

A Paying Investment in Power . . . International Fairway Tractor

At the Woodside Golf Course, Des Moines, Ia., the International Fairway 12 Golf Tractor is demonstrating its ability to save money on maintenance work. It pulls a gang of ten 30-inch mowers with a cutting width of 24 feet over this rather hilly course. Clarence Yarn, owner of the course, built up these mowers to go behind a larger and slower tractor. When the Fairway Tractor went on the job it immediately proved it could handle this unusually wide mower successfully. By doing the same job the larger tractor did, and doing it faster, the Fairway has reduced mainte-

nance costs to a marked degree. It is also used for other work when not busy on the course.

Low-cost maintenance is a reality wherever the Fairway Tractor works. Its great capacity for work at speeds up to 10 miles an hour permits more frequent cutting of the fairways and makes it available for numerous other jobs.

Now is the time to consider making this worthwhile investment for your course. Call on our nearest branch or distributor for complete information on the Fairway Tractor.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave.

(Incorporated)

Chicago, Illinois



Sickle bar tractor and seven gang mower cutting the famous Shawnee course.

Four-Speed Transmission Now Standard Equipment On Tractors

ALL Worthington Tractors will now have four-speed transmission as standard equipment. Four speeds ahead, one in reverse. In addition to its other advantages, a power

take-off for sickle bar attachment, or the running of stationary ma-chinery can now be put on at any time, without making any changes. It's the only tractor on the market having this standard equipment. Although the sickle bar attachment for mowing long grass and weeds was a new thing last year, its accept-ance far exceeded our fondest hopes. Aside from the splendid job it does cutting a 5-foot swath, 5 miles long, every hour, one of the points that found favor was that it

need never be detached. Just folds up out of the way, always there ready for use.

The same operator that mows the fairways, can without even getting off his seat, drop down the sickle bar and mow the tall rough

and other parts of the grounds. The sickle bar is always there ready for use, bear that in mind.

OVERGREENS CUT 6 INCHES WIDER

The 1936 Overgreen is now equipped with 18-inch units instead of 16-inch. One man can cut a green every 6 min-utes. 18 greens can be cut in 41/2 hours on 11/2 gal-

lons of gas. Send for new catalog. Get all the facts. See for yourself how Worthington cuts down your

cutting costs.



1936 Overgreen cuts a 50-inch wide swath. Another Worthington im-provement that cuts down cutting time and costs.

Main Office: Stroudsburg, Pennsylvania



Sales Agencies in all Principal Cities of U.S.A.



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if you are planning

FAIRWAY WATERING

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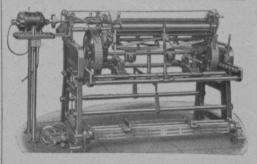


The SILVER KING Tractor

Here in one tractor, are combined low first cost, low maintenance cost, low gasoline and oil consumption, high speed and great power. The Silver King comes equipped with either low pressure tires or wide, roller type wheels. It pulls a 5-gang unit practically anywhere, a 7-gang unit on the straight-away. It is compact, light weight, flexible. Four speed transmission. Speeds from 2½ to 25 miles per hour. Investigate. Illustrated bulletins and prices upon request BOOTHS 33 and 34 National Greenkeepers
Ass'n Convention, Cleveland

THE FATE-ROOT-HEATH CO. 1136 BELL STREET, PLYMOUTH, OHIO Built by the Manufacturers of PEERLESS Mower Sharpener

PEERLESS MOWER SHARPENER



For beautiful greens, keep your mowing equipment sharp on the Peerless Sharpener. Fast and accurate. Simple to operate. Sharpens all types of power and hand mowers. Grinds blades up to 36" wide. Reconditioner for "lapping in." Low in price. Send for illustrated bulletin. Booths 33 and 34 National Greenkeepers Ass'n Convention, Cleveland.

THE FATE-ROOT-HEATH COMPANY

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PENNSYLVANIA

SUPER ROLLER GREENS MOWER

Light weight, high speed, smooth cutting, 8 crucible steel blades. Positive precision adjustment, Alemite lubrication. Cuts ribless 18 inch swath.

NEW LOW PRICE

The Model K (rugged, cast-iron construction) is the greatest value in low priced mowing equipment available today. At \$82.50 per 30 inch unit it has every improvement to be found anywhere in its field—and it costsyou less!

