there's an Efficient TORO Mower

are left off. Like the five-unit outfit, it is all steel, electrically welded, and practically indestructible. Being short coupled, it can go in and out of close places and be housed easily at night.

For smaller areas and general all-round mowing, the Toro Park Special is the best built and lowest-priced power mower of its size made. Makes 30-inch cut, mows four to six acres a day. Simple in design, perfectly balanced, can be turned, tipped or rolled with one hand, exceedingly easy to handle.

For cutting around close places and doing a clean job once over, the Toro Park Junior has no equal. It is a 22" power mower with same motor as the Park Special—the Toro 1¾ H.P., 4 cycle, single cylinder, air-cooled.

For small areas and close work around flower beds, shrubs, trees and other places where a hand mower is required, the Silver Flash is the "sweetest" little mower ever put on the market. Built like a watch, light weight, light running, clean cutting and easy to handle.

The complete TORO line includes many other labor-saving machines for efficient golf course maintenance work. Write for the new 1930 TORO catalog.

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line of business, should consider that the greenkeeper is an expert in his line and is hired for his knowledge of golf course construction and maintenance and his ability to handle efficiently the men engaged for work on the course. While the principal duty of the green-chairman is to see that everything in and about the golf course is operating efficiently, he must be careful to avoid antagonizing the greenkeeper by inadvertently giving orders to the men, etc. It is well to handle all matters in regard to the golf course through the greenkeeper and to talk over with him any plans or practices proposed before asking that action be taken to place them into effect.

The green-chairman is the connecting path between the officers and directors of the golf club and the construction and maintenance force on the golf course. If the chairman has decided upon any action that should be taken, it will frequently be necessary to sell the plan to the board, especially if additional expenditures are involved. The best plan is to have a logical story as to why the work should be done as proposed, what optional procedures are available, and what the cost of carrying out the plan will be. It is well to be liberal in cost estimates as generally things cost more than is anticipated.

The chairman will receive frequent suggestions as to changes and improvements that can or should be made. It is well to consider carefully such suggestions by talking them over with the greenkeeper, and if they seem good and the board approves, carry them out as promptly as possible, as we all like to see immediate results from our suggestions.

Confer Watch on Costs

Confer frequently with the greenkeeper as to how the expenditures on the golf course are running and what can be expected during the season with the view of having him work with you in keeping within the appropriation. When new tools or materials are needed, decide with the greenkeeper what to get, and then secure prices from different suppliers as it is possible frequently to save money in this way.

Read up on golf course construction and maintenance with the view of finding out what some of the difficulties are that make greenkeeping a job for experts, and see that your greenkeeper is furnished with best available literature along these lines and is encouraged to confer with others working in this line. The old saying, “You do not get something for nothing,” is well illustrated in golf course work, where, in general, we are attempting to grow an unnatural amount and kind of turf both on fairways and greens. To accomplish and maintain the desired results economically is the job of your greenkeeper, with your aid and encouragement.

If results do not materialize as soon as you expect, do not become impatient. Growing grass on fairways and greens is a process of nature, and all one can do is aid and assist. It takes time and a lot of patience to build up and maintain good fairways and good greens. Take it easy; do not try to hurry nature too much; do not encourage experimenting too extensively, and, above all, be patient.

Comfort Big Factor at Well Kept Course

How much does the word “comfort” mean to you as applied to the golf course? Is it not true that a player has the right to demand a certain degree of comfort, as well as a well-kept course? Should we not think over ways to make our courses more comfortable for our players?

How can comfort be secured? In many ways; easy inclines instead of steep slopes; paths of ease and comfort instead of sandy, rocky, slippery trails; shelters here and there; seats on or beside tees, especially where there is liable to be congestion; these are a few. Keeping the rough in such a manner that balls can easily be found aids in comfort. Drainage of low areas where water stands in the wet times not only improves the course, but also helps in the greater comfort for the players. It is easy to see how comfort can be made greater, there are so many ways to improve.

