

5 Facts

on the latest model

PENNSYLVANIA "New" FAIRWAY

- 1 The simplest gang mower (Quint or Trio) made.
- 2 Easier-steering, shorter-turning, quicker-handling.
- 3 Blades (5 in a cylinder) of finest quality crucible tool steel.
- 4 Quality ball or roller bearings on every moving part except the ground rollers.
- 5 Light-weight, yet it hugs the ground and stands the gaff with the heaviest of them.

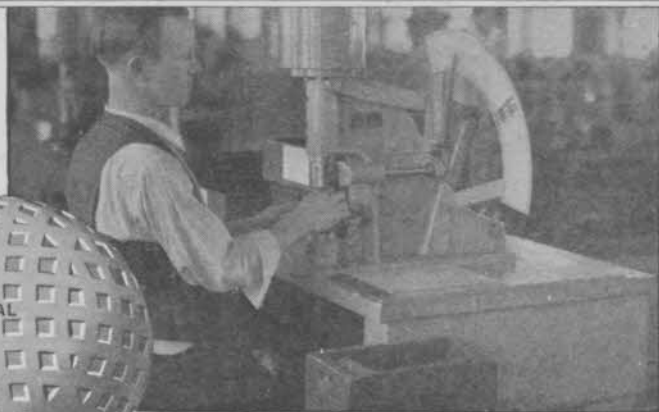
PRICE: Quint, \$625; Trio, \$375—both at Philadelphia.

Write for CATALOG of facts on the "New" Fairway, the Super Roller and New Aristocrat greens mowers and the other PENNSYLVANIA golf mowers.

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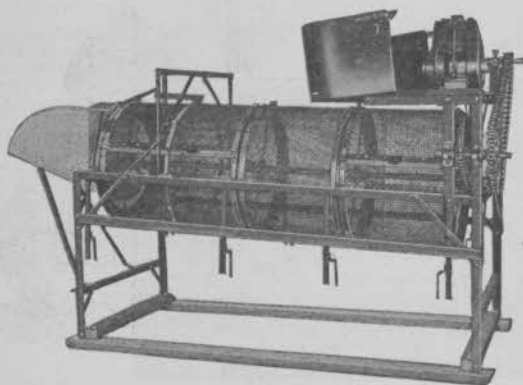
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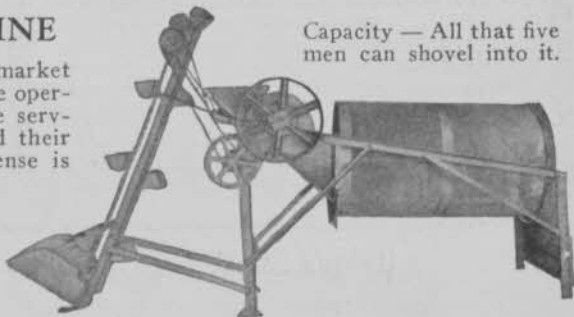
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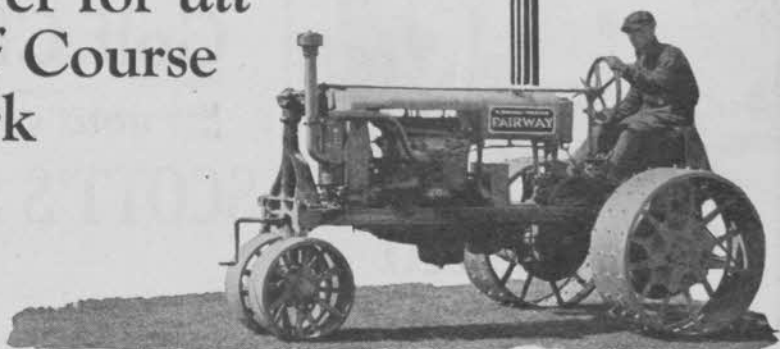
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It moves dirt, materials, and equipment for construction work.

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



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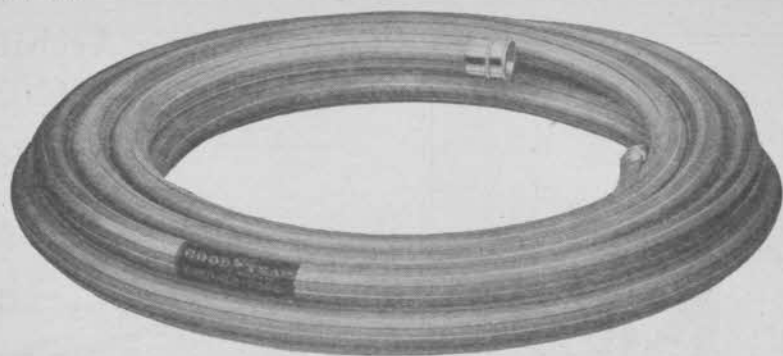
Isn't good seed the first requisite of good turf? The answer is obvious for you can't make a good course out of poor seed—and that's why over 1000 golf clubs are sowing SCOTT'S Seed with continued satisfaction. The proof of its superiority lies in the ever increasing number of golf clubs turning to SCOTT for clean, thick, weed free seed that fulfills the anticipation of the Greens Chairman.