Improvements in the condition of your course usually call for corresponding increases in maintenance costs — but not when you use these mowers... The Giant DeLuxe Pennsylvania Fairway soon pays for itself,— for it works 20% faster with a 20% wider cut with 20% less operating expense... Yet this Giant 36 inch unit costs but \$15.00 more than the 30 inch unit! In addition to cutting down your operating expenses, the DeLuxe Fairway holds its maintenance cost to a new "low" because its unbreakable malleable iron construction eliminates the usual waste of time and money caused by broken parts.

DELUXE FAIRWAY

The 30 inch DeLuxe Pennsylvania offers all the mechanical features of the 36 inch Giant in the conventional 30 inch size. At \$100 a unit these unbreakable units are available singly or in gangs of 3-5-7 and 9.



10TH

Annual Convention and Equipment Exhibition

of

The National Association of GREENKEEPERS of America

The Time
Tuesday to Friday
February 4th to 7th

4

The Place
Carter Hotel
Cleveland, Ohio

An educational program for the benefit of every club's greenkeeper will last three days. It will be of the type that can not be surpassed, along with a display of the most modern upkeep equipment and supplies to get and keep your course groomed in the pink of condition.

SEE THAT YOUR GREENKEEPER ATTENDS

FOR COMPLETE DETAILS REGARDING EXHIBITION SPACE RATES, RAILROAD AND HOTEL RATES, ETC., WRITE TODAY TO

The NATIONAL ASSOCIATION of GREENKEEPERS of AMERICA

Frank W. Ermer, Chairman Show Committee BOX 2257, BROOKLYN STATION, CLEVELAND, OHIO



This NEW TORO gives you exactly what you need in a General Utility Tractor

We sold more Toro Tractors to golf courses last year than any other year in our history. Outstanding performance combined with fair prices made this record.

But we are out to beat it in 1936 and present indications are that a new mark will be set.

The new Toro Husky Model C shown above gives you everything you need and want in a general purpose tractor. It is short (only 71 inch wheel base); it is powerful (will pull seven 30-inch mowers up a 20% grade in high gear); it is fast (15 miles per hour), and it has just the right weight (1790 pounds).



You can see this new machine at the Golf Show in Cleveland, February 4th to 7th. Ask any of our distributors and they will tell you more about it, or write to us.

The 1936 Toro Catalog will be ready January 15th.
Write for it.

TORO MANUFACTURING CORPORATION of MINNESOTA

3042-3168 SNELLING AVE.

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Greens & Fairways, North & South

Just think what it means to have a pure, soil-building humus which contains more than 2% organic nitrogen (by actual analysis, 3.52% on dry basis). That is what you get in Florida Humus—an ideal water container and soil-conditioner which also acts as a slow, progressive plant food.

Clubs using it (in new construction or for top-dressing) have gotten strong drought-resistant greens and fairways, and have saved up to 50% of their watering and fertilizing costs. For full information, consult your nearest distributor, listed below:

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ATLANTA: Evans Implement Company BALTIMORE: E. Miller Richardsom & Co. BOSTON: Joseph Breck & Sons, Corp. BRISTOL: (Va.): Wood Howell Nurseries CHARLOTTE: E. J. Smith Company CINCINNATI: The J. Chas. McCullough Co. CLEVELAND: Sidney L. Dryfoos DETROIT: Terminal Sales Corp. JACKSONVILLE: Jacksonville Landscape Co. LOS ANGELES: Germaine Seed & Plant Co. NEW YORK: Stumpp & Walter Co. PHILADELPHIA: Henry A. Dreer, Inc. PITTSBURGH: Beckert Seed & Bulb Co. PROVIDENCE: W. E. Barrett Co. ST. LOUIS: St. Louis Seed Co. WASHINGTON: Balderson & Co., Inc. WILMINGTON: Franklin J. Murphey

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CONTROLS BROWN PATCH and COSTS ²/₃ LESS to apply THAN INORGANIC MERCURIES

Special Semesan costs you ¾ less to apply than inorganic mercuries, only a few cents more to buy, and is easier on the sprayer—saves you repairs. Use it this year. Five lbs., \$10.00; 25 lbs., \$42.50; 100 lbs., \$165.00.



