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Signs correctly assorted so that all 150, 200, 250 and 300 yard distances can be marked; install at each 50 yard interval on every hole. Signs are heavy pressed steel in two colors of enamel. Positively RUST-PROOF.

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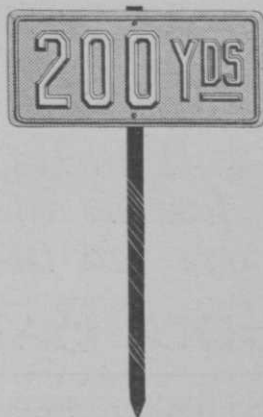
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SPECIFICATIONS

Plate: 24-gauge galvanized steel, guaranteed rust-proof. Size: 5½" x 12". Finish: highest grade flexible enamel, baked on in two color contrast. Set consists of 18 150-yd. signs, 14 200-yd. signs, 14 250-yd. signs, 4 300-yd. signs. Stake: Cadmium-plated channel steel ¾" x ½", 21" long. Embossed figures 4" in height.

Your clubhouse— Your course— Your pro shop—

Operation of each of these vital departments of a golf club involves scores of vexatious and unusual problems. The proper management of a golf club involves factors that have no parallel in other businesses. For that reason all departments of successful country clubs must be operated by the men whose ability and dependability mark them as basic assets.

The Club Managers' Association of America is raising the standards of club management by a notable campaign of educational work by and for managers, and by an employment service that helps each club get the manager whose qualifications exactly fit him to the requirements of the job.

The Club Managers' Association, the Professional Golfers' Association and the National Association of Greenkeepers all stand together on a platform of harmonious and able operation of each golf club department, for one fundamental reason:

"The good of the clubs"

For details of membership in the Club Managers' Association, or for information relative to its numerous services to the country and city clubs, write

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of AMERICA

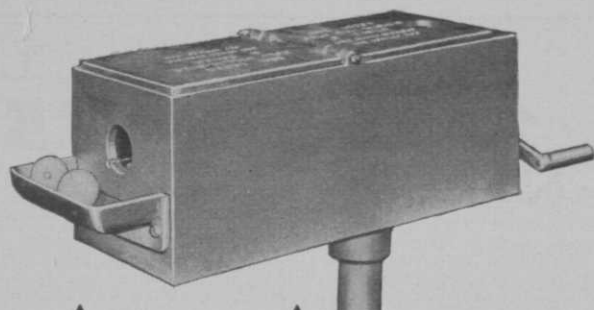
Henry R. Dutton, *Secretary*
BOSTON CITY CLUB, BOSTON, MASS.

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AND

Drys

*golf balls
as fast as they
are fed to the*



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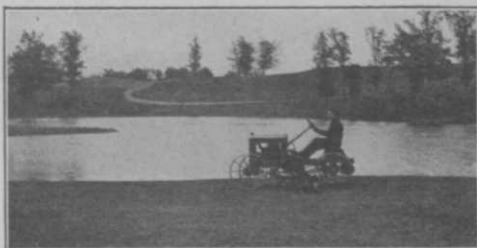
braced and cabled. By this method, tree experts so strengthen the trees that they can weather bad storms without being harmed. Cables now used are so inconspicuous that they can barely be seen and yet they will bear an astoundingly heavy load. When properly placed and properly applied, they provide mechanical support for the trees which can be obtained in no other way.

Brace V Crotches

Ninety per cent of the trees which suffer serious injuries during storms are those with weak crotches. It is easy, even for the layman, to distinguish a weak crotch from one which is strong. The right angled crotch formed when a limb grows out laterally from the trunk or parent stem is mechanically perfect. It will never split except under very unusual circumstances. Almost as good is the "U" shaped crotch where the two branches grow apart with a curved section of wood binding them together. The truly weak crotch is the one which is formed in the shape of the letter "V." Here the fibre tissues of one limb run approximately parallel to the fibre tissues of the adjacent limb. The attachment is weak and the tendency to split is inherent. Unless a tree with such a crotch is given mechanical support, it is likely to be seriously injured at any time.

