It takes 5 efficient units to make an efficient Quint

Experienced greenkeepers know that a fairway gang mower cannot be any more efficient than its individual cutting units.

Every cutting blade of the PENNSYLVANIA “New” Fairway Quint or Trio is made of the finest crucible tool steel, oil-hardened and water-tempered. Each knife is given three separate grindings. Highest quality bearings throughout—either ball or roller. Alemite lubrication.

Write for further details and COMPLETE GOLF CATALOG.

PENNSYLVANIA LAWN MOWER WORKS
1628 North 23rd Street, Philadelphia, Pa.
What Cost Fairway Water System?

Suit the Cost To the Purse

Don’t let the bugaboo of cost prevent you from enjoying the benefit of modern fairway irrigation. Our organization will gladly show you how the cost can be made to fit the amount of money available. The figures below are to help you decide what you want.

$10,000 - $12,500 Covers cost of 18 hole Hose System if you have ample water supply with minimum residual pressure of 50 pounds at farthest outlet.

$12,500 - $15,000 If there is plenty of water, but the pressure is too low, add $2,500 to the above cost for a pressure pumping plant.

$20,000 Gives you an 18 hole Fairway Hose System of permanent (75 to 100 years) construction. Add $8,000 to $12,500 for California Hoseless Fairway System.

$25,000 Covers cost of permanent 18 hole Hose System for Fairway, Tees and Greens. Add $8,000 to $12,500 for California Hoseless Fairway System.

$33,000 - $37,500 For complete 18 hole Hoseless System for Fairways, Tees and Greens, permanent construction, Automatic Pumping Plant. The ideal installation.

The above figures are of course merely estimates, and will vary with different courses. However, if you want fairway watering, you can have it. Write us for details.

WENDELL P. MILLER and ASSOCIATES
105 W. Monroe St., Chicago
85 E. Gay St., Columbus, O.
Consulting Engineers
Eastern Engineering Representatives for BUCKNER-CALIFORNIA Hose and Hoseless Systems

DRAINAGE IRRIGATION TURF DEVELOPMENT

Only reliable companies are allowed to advertise in GOLFDOM.
Bent Greens

You can have Scott Greens regardless of whether your preference be Bent Seed or Bent Stolons.

We are prepared to supply the very highest quality of seed in the several well-known strains. Careful recleaning over our own mills insures freedom from weed seeds and waste matter.

From our own nursery we can supply the Genuine Washington Strain of Creeping Bent Stolons. Ask for the names of Clubs in your locality that have greens produced from our Bent.

For your fairways which have doubtless suffered from the severe summer, we suggest Scott’s Seed. Ask for quotations on New Crop Kentucky Blue Grass, Redtop, Chewings Fescue and any other grasses in which you are interested.

Write, wire or phone for prices. Play safe with Scott Quality. 1100 other clubs do.

O. M. SCOTT & SONS CO.
Marysville, Ohio
Golf Course and Lawn Seed

NACO
“A GOLF COURSE FERTILIZER”

COMPLETE and ALL ORGANIC

NITROGEN is the most essential element of all plant food mixtures. NACO contains ample amounts of both quick acting and slow acting nitrogen... insuring rapid and continuous growth of grass, giving it the rich green color that denotes well nourished, healthy turf.

PHOSPHORUS is the element in plant food that builds strong, well developed root structure. The phosphoric acid in NACO is in the form of bone phosphate (digested fish bones) a form of phosphorus that tends to offset the ill effects of acid soil, without making it sweet.

POTASH is the balancing element in all complete plant food mixtures. In NACO the potash balances the feeding of ammonia and in combination with the phosphoric acid produces a disease-resisting growth of turf and a tough stand of grass that is less liable to wilt under drought and the heat of the summer sun.

NACO contains no weed or other seeds, but it is not sterile. The millions of beneficial bacteria that it adds to the soil break down the plant food compound into those forms which can be taken up by the grasses as plant food.