This is the ideal time to do much of this work to make the course more comfortable. Paths can be made easier, possibly sodded; if on a hillside, steps can be built in to help. Seats and shelters can be built, and others ways to improve studied, so that next season will find joyful comfort in command on your course. The little things count, and comfort can be made greater by each little step.—N. E. Greenkeepers' Newsletter.
Flooded Fairways and Frantic Golfers

Jupiter Pluvius has it in for golfers in the spring, when he opens wide the flood gates and waters pour upon the earth, soaking the already sodden fields and fairways and making still madder the golfer who for months has been held under restraint. You can't stop the rainfall so there is only one thing to do—get rid of the water, quick!

The Key to the Situation

Leave it to Nature, if you want to; in her own sweet time she will dissipate the floods and dry up the soil. But that doesn't help the impatient golfer. Beat Nature at her own game—everybody's doing it!—compel that surplus water to run off at record breaking rates by employing

Engineered Drainage

This is nothing more or less than a practical application of scientific principles whereby surface and soil water is removed extra expeditiously, leaving the turf with that springiness that delights the golfer's heart and makes him say "Ah! Our greenkeeper certainly knows his business!"

Play Weeks Earlier

Life is too short to waste even a single day of golfing. Get on your course weeks earlier than you thought you could—engineered drainage will help you do it. It is being done on other courses everywhere—don't let yourself be a back number. Get our booklet—it's free—it gives the whole story. Just say "Drainage" on a post card addressed to us, and see how quick you'll get the facts.

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Dixie Experts Give Tips on Bermuda Turf

RAY TOWER
Forest Hills C. C., Tampa, Fla.

Bermuda Grass (\textit{Synodon Dactylon}) is a tropical or semitropical grass, native to India. It was introduced into the United States prior to 1800. It propagates from seed or from abundant underground stems and surface runners. The northern growth limits (i.e., where it will survive the winter) correspond roughly with the southern limits of creeping bent. It may be used as a summer grass almost anywhere in the United States, but is not a successful permanent golf course grass north of the southern boundaries of Tennessee and Virginia.

Bermuda produces seed very sparsely, if at all, in the Florida peninsula. There seem to be several strains of the variety prevalent here, varying in texture from fine to very coarse. It is not particular as to soil requirements, as it will be found growing on the poorest sands; however, it responds wonderfully to proper cultural methods, and is to date the only successful golf greens grass in Florida.

In answering GOLFDOM’S December queries, our replies are based solely on our experience with Bermuda grass at the Forest Hills C. C. course in Tampa.

(1) When should Bermuda grass be sown, and when fertilized?

Fertilize your seed bed with any good organic fertilizer, as part of the seed bed preparation.

Bear in mind that only the top six inches of soil needs to be well enriched, as 90 per cent of the root growth will be in this top soil.

Seed may be sown in this locality any time between March 15th and June 1st, it being understood, of course, that water is available during this period. Our rainy season does not start until about June 15th. Under proper conditions, 5 pounds of seed per 1,000 sq. ft. of area is plenty.

Our experience has been that it is simpler and quicker to produce Bermuda turf by the vegetative method than by seeding. In vegetating, we dig up the grass needed, chop it to about 2-inch lengths, broadcast evenly over the properly prepared area, cover with about three-fourths to one inch of soil, roll down and keep moist.

Top-Dressing Practice

(2) What sort of top-dressing, and how often used?

We find it necessary to top-dress at least six times a year. Eight would be better if time and funds permitted.

For top-dressing material, we use a compost of about one-fourth dairy manure; whatever vegetable material, such as grass clippings, etc., we may have available; one-half sand, and the balance a black mucky sand taken from low area about the property. We try to keep this material composted from 8 months to one year ahead. At each top-dressing we use approximately one cu. yd. of compost to each 5,000 sq. ft. of turf, and supplement this with an addition of some good nitrogenous (6 per cent to 8 per cent) fertilizer applied at the rate of 10 lbs. per 1,000 sq. ft. This additional fertilizer is put on the greens just ahead of the compost, and worked in with it.

(3) Should Bermuda grass greens be watered, etc.?

This locality has abundant rainfall during four months of the year. During the balance of the year artificial watering is absolutely necessary, not so much to keep a surface that will hold the ball, but to keep the grass in continuous growth. Our practice is to water at night. Each green is watered twice each week during the cool dry months, and three times each week during the warmer dry months. Nature overdoes the watering during the rainy season.

(4) Does it harm the greens to play on them all year?

