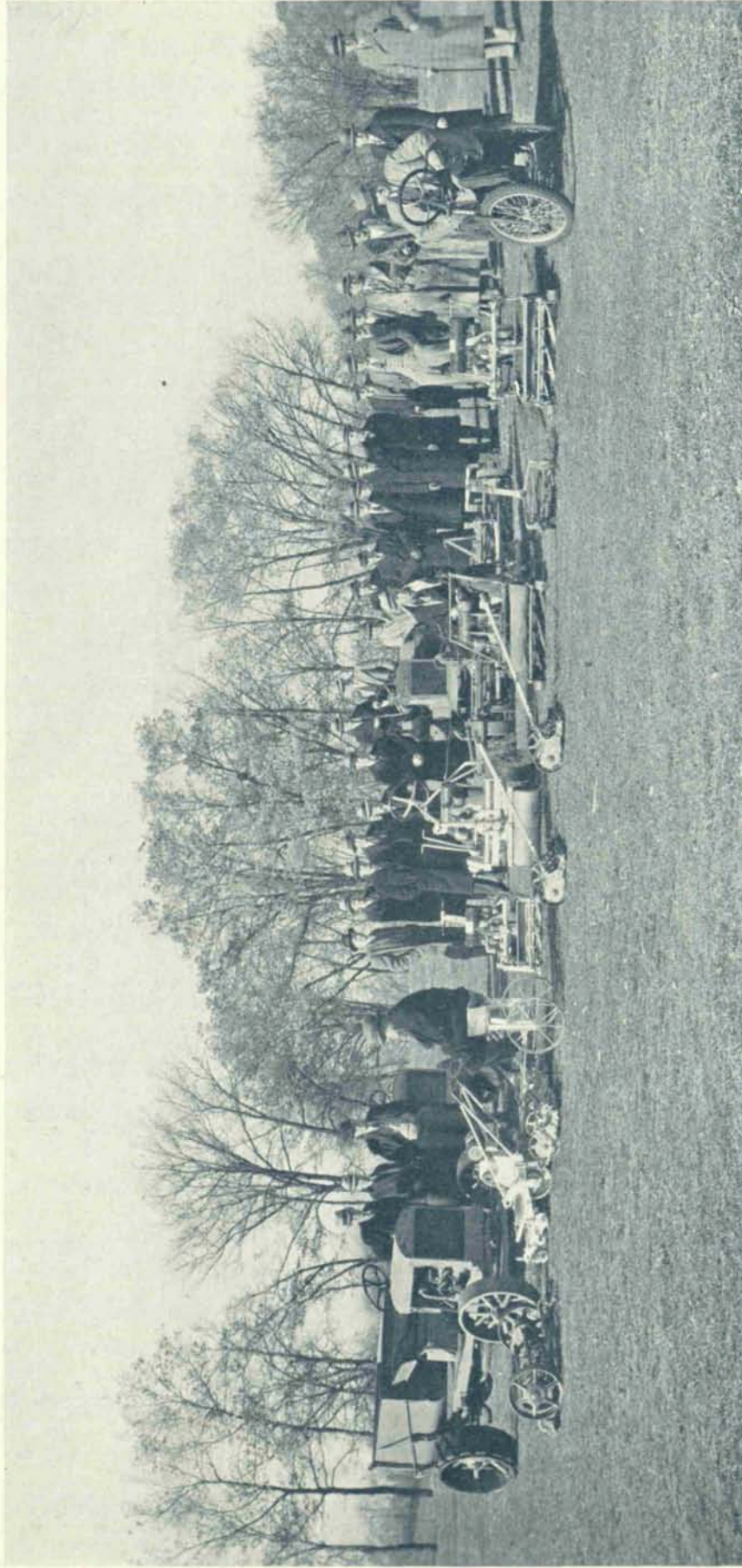


# TORO DISTRIBUTORS HOLD ANNUAL CONVENTION



*Reading from left to right, those in attendance were—B. K. Cobee, A. J. Fellman, F. J. Fellman, J. Oliver Johnston, A. E. Moyer, Whitney Golt, H. L. Wilson, Elton Griffith, G. F. Bisbop, R. L. Ryerson, F. C. Martin, E. J. Smith, M. R. McClaren, A. B. Bell, A. E. Flack, D. B. Bell, J. W. Morgan, H. C. McCartney, Frank Goldthwaite, O. W. Bentley, J. S. Clappner, H. S. Bailey, J. L. Record, O. O. Clappner, W. E. Lafkin, O. J. Swenson, T. L. Gustin, E. B. McCartney, K. E. Golt.*

The annual Distributors' Convention of the Toro Manufacturing Company was held this year at the Minikahda Club, Minneapolis, on November 10-11-12. Toro Distributors from every section of the United States were in attendance.

Many new products were shown, including a new Toro Fairway Mower, a Power Roller, a Power Runabout, and several other promising new products for next year. Much enthusiasm was shown and everyone agreed that 1931 was going to be a banner year.

## Toro Manufacturing Co.

3042-3160 Snelling Avenue  
Minneapolis, Minn.

### Service Stations at:

|                    |                       |                      |
|--------------------|-----------------------|----------------------|
| Newton, Mass.      | Cleveland, Ohio       | Dallas, Texas        |
| New York, N. Y.    | Detroit, Mich.        | Los Angeles, Calif.  |
| Yonkers, N. Y.     | Indianapolis, Ind.    | Winnipeg, Man.       |
| Syracuse, N. Y.    | San Francisco, Calif. | Toronto, Ont., Can.  |
| Troy, N. Y.        | Chicago, Ill.         | Calgary, Alta., Can. |
| Jacksonville, Fla. | Des Moines, Iowa      | Buenos Aires, S. A.  |
| Philadelphia, Pa.  | Kansas City, Mo.      | Hamburg, Germany     |