It is easy to understand why trees with weak crotches are susceptible to injury. The top of the tree is like a mighty sail and in heavy winds it bends back and forth, and twists and weaves from side to side. The strain is tremendous. Inevitably, sooner or later, the crotch begins to weaken and starts to split apart. Water gets into the crevice which is formed and carries with it spores of fungous disease. When the fungous disease once gets started, it proceeds rapidly with its work of destruction. The crack may heal over but the disease keeps eating away and the interior of the crotch becomes weaker and weaker. Ultimately it is so weakened that it can no longer sustain the load upon it, and one of the limbs crashes to earth.

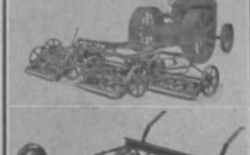
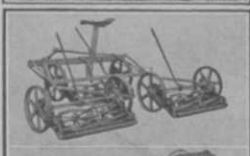
Trees with weak crotches are not necessarily doomed. The weakness can be speedily corrected. By installing bracing rods above the crotch at the proper positions, and by cabling the limbs together, the tree expert can so strengthen the crotch that danger of splitting is practically eliminated. Countless beautiful trees have been saved in this manner.



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More compact.

Goes up steeper hills.
**ENGINE DRIVEN
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Wing cutters fold in.
Can back out of narrow places.

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Triplex **\$365.00**

Hardened Gears
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*Recommended
and used
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Jack Daray
(Famous Golf Architect)*

BUILDING a good golf green is not enough. It must be well seeded, well kept and *well fed*. That is what Jack Daray recommends V-C Fairway for — the constant feeding and feeding a good green demands... For over two generations this company has specialized in making plant foods, and in V-C Fairway it has developed the perfect balanced ration for grass. Write for full information.

Lawn and Garden Dept.

VIRGINIA-CAROLINA CHEMICAL CORP.

Richmond, Va.



Used on the most famous golf courses

If the crotch has started to split, and decay has started, the problem becomes more complicated. The operation requires not only a complete removal of the decay and disease and careful sterilization of the interior, but it demands adequate and ingenious mechanical bracing to hold it against the tremendous force of the winds. And yet there are tens of thousands of these skillful operations that have resulted in complete success, and the trees stand as living monuments to a great and useful science.

Danger Signals of Rot

Cavities in trees are caused by rot fungus, a low form of vegetable life which lives by tearing down and consuming other forms of vegetable life. At certain times in the year, the fungus growth throws out what are called fruiting bodies. They resemble toadstools; in fact, many of them are toadstools. Often they can be seen on the side of the trunk or limbs of trees where the disease is working on the inside. These fruiting bodies give off a myriad of tiny microscopic seeds called spores, so small as to be invisible to the naked eye. The spores float through the air and most of them fall to the ground and perish. But some find lodgment in open wounds in trees and start their work of destruction.

Once established in a tree, the fungi send out their little threadlike tentacles which spread in all directions and penetrate from one cell to another. These avaricious tentacles consume the cell structure because that is their food. They continue their greedy destruction of one cell after another until the entire interior is a mass of decay and the tree has become so weakened that it crashes to the ground.

Decayed areas in trees are treated by the tree surgeon in much the same way as a dentist treats a decayed tooth. The decayed spot, whether large or small, is cut out with painstaking care. Every trace of diseased wood is removed—every trace of infection. If any part of the fungus growth is allowed to remain, it will continue to spread and ultimately the tree will be as badly decayed as before. The wound is then sterilized and covered with a protective dressing and the cavity is then filled with sectional concrete, installed in such a way that the tree's structural strength is entirely restored. Bark creeps over the filling from the edges, and in time all traces of the wound are concealed.



Far-sighted greens chairmen prefer to eliminate weeds at sowing time instead of after they have grown. That's why more than 1100 of them buy Scott's Seed. Experience has proved that careful selection and Scott recleaning methods make every pound of Scott Seed uniformly pure and weed-free.

We sell no special mixtures but can furnish you with any separate varieties suitable for your kind of soil.

Look at the enlarged picture of seed in the circle above. No weeds. No chaff. Just typically-pure Scott Seed.