No. Not if you are giving your greens proper care.

Forest Hills C. C. opened to play in November, 1926. Since that time the course
Cut the Greens with a JACOBSEN and SAVE Club Funds

In the multiple performance of cutting, brushing, working in the top-dressing, and rolling the greens, the Jacobsen Power Putting Green Mower is outstanding. It emphatically solves the problem of Better Greens at less Cost in labor and equipment. Broad rollers and even distribution of weight give it no greater pressure on the green than the human foot. Its brush attachment is invaluable in keeping grass from matting; in working in top dressing and keeping the green in perfect putting condition. America's foremost power mower engineers have endowed the Jacobsen with improvements found on no other mower. Write today for our free Guide to Green Maintenance and list of users.

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Powerful motor and all working parts simplified and standardized to a degree that gives emphatic assurance of unlimited, trouble-proof and lowest-cost operation.

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Made in two sizes—19 and 24 inch. Equipped with power transport cart for convenience in moving to and from greens.

This Free Guide to Green Maintenance and list of users is interesting and highly instructive, showing how popular Greenkeepers keep their greens in perfect putting condition. Send for it.

See the Jacobsen Power Mower Exhibit at Booth 25 during the National Association of Greenkeepers' Convention in Louisville, February 4-7 inclusive.
has been open twelve months each year. Our greens are improving each year, in spite of the fact that play is steadily increasing. We do not use temporary greens at any time, not even when putting in our winter rye seeding.

(5) Will a filler of bluegrass or fescue make greens less jumpy? Yes. But why bother with that when judicious watering, fertilizing and top-dressing will give you a smooth one-grass green?

Here in Florida we have just enough cold weather to brown the Bermuda and make it dormant for a short while. For that reason it is common practice to sow a cool weather grass for winter greens. Italian rye, Kentucky bluegrass, redtop, poa bulbosa (bulboxus bluegrass), or creeping bent may be used alone or in combinations for this purpose. Our practice is to use only Italian rye at the rate of 12 to 15 lbs. per 1,000 sq. ft. This may be sown any time after October 1st. We put it off as long as we dare. This year our rye was put in the first week in December, just about two weeks ahead of the first cold snap. So long as the weather is such that the Bermuda continues to grow, the rye is unnecessary, and only an added burden in greenkeeping.

### Bermuda Grass Conditioning

**Methods That Work for Me**

_by T. J. LUNDY_

_Greenville (Miss.) C. C._

From the first of April on you can start planting bermuda grass seed, but this way is slow in getting a good mat quick. I found the best way was to take bermuda stolons and cut them in lengths that ran from one to three inches long, place them thick all over the green, and then top-dress with about one-quarter inch of dirt over them. Then give the green a good watering. In this way you get a better green faster. Of course, you could put seed on top of this and it would help lots.

In regard to watering a bermuda grass green, I have tried both night and day shifts and have not found any difference. The only thing I found in watering at night, the workmen were not bothered with the early play.

The water pressure on my course was so low that I used one boy on each nine, just going from one to the other green all the time, changing the sprinklers. Sometimes these sprinklers ran for weeks without stopping. With good water pressure you would not have to do this, of course. I have found that you must have your green watered to the depth of two inches to hold the moisture and softness of the green.

I have tried all kinds of fertilizer. On some greens one kind was fine, others no good at all. I am inclined to think that milorganite is good for all year use, and it is comparatively inexpensive. I had a special manure made for me by the Marine Fertilizer Co. in Gulfport which is the best you, in my opinion, can buy for bermuda grass, but this is rather high priced.

In regards to top-dressing, rotted cow manure with rotted leaves and humus hauled from the swamps, mixed with oyster shell dust, is the best top-dressing that you can make. Cow manure and rotted humus feed and hold the moisture and make the green soft. That is what you are after.

I find that top-dressing a green whenever you think it needs it is better than having a fixed rule on certain days, as all you are trying to do is get the tender shoots or blades coming all the time to get the best greens. If you do not top-dress often enough the grass will become hard and stubby.

My motto has always been stay as close to mother nature as possible. "And whenever in doubt" top-dress if it is only with plain top soil.