# The NATIONAL GREENKEEPER

(Registered U. S. Patent Office)

*Official Organ of the National Association of Greenkeepers of America*

Published monthly at 405 Caxton Building, Cleveland, Ohio.

Contents copyright, 1930, by The National Greenkeeper, Inc., Publishers.

Robert E. Power, President and Editor; Frank H. Pelton, Sec'y.; C. F. Lowe, Treas.; M. J. Fox, Asst.-Sec'y.

Entered as second-class matter, Aug. 25, 1928, at the post office, Cleveland, Ohio, under act of March 3, 1879

All Rights Reserved—None of the contents of this Magazine, either wholly or in part, may be reprinted without permission

## Contents

|   |           |  |    |
|---|-----------|--|----|
| PRACTICE COURSES ON SMALL AREAS<br>By Peter Henderson.....  | 5         | CONNECTICUT GREENKEEPERS MEET.....             | 17 |
| GOLF COURSE CONSTRUCTION FROM THE GREENKEEPER'S<br>STANDPOINT<br>Chapter VIII—Bringing the New Course Along<br>By Edward B. Dearie, Jr..... | 9         | CANADIAN NEWS<br>By J. H. Evans.....           | 18 |
| MORLEY ANNOUNCES SPEAKERS' PROGRAM FOR COLUMBUS<br>GREENKEEPER'S CONVENTION<br>By Colonel John Morley.....                                  | 14 and 15 | PACIFIC COAST GOSSIP<br>By Arthur Langton..... | 19 |
| MID-WEST GREENKEEPERS' PAGE.....  | 16        | NEW GOLF COURSES.....                          | 22 |
| JOHN QUAILL SAYS.....   | 17        | AROUND THE OFFICE DESK.....                    | 23 |
|   |           | MARKET PLACE AND BUYERS' GUIDE.....            | 24 |
|   |           | The New Overgreen Scout                        |    |
|   |           | New Developments in Golf Fertilization         |    |
|   |           | Golf News Here and There                       |    |