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Marysville, Ohio

Golf Course and Lawn Seed



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GOODYEAR
"Emerald Cord" Hose**

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Goodyear "Emerald Cord" Hose is the only hose for the well-groomed club. It is remarkably long-lived—it will probably last longer than any hose your club has used before. And, in addition, it never obtrudes, in or out of use. It never has the dejected look of an old rubber boot left lying about. It is always smart and engaging as a golf course hose ought to be.

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Beneath its green jacket years of work are built into this newest Goodyear hose. The best of "double-double" cotton cord, firmly held in live and pliant rubber, forms the toughest of bodies. The heavy outside ribs protect it and facilitate work.

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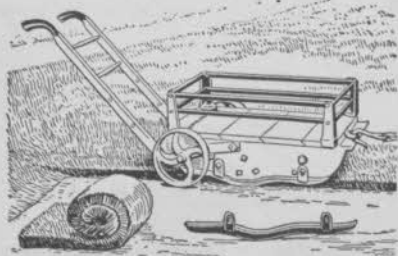
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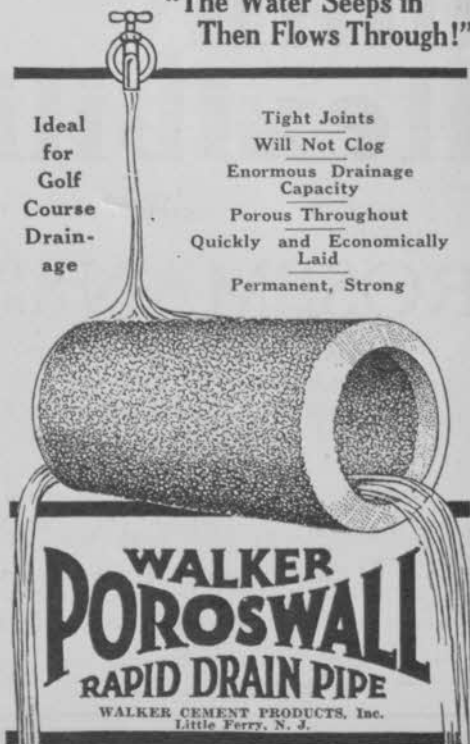
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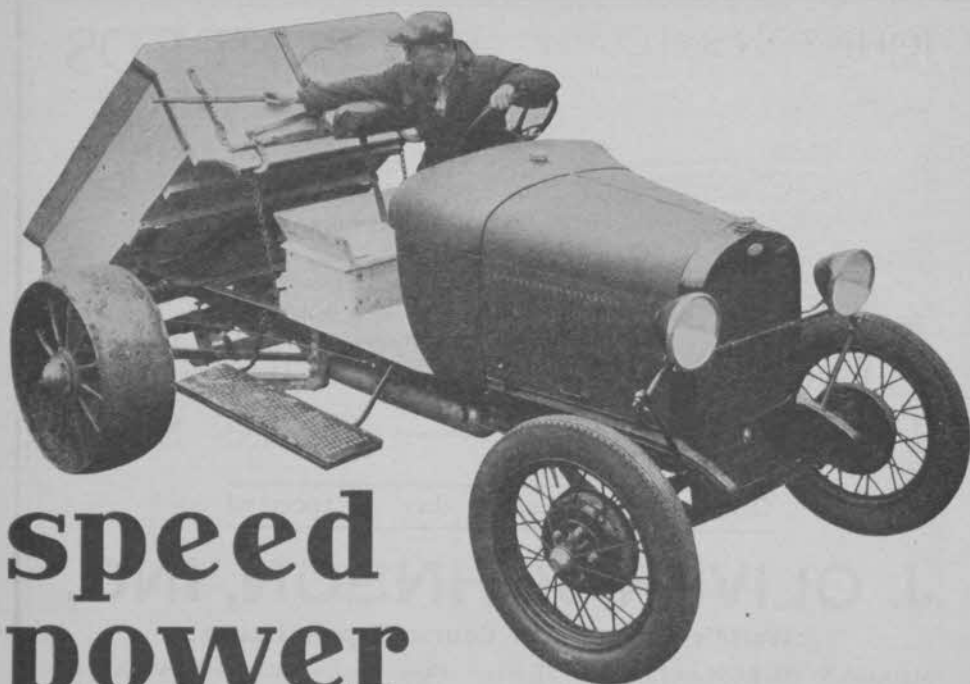
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A regular, he-man, all duty course maintenance tractor—powered by the new Model A Ford engine—especially designed for golf course work—built to stand the gaff—has more power per pound of tractor than anything on the market.