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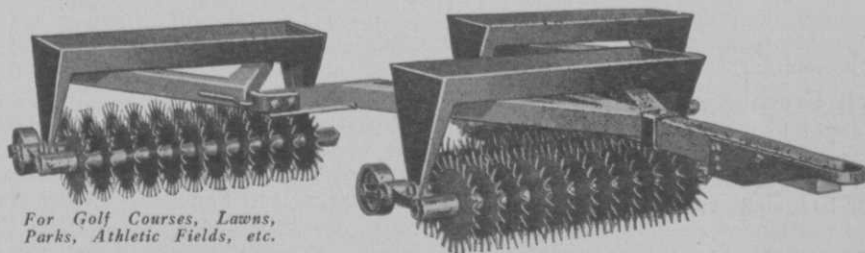
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SPIKE DISC is the ideal implement for cultivating, reseeding, fertilizing, top dressing. Its steel teeth cultivate and aerate, preventing the surface of the ground from becoming hard-baked. This produces a moisture-retaining mulch. Seed and fertilizer settle in the perforations made by SPIKE DISC and are not blown or washed away. Moderately priced, sturdily made. Hand, tractor and horse-drawn models. For complete details and prices write to:

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268 MARKET STREET, SAN FRANCISCO.
Made by WILDER-STRONG CO., Monroe, Mich. 565 WEST WASHINGTON BLVD., CHICAGO.

How Books Should Be Set Up To Show True Greens Cost

By E. H. DOTY
Treas., Cleveland D. G. A.

MAINTEINING the golf course is the job of the greenkeeper. Writing the history of the costs of that maintenance is the job of the bookkeeper.

The interest the greenkeeper has in the bookkeeper's job centers entirely in the result of the writing of that history. The result of the work of the bookkeeper in this particular depends upon the knowledge, the experience and the desire of this bookkeeper.

The one who keeps the books showing the history of the maintenance of a given golf course, should not only have knowledge of accounting but also somewhat of greenkeeping. Such a one should have experience as a golf player as well as an accountant.

Detach Greenkeeper's Operations

He ought to want to show the final results as to costs of maintenance so that the efforts of the greenkeeper, be they good or bad, shall be unconfused with any other operation of the organization.

There are so many things bought for a country club, and used in its various departments, that some knowledge of greenkeeping on the part of the bookkeeper is essential for the proper inclusion and exclusion of charges sought to be assigned to greenkeeping.

I have in mind a very competent bookkeeper; so competent was he that he had invented many forms for quick and certain bookkeeping methods. He knew all about

CLEVELAND'S golf club figure wizard explains here to many greenkeepers how they are being "framed" by improper accounting methods. From experience as treasurer of Westwood and as an official of the Cleveland District G. A., Doty shows what the greenkeeper who doesn't know something about course cost accounting is up against.

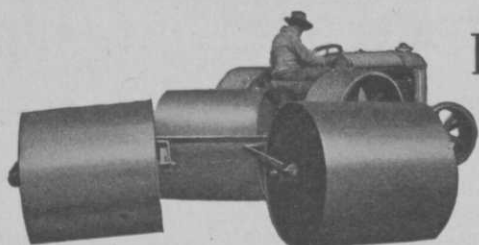
It is our opinion that the eminent statistician and analyst minimizes the differences in course architecture as a maintenance cost factor too much in his reference; "A golf course, however, is a golf course." We'll ride with him to the limit on the rest.—Editor.

debts and credits and he could show you in half a minute just what the balance, if any, was in any fund or the sum total that he had charged up against the various activities of the organization. The trouble with his accounts was not that they were inaccurate, or that they would not balance, but that the figures which he gave as the cost of maintaining the course could not be depended upon because of his own ignorance of what ought to be included. He was not a golf player but just a bookkeeper who knew what debit and credit meant, but

not whether the cost of trophies should be charged to the golf course or to something else. The result was utter confusion when attempting to use the result of his year's efforts.

Bookkeeping can be just as intricate as one wants to make it; but I have noticed that the more intricate it is the less the greenkeeper can know about the accounts.

Of course greenkeepers are not at all interested in the general bookkeeping scheme of their clubs. What they want to know is exactly what it costs to keep their own courses in proper shape for their members to play golf upon any time they desire. They are interested that only those things that are necessary to that end are included. They are not interested in charges for depreciation nor any allocation for general expenses nor anything else for which they are not entirely re-



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Let's have the full details about the Universal Compost Mixer.