## Officers---National Ass'n of Greenkeepers of America

**John Morley, President**  
Youngstown Country Club  
2248 Selma Avenue  
Youngstown, Ohio

**John Quail, Secretary**  
Highland Country Club  
426 Highland Avenue  
West View, Pittsburgh, Penn.

**Fred A. Burkhardt, Treasurer**  
Westwood Country Club  
Cleveland, Ohio

**John MacGregor, First Vice Pres.**  
Chicago Golf Club  
Box 717, Wheaton, Illinois

**Lewis M. Evans, Second Vice Pres.**  
827 Hazel Avenue  
Ardley, Penn.

**Wm. J. Sansom, Third Vice Pres.**  
Toronto Golf Club  
Long Branch, Ontario, Can.

**George Davies, Fourth Vice Pres.**  
Big Springs Golf Club  
Louisville, Kentucky

**Robert J. Hayes, Fifth Vice Pres.**  
Pelham Country Club  
Pelham Manor, New York

## DISTRICT VICE PRESIDENTS

ELMER F. AFFELDT, 35-12 Brewster Ave., Flushing, L. I., New York.  
JOHN ANDERSON, Crestmont Country Club, W. Orange, N. J.  
WALTER G. ANDERSON, Sunnehanna Country Club, Johnstown, Penn.  
A. E. ARNOLD, Masonic Country Club, Grand Rapids, Mich.  
C. J. AUGUSTO, Del Monte Country Club, Del Monte, Calif.  
G. W. BARNES, Banff Springs Golf Course, Banff, Alberta, Canada.  
C. G. BARTON, Sylvania Golf Club, Toledo, Ohio.  
C. BASHAM, River Crest Country Club, Fort Worth, Texas.  
ALEX. BINNIE, Shoreacres Golf Club, Lake Bluff, Ill.  
JAMES BOLTON, Berkshire Country Club, Reading, Penn.  
W. A. BOSTIC, Biltmore Forest Country Club, Biltmore, N. C.  
CARL A. BRETZLAFF, Meridian Hills Country Club, Indianapolis, Ind.  
PAUL BROCKHAUSEN, New Blue Mound Country Club, Wauwatosa, Wisconsin.  
FRED A. BURKHARDT, Westwood Country Club, Cleveland, Ohio  
JOHN CAIRD, Manito Golf Club, Spokane, Wash.  
J. O. CAMPBELL, Wethersfield Country Club, Hartford, Conn.  
JAMES CONNAUGHTON, Monroe Golf Club, Pittsford, New York.  
DENNIS CROWLEY, Wollaston Golf Club, Boston, Mass.  
CARL DAVIS, Moonbrook Country Club, Jamestown, New York

E. E. DAVIS, Meadville Country Club, Meadville, Penn.  
THOS. E. DOUGHERTY, Springhaven Country Club, Chester, Penn.  
GORDON W. EARL, Ogdensburg Country Club, Ogdensburg, N. Y.  
CHARLES ERICKSON, Minekahda Club, Minneapolis, Minn.  
D. ALLEN FRASER, Berkshire Hunt and Country Club, Lenox, Mass.  
FORD GOODRICH, Flint Country Club, Flint, Michigan.  
JOHN GRAY, Essex Golf and Country Club, Sandwich, Ontario.  
HARRY HANSON, Maple Bluff Country Club, Madison, Wisconsin.  
H. HAWKINS, Lakeview Golf Club, Port Credit, Ontario.  
ROBERT HENDERSON, Country Club of Buffalo, Williamsville, N. Y.  
ARTHUR J. JENSEN, Fargo Country Club, Fargo, N. D.  
OSCAR JOHNSON, Happy Hollow Club, Omaha, Nebraska.  
M. W. LAWRENCE, West End Country Club, New Orleans, Louisiana.  
GEORGE LIVINGSTON, Belle Meade Country Club, Nashville, Tenn.  
HUGH LUKE, Garden City Country Club, Garden City, N. Y.  
WILLIAM MAYNE, Jasper Park Lodge, Alberta, Canada.  
JOE P. MAYO, Pebble Beach Country Club, Pebble Beach, Calif.  
CHESTER MENDENHALL, Sim Park Golf Club, Wichita, Kansas.  
T. H. RIGGS MILLER, Richmond Country Club, Staten Island, New York.

