously smoother than the costliest of carpets.

Golfers began to kick about their own fairways and putting greens and the complaints made the greenkeeper hustle. He worked harder, patiently and put in arduous effort trying to give the members, his employers, something like what they wanted. The greenkeeper had to learn to seed, learn to cultivate, to fertilize, etc. Above all he had to produce a putting green. He began to read books and he talked to seedsmen and others. He began to learn something about his work; he had become a skilled laborer.
Then golf began to sweep the country in a wave of popularity never equalled by any other sport. New courses began to spring up everywhere, old courses were enlarged, improved and rebuilt. Where thousands of dollars had been spent before on golf courses now millions are devoted to the sport. As the money flowed out critics began getting in their deadly work and the critics were the members who wanted value for their money;—the greenkeeper hurried to keep up. He stumbled now and then, but he forged ahead. He experimented, tested, worked, read and discussed. The leading men in the club for which he worked became members of the Green committee. They worked with him. They began calling in soil experts, and fertilizer authorities. Golf clubs began to have their soils analyzed and they looked with new interest on their water supply.

GREENKEEPING IS NOW A PROFESSION

That happened? Today the picture has changed again. The greenkeeper today is a personage of distinction. Within the past few years greenkeeping has become a highly technical profession. With the advent of our annual Golf show we have now reached a point where we encourage competition. For at the coming Golf show four officers of our association have been appointed, namely, John MacGregor, Chicago; Robert J. Hayes, New York; William Sansom, Toronto, Canada; and John Quaill, Pittsburgh. These four men will each select a captain who will select his assistants to build a putting green. Material will be furnished for the four putting greens and the competition will take place at the Auditorium. These putting greens must be built for a 400-yard hole, with a par 4.

CLUBS WILL INSTALL WATERING SYSTEMS

The severe and long dry spell of the season of 1930 has induced a large number of up-to-date golf clubs to install this coming spring a watering system for their fairways. A number of them are at a loss to understand what kind of a system to use, especially along economical lines. It would pay officials of golf courses before they decide with their plans to visit the Golf show where they will be able to receive data that may be the means of saving considerable money and at the same time aid them to observe the up-to-date sprinklers which will be demonstrated at the Show.

Our Golf shows, under the able management of Fred A. Burkhardt and his committee have always been a success and they have been highly complimented. The coming Show will outclass all previous ones for "Fred," as he is usually called, has been able to take off some of the rough corners and it is his earnest desire to have the coming Show as near to perfection as possible. Mr. Burkhardt has been ably assisted in making these Golf shows a success by the executive assistance of Mr. Robert E. Power and Miss Marie J. Fox and he has had also the support of the leading manufacturers and merchants.

Our association is indebted to Mr. G. V. Jones, passenger and ticket agent of the Baltimore and Ohio railroad, Cleveland, for his services in obtaining reduced railroad fares on all railroads entering the city of Columbus.

Nothing is more essential to the vitality of our profession than that greenkeepers in one part of our jurisdiction be kept familiar with what greenkeepers in every other part of the United States and Canada are doing for the upbuilding of our Association, yet by reason of the great distances which separate one from another, some medium of communication is necessary if the members of our Association are to be kept informed about what is going on around our vast territory. To provide such a medium and to keep our members informed month by month with what we stand for, is an estimable privilege no member can afford to be without.

The National Greenkeeper was
created at the birth of our association to make that privilege possible for you. Our magazine has no axe to grind, enters no controversies, only to protect the well being of our association and its policies. It represents no cliques. To serve the members of our fraternity to the top limit of its resources is its one and only purpose. It has been a great factor or instrument in helping to make our Golf shows and Conferences the success they have attained.

It has often been stated that good work brings forth good fruit. We are pleased to state that Mr. Robert E. Power, president and editor of the National Greenkeeper, as a Christmas greeting to the National Association of Greenkeepers of America has notified the officials of the Association that he will give to the Benevolent Fund the sum of two dollars for each member in good standing for the year 1931. This will increase the fund to about one thousand dollars.

The Benevolent Fund was founded for the purpose of aiding families of permanently disabled and needy members. This generous offer should stimulate the members to put their shoulders to the wheel and get after new members who have the qualifications as laid down in the constitution of our Association.

We are beginning a new year. So let us continue to pull together and endeavor to improve upon the success of former years, at the same time maintaining that dignity and sincerity of purpose which has always been ours.

The four days set apart, February 3-6 inclusive, will be gala days for all who attend. It will be the greatest gathering of men devoted entirely to golf maintenance that has ever been held. To observe and witness the warm, friendly hand-clasps and greetings when the members of our association begin to arrive—the friendships that were previously cemented at Toledo, Chicago, Detroit, Buffalo and Louisville will be renewed upon this occasion. For occasions like these are seldom soon forgotten. New acquaintances are formed and old ones renewed and friendships are made lasting and eternal.

The management of the Deshler-Wallick as well as Mr. George Trautman, Secretary of the Columbus Chamber of Commerce, are doing all in their power to make our visit enjoyable and profitable. The Central District Golf Association together with George Sargent and Joseph Williamson and others have outlined a program of entertainment which alone will pay you for the time and expense in attending our reunion. We have endeavored to give you during three days, Conferences with speakers of ability and who are nationally known. We have arranged the subjects as at the last session, so that we will have the practical as well as the scientific side of greenkeeping.

The program arranged for your benefit will start promptly Wednesday afternoon at two o'clock and after a few preliminary remarks from your president this meeting will be turned over to Mr. George M. McClure, Bureau of Soils of Ohio State University, who will preside over the meetings. The program containing the names of the speakers and their subjects will be found elsewhere in this publication.

EXHIBITORS’ DINNER, MONDAY NIGHT

On Monday night at 7:00 o'clock Mr. Fred A. Burkhardt and his committee will give a complimentary dinner to the man-