### A. B. Porter Starts Supply House

_at Salem, Mass._

_Arthur B. Porter, formerly active in the New England Service bureau, has established a golf course equipment and supply business with headquarters at 55 Dearborn St., Salem, Mass. Porter maintains a warehouse in Salem, 16 miles north of Boston, with trucking service for rush orders._

Whitlach's Golf—MacMillan Co., Chicago and New York.—The third reissue of this practical primer shows that the volume retains its interest and value for the golfer in the earlier stages of his development. References to the cleek and sand tees in this simplified classic show how the game has marched along in the six years since the last revision, but the fundamentals of the swing remain the same as they were observed by Marshall Whitlach when he set down his ideas for making the path to good golf easier.
"A GOLF COURSE FERTILIZER"

Not a testimonial, but the definite recommendation of a well known authority who developed the formula after years of experiment in turf culture. We will be pleased to mail you one of the above interesting booklets on request... address Nitrate Agencies Company, 104 Pearl Street, New York City
Clubs Join U. S. G. A. in Tax Relief Push

It looks like the U. S. G. A. plea that the golf clubs get busy in a concerted effort to get federal relief has aroused the club officials to the point where they are in dead earnest about having their members' representatives in congress understand the injustice and heavy burden of the tax situation.

One of the letters putting forth the golf club side of the case in illuminating fashion is that written to Senator Thomas D. Schall of Minnesota by Walter Nold, secretary of the Golden Valley G. C., Minneapolis.

Mr. Nold wrote:

As you know, the Revenue Act of 1928 provided for the continuation of the war tax of 10% on dues and initiation fees to golf clubs and added a new tax equal to 10% of any amount paid as the purchase price of shares of stock, bonds or other securities, ownership of which is a condition precedent to membership.

The Revenue Act of 1928 is entitled "An Act to reduce and equalize taxation," etc. Practically all of the war taxes, and particularly the so-called nuisance taxes which admittedly were imposed not upon the basis of any tax logic but purely as a temporary means of providing revenue, either have been discarded entirely or very materially reduced in rates. But more than eleven years after the Armistice, the burden of the golfer has not been lightened but actually has been made heavier.

I do not see how either the imposition of this new tax or the continuation of the old tax can be reconciled with any program of reduction and equalization of taxation.

Here is an illustration of the inequality of this tax. Some golf clubs are organized and operated without any dues, although the members are required to purchase memberships which are transferable, the members paying a green fee each time they play. Some members play more and pay more, others play less and pay less. Members of such clubs apparently are not required to pay any tax, while members of clubs who pay certain stipulated amounts annually as "dues" and no "green fees" are required to pay the tax. I do not know on what principle of equity the one group should not pay a tax and the other group should pay a tax, merely because of a slight difference in the method of financing.

Another inequality is the fact that patrons of public fee courses, constructed, maintained and operated for profit, pay for the privilege of playing but are not required to pay any tax. An attempt at justification of this is the statement that the government collects taxes on the income from such ventures for profit. But any such tax collected is a tax only on the NET income from the venture, and only after the allowance of certain exemptions and credits. In the case of the club, the dues paid by the members, on which a tax of 10% is paid, constitute substantially the gross income of the club, so that by way of comparison the tax is in effect not a tax on net income but a tax on gross income before deduction of any costs or expenses, and without any exemptions and credits, and, furthermore, is at a rate higher than probably would be paid by an individual.

If a man be rich enough to pay the entire cost of constructing and maintaining a golf course for his exclusive benefit, he is not penalized by a tax of 10% as is the club member who pays a proportionate part of the cost.

Here is another illustration of the apparent inequality of this tax. A man may spend during a year $1.00 or $1,000, or any amount, so long as the individual admission price does not exceed $3.00, on burlesque, vaudeville, motion picture and other theatrical performances, none of which can be considered health-giving (and probably few classed as educational or cultural), without the payment of any tax. But if a man in a year spends more than $25.00 as dues in a golf club for the privilege of joining other men in the pursuit of a health-promoting outdoor recreation he is taxed 10% for so doing.

Some uninformed person may attempt to justify the tax on the assumption that golf clubs are composed entirely or very largely of only men of advanced ages who perhaps profited more than they sacrificed during the World War. Golf, if ever, is no longer exclusively an old man's game. I am sure that a call of the roll would show that a great many
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The new model, with many improvements, is the last word in "tee convenience" and smartness.