 \bigcirc Regular SEMESAN and NU-GREEN prices: SEMESAN — 25 lbs., \$46.25; 100 lbs., \$180.00; 300 lbs., \$525.00. NU-GREEN — 25 lbs., \$30.00; 100 lbs., \$115.00; 300 lbs., \$330.00.

Order from Your Golf Supply House

BAYER-SEMESAN CO., INC.

STAUDE General Tractor \$495 to \$795

F. O. B. ST. PAUL, MINN., U. S. A.

A STRICTLY high-grade, powerful, light weight, quiet running tractor for mowing, hauling and other work on golf courses, parks, country clubs, cemeteries, airports, etc. Its efficiency, sturdiness, dependability and economy have been proved by 18 years of service and by over 2000 golf clubs.

STAUDE Mak-A-Tractor \$155

Attachments-F.O.B. St. Paul and up

For converting Models T, A, or V-8 Ford pleasure car chassis into efficient tractor . . . easily attached in a few hour's time. Sold under a money-back guarantee. Buy through your Ford dealer or write for full information.

E. G. Staude Mak-A-Tractor Co. 2696 University Ave. St. Paul, Minn.



Is it worth \$125

· to learn

the simple requirements of an attractive, worthwhile layout?

· to find

the minor changes which improve your course from every angle?

· to save

many maintenance dollars thru proper design and construction?

The

LINKS

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Primaries and finesse in course design. Most effective "schedule of holes". Principles for building sound greens. Points in placing and best using hazards. Treatment of tees and fairway layout.

62 full page photographs and illustrations of ideal application on successful courses. by

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THE WILSON
PGA Championship

VULCANIZED
Retailing at 75c each

THE WILSON PGA Durable

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THE WILSON PGA Fifty

Retailing at 50c each

Each of these three balls is manufactured to deliver the finest performance possible under three separate requirements. They will all deliver an extra quota of customer satisfaction and repeat business for you during 1936.

Of course, they are vulcanized under the Geer patent, but they are vulcanized under the Wilson "Air Cure" process -a method of vulcanization which requires a minimum of heat and retains a maximum of life and resiliency in the finished ball. Ask Wilson salesmen about these special vulcanized balls.





WILSON SPORTING GOODS CO., Chicago, New York and other leading cities



REG. U. S. PATENT OFFICE

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Working with WEATHER

By CLINTON K. BRADLEY
Passaic County Golf Course,
Paterson, N. J.

IN OCTOBER, 1935, GOLFDOM, on page 16, appeared: "Knowing full well fungicide effectiveness is governed largely by weather, green-keepers here and there rejoice they have been lucky enough in guessing

weather conditions to keep down fungous diseases and have begun to talk about weather instruments as greenkeeping requirements that will soon pay for themselves." I wish to substantiate this statement, as, by a conservative estimate I find that by taking advantage of predicted weather conditions, at least \$100 can be saved annually per 9 holes of golf.

Weather is an important factor in course management and planning golf playing events. On my present 27-hole job, weather instruments that I own are an invaluable aid in fertilizing, watering, brownpatch control and working schedules.

In spite of the belief of some that no one knows much about turf diseases except that they happen, it has been definitely proved that certain temperature ranges are favorable for the development of fungous diseases. With the aid of information issued by Prof. L. S. Dickinson and Dr. W. H. Davis of the State College at Amherst, Mass., and reference to the USGA Green Section Bulletin of August, 1932, recording thermometers will enable any one to forecast brownpatch attacks in time to reduce or check the blight.

The policy of reputable fungicide manufacturers is to recommend that treatments be as effective as possible and they are as anxious as the greenkeepers, that mate-

rials not be wastefully applied, nor used in times when treatment is not needed. Check and control of turf diseases are more certain than prevention.

> Weather Governs Turf

Seed germination, plant growth, and bacterial breakdown of organic fertilizers require sustained optimum temperature and moisture conditions. Should results develop slowly, the instruments will indicate the reason, and prevent the waste and probable injurious effects of an unnecessary second treatment. Frequently one is caught off guard and starts on a clear morning to fertilize with organics or topdresses with soluble fertilizers. An unexpected heavy rain will fall before materials have a chance to work in, and the fertilizer either floats out in ridges or wash into low areas, burning turf from concentrated solutions.