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Golfdom

THE BUSINESS JOURNAL OF GOLF

OCTOBER, 1929



The ninth at Cypress Point (Calif.) lauded as one of the world's greatest courses. Dr. MacKenzie, who designed this course, is shooting

SPENDING Mental Effort to SAVE Manual Costs

By DR. A. MacKENZIE

THERE are many considerations that come into play in the upkeep cost of golf courses.

The most important factor is the quality of the design and construction of the original layout of the course. A badly constructed course gives rise to constant expense in upkeep and reconstruction. I recently advised on a golf course which had 50 greens during the last few years. Even now the committee realizes the course could be still further improved and contemplated further alterations.

The most important consideration in lessening the cost of maintenance is to obtain finality in the design and construction of the course. The energies of the greenkeeper and his staff can then be devoted to maintaining what is already as perfect as the local conditions of terrain and soil allow.

Building to Stay Built

It is frequently stated that all golf courses require alterations and improvements from time to time. This is untrue. On the contrary, if a golf course requires

extensive alterations it is an indication of mistakes in the original design or construction.

The old course at St. Andrew's is a classical example. It was the best course in the world in the days of the feather, the guttie and the Haskell ball, and today, according to Mr. Bobby Jones, is by far the most interesting and pleasurable of all the courses he has ever played. It has remained unaltered for more than 50 years. There is more than one golf course architect living who never has had a course appreciably altered that was constructed "ab initio" according to his ideas. Mr. Abercromby, the designer of Addington, Worplesdon and Coombe Hill, has, as far as I am aware, never had any of his courses altered. Moortown, where the Ryder cup match was played this year, was constructed more than 20 years ago and with the exception of a few new tees and one new green, necessitated by a change in the site of the clubhouse, never has been altered.

Alwoodly, its near neighbor, an older and even better course, has never had any alterations. Is it conceivable that a course like Cypress Point will ever be changed?

The truest economy in the long run is to obtain expert advice to make certain that the design and construction of a course is final and that all one's efforts can be devoted to maintenance.

Brain Cheaper Than Brawn

In other words, substitute the high cost of manual labor by the comparatively speaking low cost of mental labor.

It would take a book to describe in detail all the faults in construction which may give rise to excessive cost in upkeep, but some of these may be enumerated.

Abrupt hillocks, hollows and banks of bunkers of an unnatural appearance. These are difficult to mow and, in fact, even today there are courses in existence where these artificial features have to be mown with a scythe.

Lost Ball a Course Deficit

One of the most important considerations in creating a pleasurable golf course is to make it so that no one ever has to look for a golf ball. It is no fun looking for your own ball and even less in looking for your opponent's. A course should be constructed in such a way that it is easy to keep down all rough grass and other vegetation with a mowing machine.

Watch Top-Soil

Insufficient top-soil or the wrong kind

of top-soil is certain to create trouble and expensive upkeep. It is important that all top-soil should be free from weed seeds. On some courses we have, preparatory to sowing, ploughed and turned over the ground as many as nine or ten times so as to sterilize the soil and obtain a seed bed free from weed seeds.

It is also of the utmost importance to choose the right kind of seeds and fertilizers most suitable for the particular soil and climatic conditions in the locality where the course is situated.

It must be remembered that seed and fertilizers most suitable for agriculture are almost always wrong for golf. Farmers require grasses with a large leaf growth and a small root growth. Golfers, on the other hand, require dwarf leaf growth combined with a thick mat of root growth.

One of the most common mistakes in greenkeeping is over-feeding with the wrong kind of fertilizers. Alkaline fertilizers, although at times of value, may create irreparable damage. I have known cases in which it has cost thousands of dollars to neutralize the evil effects created by fifty dollars of the wrong kind of fertilizer.

The general principles of greenkeeping outlined in my book on golf architecture written many years ago apply just as much today as when these principles were first written.

Test Before You Plant

It is always desirable before sowing to have experimental plots to test out the effect of different seeds and fertilizers on varying soils. These experiments saved us from disaster at Cypress Point. Trial plots showed us that the top-soil we at first thought was most suitable was valueless. It was too sterile and lacked the bacteria necessary for the growth of the best golfing grasses.

The result of these precautions has enabled us to obtain greens and fairways at Cypress Point which, in less than two years, compare favorably with any in the world.

Bad drainage is another factor which creates difficulties and excessive cost of upkeep. It is always well worth while for a club to pay for the advice of a skilled drainage engineer. Drainage is a very intricate subject and should only be undertaken by a specialist.

A course should be designed and con-