HUGH C. MOORE, St. Simon's Island Golf Club, St. Simon's Island, Ga.  
JAMES MURDEN, Ridgewood Golf Club, Cincinnati, Ohio.  
JOSEPH O'GRADY, New Bedford Country Club, New Bedford, Mass.  
WILHELM PETER, Lynnhaven Golf Course, Kansas City, Mo.  
JOHN PIRIE, Country Club of Fairfield, Fairfield, Conn.  
CLARENCE PLOSS, Salem, Mass.  
WALTER C. REED, Westwood Country Club, St. Louis, Mo.  
CAPT. DAVID L. REES, Progress Country Club, Purchase, New York.  
CHARLES A. ROBINSON, Brookside Country Club, Lake Tarleton, Pike, N. H.  
GEORGE SARGENT, Scioto Country Club, Columbus, Ohio.  
ROBERT SCOTT, Baltimore Country Club, Baltimore, Maryland.  
H. E. SHAVE, Oakland Hills Country Club, Birmingham, Michigan.  
FRED J. TIENKEN, Colorado Springs, Colorado.  
D. R. VALENTINE, Beaumont Country Club, Beaumont, Texas.  
JOSEPH VALENTINE, Merion Cricket Club, Philadelphia, Penn.  
GEORGE WELLIN, Tumblebrook Country Club, New Britain, Conn.  
JACK WELSH, Wakonda Country Club, Des Moines, Iowa.  
WALTER WOODWARD, Senneville Country Club, Montreal, Quebec, Canada.



# NOW

*you can have* **BETTER**  
**FAIRWAYS**  
*without*  
*more money*

**Y**OU know what the trouble has always been — you have never had enough fertilizer for your fairways.

Now there's a way to have more fertilizer for your fairways — and without any more money.

In Nitrophoska you get more plant-food for your money than you can get in any other fertilizer. Nitrophoska is three to five times as rich in plant-food as most fertilizers. And, remember, it is the plant-food that your fairways need.

An application of 100 pounds of Nitrophoska per acre is equal to 400 pounds of ordinary fertilizer. And costs very much less.

If you are really determined *to have better fairways*, you will use Nitrophoska — because it gives you more plant-food for the same money.

You can buy Nitrophoska from your regular supply dealer, or direct from us.

SYNTHETIC NITROGEN PRODUCTS CORP.  
285 Madison Avenue, New York

*Urea is the ideal  
Nitrogen Fertilizer  
for Greens*

Repeated tests have proved conclusively that Urea is an ideal nitrogen fertilizer for the finest grasses. It furnishes organic nitrogen in the same form as in liquid manure. It gives a beautiful green color to the turf, and is long-lasting in its effect.

# NITROPHOSKA

TRADE MARK REG. U.S. PAT. OFF.

## 15-30-15

*The Most Economical Fertilizer Ever Made*



December  
1930  
Volume IV  
Number XII

# The NATIONAL GREENKEEPER

*The Leading Journal of the World on Turf Culture and Golf Course Maintenance*

Official Organ of The  
National Association  
of Greenkeepers of  
America

## Practice Courses On Small Areas

By PETER HENDERSON

I FEEL somewhat embarrassed over the manner in which many people have been crediting me with having originated the Pitch and Putt courses that have created so much interest during the last few months. This is not fully merited—for all that I have done has been to take a thought which has been in the minds of many of us and redress it and revamp it more or less attractively and publish it as a part of the general service of our firm.

From time to time, I have had occasion in the past to send out the results of our experiences and special experiments in golf construction and maintenance but nothing that we have distributed has provoked the comment and correspondence, as has this suggestion of Pitch and Putt golf courses. Two or three years ago, when we placed ourselves on record as to over-fertilization and over-medication, we felt that the hundreds of letters that came to us would be a record for all time but great as the interest was in that subject, I think that this is going to be very much larger.