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Spreads all materials used on greens or fairways without ridges or bare spots. Distributes compost or prepared soils, fertilizers and plant foods.

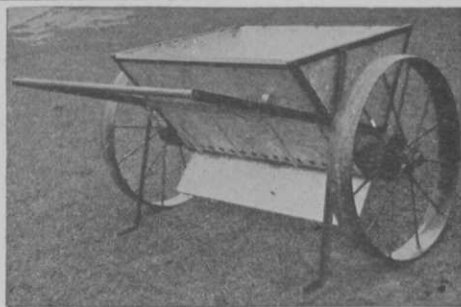
There is a Thompson Spreader and Sower for every golf course requirement.

Write today for literature on the complete Thompson line of Spreaders, Seed Sowers and Barrel Sprinklers.

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Ypsilanti, Michigan



sponsible. Depreciation charges are proper enough in a club's bookkeeping scheme, but that is no reason for carrying them into the public exhibit of maintenance costs.

By confining maintenance costs to those "out of pocket costs," all of which the greenkeeper is directly responsible for, relegating whatever other entries that may be necessary to the general bookkeeping plan, simplifies the task and makes comparisons with other efforts along the same line easy and therefore more certain and altogether more illuminating.

What Is Greenkeeper's Job?

My own plan starts with a definition. I attempt to set forth exactly what the task of the greenkeeper is. I define the maintenance of a golf course as *the work necessary to keep a given course in proper condition to play the game of golf according to the rules of the U. S. G. A.*

That sounds simple enough and one would naturally think that nothing else could be done by anybody, and yet I will venture to say that the bookkeepers of a large number of country clubs mix into the costs of maintenance accounts, many things that ought not to be there and with which the greenkeeper has nothing to do. These costs will run from \$100 to \$300 per

hole per year. In other words, a greenkeeper with these extra costs loaded into his figures will find his costs per hole set down as that much more than they should be. When his efforts thus set forth are compared with the results of the work of a greenkeeper whose accounts do not include these costs, such a comparison means nothing.

For instance, there is the printing of score cards. Score cards are not necessary for the playing of golf. Score cards are not ordered nor their use controlled by the greenkeeper. Their cost should not be included in the cost of course maintenance. The cost of a caddie-master, of a golf professional, of trophies, of ice and towels at the tees—all of these are desired by members and most clubs have them, but in no standardized fashion; and whether they are standardized or not they have nothing to do with maintaining the course, the job that the greenkeeper is charged with.

Maintenance Set-up

In my accounts and in such statistical work as I have attempted in the Cleveland district, I have used the following set-up for course maintenance:

Auto license

Cement

Cinders

GEORGE A. DAVIS, Inc.

5440 NORTHWEST HIGHWAY, CHICAGO

COMPLETE GOLF COURSE EQUIPMENT
MOWERS—TRACTORS—SEEDS
FERTILIZERS

LARGER STOCKS

LOWER PRICES

BETTER SERVICE

SEND FOR NEW 1931 CATALOGUE

**Dress Up
Your Course
with Smart
CASWELL
Adjustable
Canopies**

**They
Provide
Shelter from
Heat and
Rain**



**Caswell Manufacturing Co.
Cherokee, Iowa**

Caswell Adjustable Canopies bring added beauty to the course; provide comforting shade on heat drenched days; offer shelter when it rains—thus adding to the pleasure and comfort of the game.

Large assortment of beautiful colors. Artistically designed and substantially made. Only highest grade materials used. Quickly installed; instantly adjusted; easily removed for winter storage. Write for full details and prices.

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- Fertilizer and seed*
- Flags*
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- Green section dues*
- Hardware*
- Lumber*
- Miscellaneous*
- Motor and machine repairs*
- Paint*
- Payroll*
- Postage*
- Printing and stationery*
- Sand*
- Teaming*
- Telephone and telegram*
- Tile*
- Top soil.*

There might easily be some slight modification of this list; I have made some changes from time to time; once we had a line for barn costs and for horseshoeing, now we don't. But list as given above is what I am using now. If anything should arise that includes any proper cost for course maintenance, I would add that item. In this list there is no item that we do not use some time during the year.