NITRATE AGENCIES COMPANY
104 PEARL STREET - - NEW YORK CITY

Let GOLFDOM advertisers help you. They are golf field experts.
Using the power of the Fairway in place of dynamite to rid the course of stumps

Here's Word from an Expert

At the Normanside Country Club, Albany, N. Y. [P. O. Elsmere], McCormick-Deering FAIRWAY Tractors are relied on by Tom C. Goodman, pro greenskeeper. Here is Mr. Goodman's report on them:

"I have been in the golf business some 30 years and have had all kinds of machinery to handle. The last three years I have used McCormick-Deering FAIRWAY Tractors and find them equal to every demand.

"In the building of our new course I pulled out several hundred trees with block and tackle and the FAIRWAY that previously I would have blown out with dynamite. I am now using two FAIRWAYS to maintain the course which covers almost 200 acres and I find them invaluable on the hillsides.

"I can confidently recommend FAIRWAY Tractors to anyone desiring a good reliable machine. The service given by International Harvester is prompt and workmanship of the finest."

Take the word of this expert that the McCormick-Deering FAIRWAY is the best equipment you can get for golf course work. Ask the nearest of 115 Company-owned branches, or a McCormick-Deering distributor or dealer, for information. Write us for catalogs.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America (Incorporated) Chicago, Illinois

The Golf Tractor

The Golf Tractor
McCORMICK-DEERING FAIRWAY
The advertisers pay for your GOLFDOM; deal with them.
HEALTHY TURF
and a firm footing
ALWAYS

Number 4 at Asheville, N. C.—drained by a complete network of Armco Perforated Iron Pipe, hence always in excellent condition for par play.

NOTHING but actual rainfall stops play on the Armco-drained course. Armco Perforated Iron Pipe, champion of endurance in service, carries off rain as it falls, thus preventing heavy, soggy ground and standing water. The fairways and greens remain dry, compact of soil—give firm footing for studied shots. Healthier turf with less care, and a longer season, result from Armco drainage. Armco Perforated Iron Pipe is easy to haul and install, and is flexible. Freezing has no effect on it. It goes just beneath the surface and is unharmed by rollers and trucks.

The fact that Armco Perforated Iron Pipe also holds the unequalled record for durability—24 years—is another reason for its preference among golf course architects and engineers and club professionals, coast to coast. Send for data on course drainage.

Armco culverts and drains are manufactured from the Armco Ingot Iron of The American Rolling Mill Company and always bear its brand.

Armco Culvert Manufacturers Association
Middletown, Ohio

ARMCO Perforated PIPE

C. 1930, A C. M. A.

Don’t Despair!

—If your grass is dying from heat and drought;
—If your members are murderously inclined because of the dry, dead greens and fairways,

BUCKNER SPRINKLERS
will save your grass your life and your money

Buckner equipment, used by the best golf courses everywhere, lays the drought ghost forever. Drop us a line.

BUCKNER MANUFACTURING CO.
FRESNO, CAL.

Special Representatives
J. Oliver Johnson, Inc., Chicago, Ill.
New York Toro Co., 67 Warburton, Yonkers, N. Y.
H. V. Carter Co., San Francisco, Calif.
Guy R. Champlain, Paris, Ky., P. O. Box 154
Joseph P. Breck & Sons, Boston, Mass.
Ritchie Bros. & Co., Vancouver, B. C.
Ivan W. Lee, Seattle, Wash.
Canadian Fairbanks Morse Co., Winnipeg, Canada.
Huie & Philip Hardware Co., Dallas, Texas
Eastern Engineering Representative
Wendell P. Miller & Associates—Columbus, O.; Chicago, Ill.

The advertisers pay for your GOLFDOM; deal with them.
The Simple Bulldog Drive
Insures Freedom From
High Repair Bills

The low wheels on the Bulldog cutting unit permit a simple pinion-and-pawl drive. High wheeled mowers necessitate a chain-of-gears drive that can cost high when it goes wrong. Bulldog repairs can be made quickly, right on the job.

In addition the Bulldog drive cuts wear in half by driving from both wheels on each cutting unit. (Most mowers drive by just one wheel.)

That is just one of the five special reasons why Ideal Bulldogs mean smoother, healthier fairways at lower cost per season. Send today for illustrated details.

IDEAL POWER LAWN MOWER COMPANY
446 Kalamazoo Street, Lansing, Michigan

BRANCHES:
413 West Chicago Ave., Chicago, Ill.
273 Boylston Street, Brookline, Mass.
237 Lafayette St., New York City
161 Vester St., Ferndale (Detroit), Mich.