As some who will read this may not have seen the original pamphlet, I would like to explain that it is

a suggestion for the building of nine and eighteen hole Pitch and Putt courses upon from two to six acres; courses that will in effect reproduce the last thirty to fifty yards on each hole by eliminating the drives and the brassie and full iron shots.



PETER HENDERSON

*Mr. Henderson is the President of Peter Henderson & Co., New York City. He comes from a long line of seedsmen and is looked upon as one of the leaders of the seed trade of the world. The readers of the Greenkeeper, however, probably know him best for his contributions to Golf. He has had a varied but very complete experience and is competent to write upon any phase of golf course construction or maintenance.*

In the short space of the original article, it was not possible to include all of the many things that were really a part of the story but I felt that the men to whom it was going—were a class of men who could put two and two together and make five by supplying the other one out of their own minds; in fact, there have been a number of valuable suggestions that have come to us from chairmen or greenkeepers.

One greenkeeper in telling me that he had already started clearing the ground, made the comment that it was going to be a wonderful thing for him in that he could keep the professional and his pupils from

using the eighteenth approach fairway and green for practice. Another—and in this instance it was the professional—said that to him it would be almost invaluable in that his greatest difficulty with his pupils was the difference between practice and competition. He felt sure that one round of an



eighteen hole Pitch and Putt course would give more benefit than several hours with an approach iron and putter on the practice ground.

A chairman wrote me that his particular burden was the ladies and the junior members of the club. The ladies were somewhat militant and they insisted upon the right to play on Saturdays and Sundays. He felt that by turning the short course over to the ladies and the juniors on Saturdays and Sundays, he would solve a problem which has been one of the worries of his term of office. "I rather feel," he writes, "that I am going to have to reverse the situation and that I shall be obliged to make a new rule to keep the men off the short course during the days that it is turned over to the others."

#### PRACTICAL MEN READ THE GREENKEEPER

THERE is hardly a reader of the *GREENKEEPER* who is not a practical man. All of you have your own opinions as to the possibilities of these courses and I have no doubt that during the next few months, there will be a number of new angles to the thought that will have developed out of the actual experiences of so many men who are thoroughly conversant with their subject. As I look back over my years of active business, I think that I have really gotten more new ideas and new variations of old ideas from my contacts from time to time with the men who have done so much to make golf the great sport that it has become in this country than from any other source.

Another angle to these courses and one which I think eventually is going to be a very important one, is the building of short courses upon the smaller private estates. It is a very pleasant thing to have a private golf course but, unfortunately, the acreage required and the original and the maintenance cost of a full-sized course is so large as to make it practically prohibitive except on the very large estate of the wealthy owner.

On the other hand, a Pitch and Putt course occupying from three to six acres and costing from four to five thousand dollars, presents a possibility that will be welcomed by many men. There is hardly a club but that has several or more men who have the ground available and are in a position to have a course such as this. I can see no good reason why the greenkeeper of a club could not in addition to his other duties, take care of the building

of one or two of these courses under the supervision of a competent architect.

Then again, I know of a number of instances in the vicinity of New York, where courses of this type will be built this spring for use by the general public and several of these will be built by men who are successful miniature golf course operators. They realize fully that there is little in common between miniature golf and the Pitch and Putt Golf Course idea but nevertheless there has been a desire growing in the minds of hundreds of thousands of people to play something that is nearer actual golf than what they have been doing.

In every instance, we have tried to emphasize that the Pitch and Putt course must be in every respect real golf and that none of the novelties and gadgets of the miniature course can be permitted upon the Pitch and Putt course. As a matter of fact, the only change from the long course is that the greens are smaller and that we have eliminated the drives from the tee and the brassie and full iron shots of the regular course and started the play on each hole at that point.

Bobby Jones is much the same as many other golf players in those shots. There are a number of men who can equal or even better him in that part of each hole but the thing that makes him the golfer par excellence of all time is his uncanny deadliness up to and on the green. That is where most players both amateur and professional are the weakest and we give them an opportunity to concentrate upon that part of their game.