When we get through and add up the figures we have what it has cost our club to maintain our course so that golf may be played upon it at any time during the season according to the rules of the game.

Secondary List

This leaves quite a list of things that cost the club money, which seem to have more or less to do with the play of golf.

These services and goods I group together under the title of "green-service." Green service therefore includes all accounts of costs of goods and services that are desired by the members for the play of golf, but which are not absolutely necessary therefor. In my accounts the items under green service are as follows:

- Association dues*
- Ball washers*
- Caddie house repairs*
- Electric light and power*
- Ice*
- Laundry*
- Miscellaneous*
- Payroll*
- Postage*
- Printing and stationery*
- Repairs*
- Trophies.*

In the case of the clubs that I have to

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BENT GRASS SEED

direct from my farms where it is produced.

There is no one variety of grass, whether it is fine turf grass or forage grass, that grows equally well under all the varying degrees of humid, soil and climatic conditions. The alfalfa that grows in North and South Dakota is a vastly different strain than that which grows and produces the wonderful yields in the Salt River Valley of Arizona. The dent corn grown on the plains of Iowa and Nebraska is not the same as the Indian maize corn that produces the largest yields in southern New England.

Likewise, certain varieties of Bent grass do much better in some localities than in others. I have had a great deal of experience covering eleven years in furnishing hundreds of golf clubs with their annual seed requirements. If you will follow the simple directions in applying the seed that I recommend to revamp your old greens or old fairways or on new seedings, I will absolutely **GUARANTEE RESULTS.**

This month and next is the time to apply your seed to improve the turf on your old greens and fairways. New seedings do rather better in the Fall.

A. N. PECKHAM

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controls brown-patch for one-third to one-quarter of the average cost.

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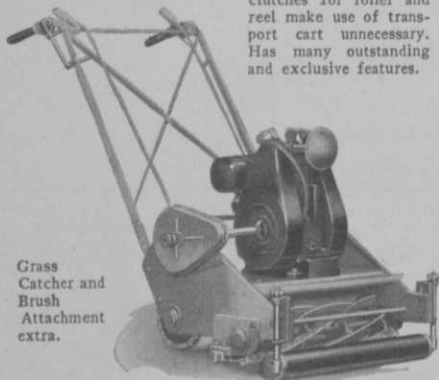
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extra.

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do with, and especially my own club, the inclusion of green-service costs in the cost of maintenance would increase maintenance costs from \$250 to \$350 per hole.

Services Beyond Control

It must be remembered that the costs for green-service may be anything that a careful or wild-eyed committee wants to make them. Tournaments may be expensively run or inexpensively run; or they may be omitted; or they may be paid for out of private pockets. Other service costs will vary greatly; high or low priced professionals; good or bad caddie masters; ice water or no ice water; and so on

A golf course, however, is a golf course. It consists of 18 holes and those 18 holes are pretty much like any other 18 holes so far as length and size of greens are concerned. At any rate if only the actual costs to maintain any 18 holes so that golf may be played at any time during the season according to the rules, are written in the accounts, comparisons of the upkeep of one course with another, the efforts of one greenkeeper with those of another, may be easily made.

Inasmuch as the figures are built upon the same foundation, the resulting differences must come from the efforts of the greenkeeper. Those efforts must be within his control or without his control. Labor may cost more on one course than the other and this is either the fault of the greenkeeper or it isn't. If it is not his fault, that fact is easily determined; if it is, that is also easily determined and the proper remedy may be applied, either by getting a new greenkeeper or getting some new workers. Maybe the members of one club are more exacting than those of the other and compel the greenkeeper to mow the greens oftener, or to employ more men or to cut the rough oftener. These are facts that are easily determined. And then again maybe the \$1,200 per hole greenkeeper is keeping his course in just that much better condition and that the members want it done that way.

Greenkeepers, it is true, have no final authority in the bookkeeping methods of the accounting departments of their clubs, but they have some influence; I have no doubt that practically every greenkeeper could get the bookkeeping department of his club to set his accounts up in the fashion that I have been advocating. Most of the present situation comes from the lack of understanding of such matters by the bookkeepers.