Dealers in all principal cities

Canadian Distributors: Aikenhead Hdw. Ltd., 17 Temperance St., Toronto, Ontario

IDEAL GOLF COURSE EQUIPMENT

When you mention GOLFDOM the advertiser knows you mean business.
A Piece of Cocoos Bent Turf

For the Finest Turf
Sow Bent Grasses

Because of the extreme fineness and beauty of turf produced from Bent Seed we recommend the use of a certain percentage of Bent in all mixtures for Fairways and Lawns. Its superiority for use on golf courses, especially the putting greens, has long been recognized.

Grass Seed
of Known Quality

Tested for Purity and Germination

South German Bent
Astoria Bent
Rhode Island Bent

Colonial Bent
Seaside Bent
Bent Stolons

Special Putting Green Bent Formula
Superfine Fairway Formula (With Bent)

Wholesale prices on above, or any other turf grasses, such as Fancy Red Top, Kentucky Blue, Chewing’s N. Z. Fescue, etc., on request.

COCOOS BENT is botanically known as Agrostis maritima, but all strains of Agrostis maritima are not Cocoos Bent.

We offer the true Cocoos Bent, the finest of the Agrostis maritima grasses, in sealed bags.

Per lb. $2.50; 10 lbs. $22.50; 100 lbs. $200

Remember—We are among the largest direct contractors for foreign-grown Grass Seeds in the United States. Over thirty years of Seed Service have enabled us to segregate those collectors of Bent Seeds who are reliable from those who are not; to single out those growers of Chewing’s Fescue whose strains are pure; also to contract for true American-grown seeds of high vitality. All our seeds are botanically true to name and are cleaned and re-cleaned until brought up to the highest possible state of purity and germination, special care being given to the elimination of weed seeds.

Without obligation we shall be pleased to send a representative who, from long experience, is qualified to advise regarding grasses and furnish such other information as is necessary for the best results.

Specialists in Golf Grass Seeds and Equipment
30-32 Barclay St., New York

Tell us any idea for making GOLFDOM advertising more helpful.
Page Fence
For
Public
and
Private
Parks
and
Institutions

A PAGE Fence built for great durability under adverse conditions

Page Fence of Alcoa ALUMINUM Wire provides protection at lowest cost per year—a worthwhile economy. Page-Alcoa ALUMINUM Fence is never marred by rust, is unaffected by moisture—almost inert to chemicals in the air which attack and in time destroy other metals!

The same strength and resistance to corrosion that make Alcoa ALUMINUM the ideal metal for airplane construction and for the external ornamentation of buildings, have been found of the greatest value for fencing.

Let us send you full descriptive details about Page Fence of "the new metal." Let us give you the address of the nearest of 64 Page Service Plants where an expert will be glad to estimate costs, lay out your fencing plan, assist in selecting the type of fence most suitable and superintend erection. Address Page Fence Association, 520 North Michigan Avenue, Dept. A64, Chicago, Illinois.
The Mark Of Reliability.
WHEN BUYING SEED

For turf building, good judgment demands that the best grass obtainable be selected for the original planting—especially so in building fairways and greens on golf courses.

To use inferior strains because they are merely cheaper is mistaken economy. The added cost of renovation brings total costs higher—with less satisfaction—than when the outstanding variety is used in the original seeding.

True reliability is worth a premium. This is particularly the case in using the Bent Grasses—where it is impossible to distinguish the best from the inferior strains except by rigid laboratory tests.

SEASIDE CREEPING BENT has already demonstrated its outstanding superiority as a putting green grass on many of the finest golf courses in the United States.

SEASIDE CREEPING BENT is produced only in the Coos Bay region of the state of Oregon. To protect users of SEASIDE CREEPING BENT the Oregon agricultural authorities have established a system of certification in charge of experts—which system includes field inspections, supervision at harvest and rigid laboratory tests after harvest.