Then again, there are many men of advancing years who enjoy golf but to whom the three or four miles of an average eighteen holes are more than their years and condition permits. An eighteen hole Pitch and Putt course will appeal to them because they can get all of the pleasure and thrill with less than a mile to go.

#### TIME ELEMENT IS IMPORTANT

THE time element is also an important item. A par of 72 on the full course will take three hours to play while a par of 48 on the short one, means about an hour to play. One-third of the time and two-thirds of the strokes and the most interesting also.

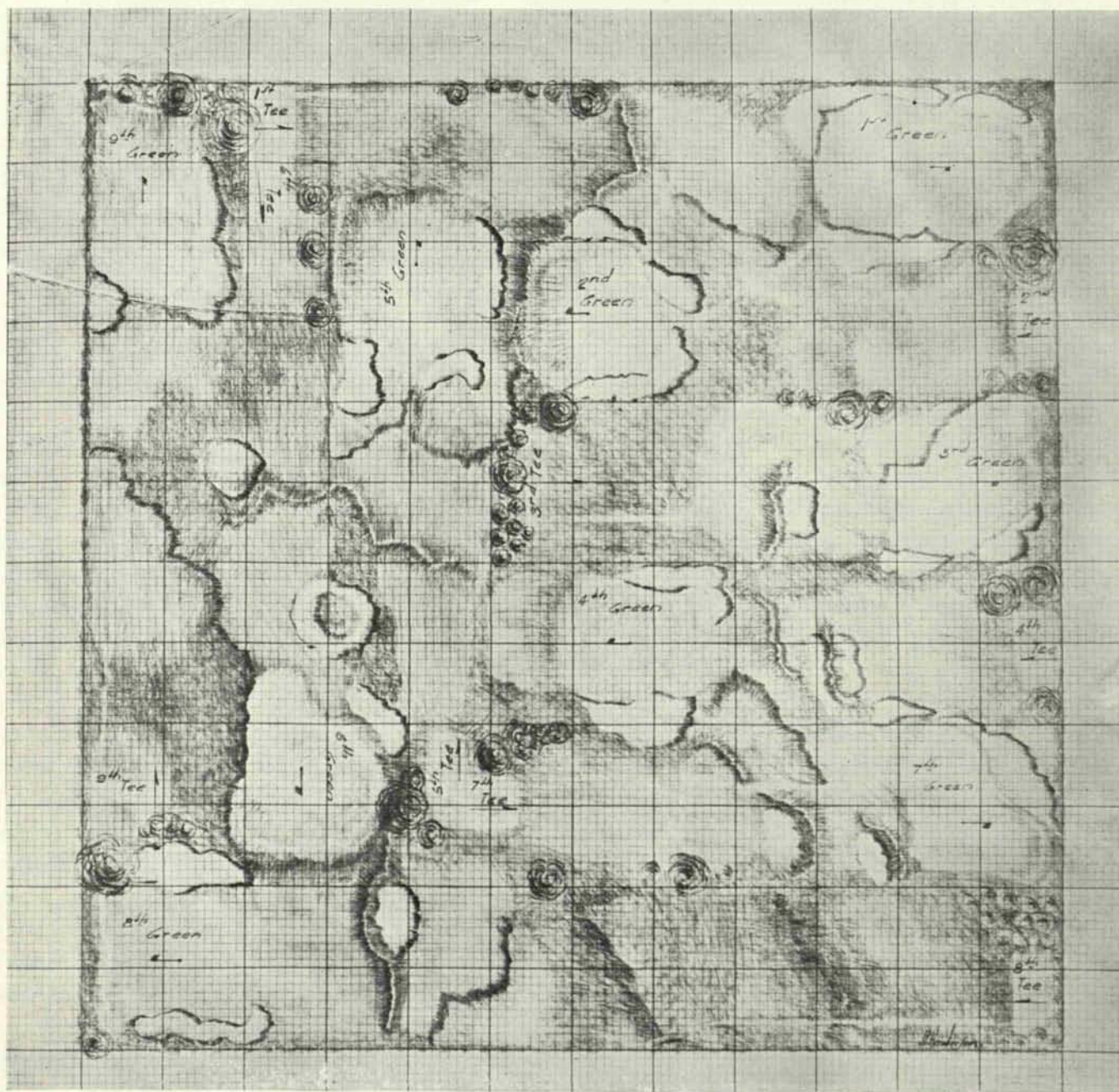
But these things are all so obvious to the trained mind that I feel sure now that we have got started,