Roto Washer, with its revolving brush of Russian Pigs' bristles quickly removes dirt and turf stains with 4 or 5 turns of the crank, *without* splash. The V-type belt is positive, like the fan belt on your car. Parts are of aluminum and bronze — rustproof, wearproof and waterproof.

The Uni-T-Stand holds the Roto Washer, and is equipped with a movable, arrow-shaped direction marker, par and yardage indicator, and tee number. Markings appear on both sides, embossed on aluminum plates, easily mounted and interchangeable.

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Only reliable companies are allowed to advertise in GOLFDOM.
of the members of golf clubs were in military service in the Great War.

No one informed on the development of golf in the United States will any more seriously propose as an argument for the retention of this tax that golf is the game of the rich and the leisure class.

Taxing Sunshine

I believe there are comparatively few men who take up golf with any idea of ever attaining any great degree of expertness in the game. The abiding features of golf for most men are the friendly association with other men, getting out into the country, walking on stretches of green, growing grass, watching the trees bud and leaf in the spring and take on autumnal colorings in the Fall, seeing the birds and the squirrels in the trees, enjoying nature's sun-ray treatment, breathing the fresh air, etc. The Master Nazarene said "render unto Caesar that which is Caesar's." But this tax seems to go much further; it seems to be a tax on the enjoyment of God's gift of sunshine, fresh air and green grass.

It is our belief that, while this tax on dues and fees may have been justified as a war measure, as a permanent measure it is illogical in principle, inconsistent and unequitable, and we believe that the Government should, if not encourage, at least remove the penalty of this tax from the health-promoting outdoor recreation of golf.

This letter is written in compliance with a resolution unanimously adopted on December 10, 1929, at the annual stockholders' meeting of Golden Valley Golf Club, which is composed of four hundred and twenty-five substantial citizens of Minneapolis and vicinity. We earnestly urge you to use your good efforts toward the removal of this tax, and I shall greatly appreciate an expression of your attitude in the matter so that I can report back to our members.

A couple of other letters chosen from among the number of copies that thoughtfully have been sent to GOLFDOM show that there is something being done to remove from the congressional mind the impression that golfers are gentlemen who are so rich that they don't give a damn about taxes. This apparent opinion is somewhat in conflict with the observations about the wealthy man and his taxes which any congressman can make at any time:

In one of these letters Jasper T. Crawford, acting secretary of the Liverpool (N. Y.) G. & C. C., writes his district's representative and Senators Copeland and Wagner:

At a recent meeting of the Liverpool G. & C. C. I was directed to write you the sentiment of our members toward the present ten per cent tax on club dues.

We believe that the tax was designed to apply on luxuries. It was aimed at clubs whose membership could presumably easily pay the tax. In our case this principle does not apply.

Our club is organized to let in members of moderate means. With a great number of our members it is a health project. This tax is a real consideration with us.

You will be doing a real service for a great number of your constituency if you can help us toward more economical golf by getting rid of this tax.

Dr. W. Frank Beck, who built a fee course at Altoona, Pa., to provide practically public golf to his community, wrote Representative J. Banks Kurtz, saying:

I understand that before long an effort will be made to have the federal tax of 10 per cent removed from golf clubs.

The question of removing it came up some three or four years ago and was defeated for the only reason that it was a rich man's game. I would like to state that there is no game that is growing so fast among the common people of our country as golf. During the last two years I have played on courses from Atlantic City to California and I am now safe in saying that there are one thousand people in very moderate circumstances playing golf to every one person who is wealthy.

In your own district I built a golf course at my own expense so that the working people and the people of moderate means would have a chance to play golf at a very reasonable price, and I know a great many people all over the United States who are doing the same thing. I believe if the individuals are taking this interest in golf it is the duty of the government to give all the aid possible for the development and growth of this wonderful game.

When the bill comes before Congress will you please do all you possibly can to have the tax removed?

"A putting green is the area within 20 yards of the hole not including bunkers. If there are no bunkers such a green would measure 11,310 square feet. No putting sward should ever be larger, and not more than one on a course has any excuse for being so large."—From the Green Section Bulletin.