To secure Bent Grass of highest quality, free from adulterants or mixtures with inferior strains—buy SEASIDE CREEPING BENT

Purity not less than 98%, germination 90% or better. Every bag certified by the Oregon state authorities and carrying the Oregon state tag and seal—

The Mark Of Reliability

Marketing Agents
THE J. M. McCULLOUGH’S SONS CO.
CINCINNATI, OHIO
THE NORTHWEST SEED CO.
SEATTLE, WASHINGTON
THE WESTERN SEED MARKETING CO.
SALT LAKE CITY, UTAH

Write or wire the above for quotations

PREMIER POULTRY MANURE

—A natural grass food and stimulant.
—A balanced manure containing 6% Ammonia, 2.50% Phosphoric Acid and 1 to 2% Potash. It contains no live weed seeds. Being organic, it aids humus and aids bacterial action. It can be applied with a minimum of labor and expense. Being more soluble than other manures, it is more available. Being finely pulverized, it is quickly absorbed into the soil.

PREMIER POULTRY MANURE CO.
327 S. La Salle Street Chicago, Ill.

DEALERS
Joseph Breck & Sons Corp’n, Boston, Mass.
George A. Davis, Inc., Chicago, Ill.
William P. Philipp & Co., Toledo, Ohio.
Grenshaw-McMichael Seed Co., Tampa, Florida.
E. L. Winn., Inc., Elizabeth, New Jersey.

. . Hundreds of Greenskeepers Have Discovered a Secret

When you hear golfers discussing with enthusiasm the condition of a certain course, the chances are that the greenskeeper and greens committee have discovered the secret of Premier Poultry Manure.

The remarkable results of this time-tested grass food are due not to chance or circumstance but to the properties with which NATURE has endowed
The TORO Del Monte Greens Rake

Proper Care of Greens Requires these Toro Tools

For removing the grain from creeping bent or Bermuda grass putting greens... also for raking up the matted grass so the mower can cut it properly... the Del Monte Greens Rake is an exceedingly handy tool. Thirty inches wide... a large green can be covered quickly. Spring steel teeth, ½ inch apart. Pressure can be regulated by operator. Use it regularly to prevent graining and maintain a true putting surface.

For cultivating putting greens without marring their beauty... to open the soil for light, air, water and top dressing and to prevent excessive souring... use the Toro Zenith Disker several times during the season. It cuts the running stooling grasses and weeds without injuring the turf.

Write for complete catalog of Toro Equipment

Toro Manufacturing Co.
3042-3168 Snelling Ave.
Minneapolis, Minn.

Service Stations in all the leading distribution centers.

The TORO Zenith Disker
**FRIEND**

GOLF COURSE SPRAYERS  
Large—Medium—Small

To protect putting greens, fairways, trees, and shrubs against Brown Patch, Grubs, and all diseases and pests.  
A rapid and economical method of applying liquid fertilizers.

**FRIEND** MFG. CO., Dept. G  
GASPORT, N. Y.

---

**TITE SOD SEED COMPANY**  
FINE GRASS SEEDS — SINCE 1880  
KANSAS CITY, MISSOURI

TITE SOD SEED is specially selected for greens, fairways, tees and fine lawns. Of known Origin and tested for Purity and Germination, this fine seed is backed by our 50 years experience as seedsmen. Write for complete information and quotations.

**J. G. PEPPARD SEED COMPANY**

---

GENTLEMEN: We used Hyper-Humus to replace mushroom manure or compost in topdressing (one-third Hyper-Humus, one-third topsoil and one-third sharp sand, by volume), and find it gives very quick response when applied with fertilizer. It is much handier to use than compost and much cheaper. We know that it contains a high percentage of useful bacteria which quickly convert Urea, ammonium sulphate and cottonseed meal to the readily usable form.

Very truly yours,

W. W. Rhodes,  
Green Committee, Wilmington Country Club, Wilmington, Delaware.

Write for literature and approved methods of application to

HYPER-HUMUS COMPANY  
51 Park Place, Newton, New Jersey

---

SEMESAN NU-GREEN CALO-CLOR CALO-GREEN

GRASS SEED, FERTILIZERS, EQUIPMENT

Orders shipped same day as received.

J. OLIVER JOHNSON, Inc.  
World's Largest Golf Course Equipment House  
Morgan, Huron, Superior Sts., Chicago

© Reg. J. O. J., Inc., 1928

You save time and money by answering GOLFDOM ads.