that we will see a large number built next year and from my knowledge of them, they are going to be very popular indeed.

I would urge that the short course be designed by

an architect and preferably one who is enthusiastic over these courses. If my own experience might make my suggestions of value, I should be glad to have you write me.



Suggested Layout for  
Nine Hole  
PITCH & PUTT GOLF COURSE  
Maurice J. McCarthy, Golf. Arch't.  
For  
Mr. Peter Henderson

10-5-30

| Hole | Length | Par | Handicap |
|------|--------|-----|----------|
| 1    | 82     | 3   | 2        |
| 2    | 56     | 3   | 7        |
| 3    | 55     | 3   | 8        |
| 4    | 50     | 3   | 9        |
| 5    | 60     | 3   | 5        |
| 6    | 75     | 3   | 3        |
| 7    | 65     | 3   | 6        |
| 8    | 105    | 3   | 1        |
| 9    | 75     | 3   | 4        |

Total Length, 628 Yards.  
Par—27.





JACOBSEN GREENS MOWER AT THE GOLF EQUIPMENT EXHIBITION ON THE ROYAL YORK GOLF COURSE, TORONTO  
*Photo by Legge Bros. and Jones*



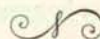


# Golf Course Construction

## *from the Greenkeeper's Standpoint*

By EDWARD B. DEARIE, JR.

*Noted Chicago Greenkeeper and Golf Course Architect*



### CHAPTER VIII—Bringing the New Course Along

**B**RINGING a new course along requires diversified experience and the exercise of conscientious judgment in all phases of greenkeeping. Problems of irrigation, drainage, mowing, turf diseases, and fertilization all make their appearance the first season and cannot be ignored.

The attractiveness of a golf course depends to a large extent upon the attention it is given during its first year. Many courses do not receive the full amount of care required during the months preceding and following their opening for play and as a result they are likely to show the neglect for several years, sometimes as long as a decade. In some cases, these ill-treated courses never recover and never reach their possible perfection.

Turf requires considerable nursing during its early stages and the greenkeeper should have experience in the development of golf courses in order to assist its maximum growth. Many greenkeepers have never supervised a new course although they may have had extensive experience in the maintenance of established courses.

There is much preliminary work for a long period before the course is open for play. The time to select the greenkeeper, or the man who will be responsible for the care of the course, is right after the plan for the layout has been approved so that he can cooperate in the construction work and thoroughly familiarize himself with surface and sub-surface soils and details of irrigation and drainage before sowing the grass seed.

Too many clubs make the mistake of not selecting their greenkeeper until the last moment, sometimes even after the planting of the grass, so that he is at considerable of a disadvantage and requires

unusual ability in order to develop the course properly.

#### OPENING TOO SOON IS MISTAKE

**O**NE of the most common mistakes in connection with new courses is opening them for play too soon. Naturally the members of the club are anxious to tee off with the first spring weather. However, grass planted in the fall seldom is strong enough to be trodden upon until the following summer. In the Chicago area few new courses are opened until July or August. The four previous months are the maturing months and during them the young grass toughens.

Root growth must be established. If trodden upon too soon, the shallow-rooted grass is worn down. Players should not be permitted upon the course until the grass covers the ground completely and has been cut several times. The tees should be given a longer opportunity to mature than any other portion of the course. These small spaces are under considerable usage due to confined playing areas.

Even after the greens are ready for play, the tees should be given an additional period for the grass to complete its maturity. For the first month the course is open to play, golfers should tee off slightly in front of the tees. Enforcement of such ground rules may seem arbitrary to some members of the club but they will not complain at the results.

#### ESTABLISH SEVERAL COMPOST PILES

**O**NE of the first things to be done in connection with a new course is the establishment of several compost piles. It is preferable to locate one of them convenient to each nine. Hidden locations in the rough should be selected from which all



the greens and fairways can be reached with a minimum of haulage which will reduce operating costs considerably.

A large quantity of compost is required by a golf course, especially during its early stages. Over 16,000 cubic feet is none too much. This quantity will make two piles 100 feet long by 20 feet wide by 4 feet high. It is almost impossible to have too much of this material as it improves with age.

Compost is organic fertilizer and, as is generally known, is made of decayed vegetation and rotted manure mixed with sand and allowed to decompose. It is not ready for use until the bacterial action has changed its physical make-up sufficiently to make it available as plant food. Therefore, fresh manure is entirely too strong.

The time to establish compost piles is just as soon as practical. If possible, they should be completed before the commencement of construction work on the course. Certainly they should not be neglected after the completion of construction work. When available barnyard manure makes excellent compost. However, it requires about a year to decompose properly.

Guano and tankage does not take so long to disintegrate because the smaller particles do not take so long to break down. Forethought on this subject immediately after the plan of the course has been approved will prove profitable. The older the compost the more available it is as a plant food and the more favorable the results.

Compost cannot be excelled for the nourishment of young turf. It is a most satisfactory plant food. While commercial fertilizers often contain a large percentage of nitrogen and other chemical elements, they do not contain the necessary humus and bacteria to change the physical structure of the soil.

#### BEDDING THE GRASS FOR WINTER

**G**RASS sown in early fall almost always is high enough to be cut at least once before winter. At the commencement of cold weather, the surface of the course should be spread with a shallow layer of top soil and compost which will nourish the young grass throughout the winter months. By bedding the grass in for the winter it is more likely to resist the rigors of the cold.

The first duty of the greenkeeper in the spring is to make a general inspection of the property. This should be very comprehensive. Observation should

be made as to how the young grass has wintered and immediate steps should be taken to encourage its growth if possible. When surface water is standing in any low spots on tees, greens or fairways, arrangements should be made to drain them properly at once. The catch basins should be inspected and cleaned out. The amount of silt and sediment which they have collected, will tell the story of the efficiency of the drainage system.

As soon as the ground has thawed out sufficiently and is thoroughly dry the new course should be completely rolled in order to push the young grass roots, which may be protruding, back into the soil. A triplex roller, weighing from 1500 to 2000 pounds complete, may be drawn down the fairways by a light tractor and 500-pound water ballast roller should be pulled by hand over the greens and tees.

#### ROLLING IS VERY IMPORTANT

**I**T is very important that this rolling should be done while the ground is dry. If the soil is damp, the rolling will pack it into mud and the ground will be sealed. Rolling courses, when the soil is moist has been instrumental in handicapping many links and the loss of satisfactory turf. Instead of assisting in the development of the turf, rolling at the wrong time will retard the growth of grass. However, rolling at the right time is very fruitful of results.

The bunkers of the new course require considerable attention. After they have been inspected in the spring, arrangements should be made to correct any possible errors in drainage at once. Water must not be allowed to accumulate in them. Artistic judgment is required by the greenkeeper in order to develop and maintain the lines of the bunkers. In this work the design of the golf course architect may easily be marred.

When properly sanded up the face of the bunkers are most satisfactory hazards and also add to the attractiveness of the course. In cutting the turf around the sand faces of the mounds and bunkers care is necessary to retain their irregular lines and natural beauty.

Top dressing of the greens and fairways should be done every six weeks from early spring until late fall during the first year. By all means get the most efficient available equipment in order to do this work. This permits the work to be done quickly and economically. Four men should be able to top dress all the greens, tees and approaches in a week.