Very light applications of fertilizer salts will burn turf if there is no way of telling when air humidity is high, and leaf yellowing will occur from lack of sunlight due to continued cloudy skies.

Duration, velocity and direction of the wind, temperature, humidity and soil conditions are the factors to be considered for irrigation needs, according to location of areas. Watering can be withheld if JOHN G. JACKSON, member for six years of the USGA executive committee, becomes the new president of the USGA at its annual meeting this month. R. Arthur Wood, former Western GA president, becomes Jackson's successor as USGA v.p.

Annual meeting of the USGA will be held at Waldorf-Astoria hotel, New York, 11 A.M., Saturday, Jan. 11. Each member club has right to be represented by one

voting delegate.

The retiring president, Prescott Bush, will withdraw from the USGA executive committee, his place being taken by Jess W. Sweetser, only new board member.

Jackson, a prominent New York lawyer, has been chairman of the USGA Rules of Golf committee since 1931. He was born Feb. 12, 1880 and has weathered well. He doesn't look eligible for the US Seniors' GA to which he belongs. He was prominent in Columbia university athletics as a member of the golf and football team.

On the USGA executive committee are represented the Western and Southern golf associations and those of New England, Pacific Northwest, Minnesota, Metropolitan and California districts.

the greenkeeper is confident that rain is due, but if he has to guess unaided by reliable instruments, the turf suffers and the greens may be too hard for play. On the other hand, rain combined with heavy watering wastes money, means sodden greens and trouble from poor drainage. Wash-outs can be reduced on newly seeded ground, if sufficient time is had to sprinkle the seed bed lightly prior to an expected rain.

In the 1934 season, with weather instruments, I have been able to save as much as \$40 per week on watering expenses, and use the money for course improvement. Fairway mowing and fertilizing can be done by working overtime if rain is ex-

pected.

Club Should Furnish Instruments

I do not advocate that greenkeepers pay for their weather instruments with their own money for this certainly is a club expense, but a greenkeepers' time is well spent, however, in learning the simple methods. This reduces the many costs and worries of keeping things green.

As with greenkeepers, so with weather instruments and other golf course neces-

sities, the cheapest investment is rarely the best. A set that automatically registers air pressure, temperature, humidity, rainfall, and optionally, wind currents and sunlight hours, will take little time from the greenkeeper's many other duties.

In the past, I used to have one of my greensmen buy me a paper every morning on his way to work, but the forecast could not be depended on, for it might rain in town, and be clear on the course. This is especially so in hilly country. A bulletin issued by the U.S. Weather Bureau states that for accurate rain data there should be one rain gauge for each quarter section, (4 per square mile.) At present there is only one gauge to about every 600 square miles. The daily weather map issued from Washington, D. C. forecasts for the states east of the Mississippi river, except Illinois, Wisconsin, Indiana, Michigan, Alabama, Mississippi and Western Florida.

Space won't permit details on climate observations, but those greenkeepers and club officials keen enough to appreciate the practical value of weather influence, will be interested in the following literature:

Valuable Guides Cost Little

From the Taylor Instrument Co., Rochester, N. Y.; "Temperature," "Guides to Health and Comfort," and Catalog No. 2000, all free. In addition, "Weather and Weather Instruments," 50c, and "Tycos Key to Barometer Reading, No. 4051," 75c.

From the Superintendent of Documents, Washington, D. C., the following literature, total cost \$1.85: Publication No. 34; Bulletin No. 42; Bulletin No. WB956; Circulars A, B, C, D, E, F, G, L, and Appendix No. 2 to Circular D; Farmers' Bulletin No. 1588; Climatic Charts of the U. S., Nos. 1, 2, 3, 4 and 5; Frost Chart No. 5. In ordering these it is well to mention "As per list W.B. 12-12-34, 3000, No. 245-6."

From the Weather Bureau, Washington, D. C., the daily weather maps can be obtained at a cost of 30c per month, including Saturdays, Sundays and holidays, or \$3.60 per year.

From the National Carbon Co., P. O. Box, Grand Central Station, New York City, for 10c stamps or coin, a "Weather Wheel" which will help forecast the weather, and also a 48-page booklet "Weather as a Hobby."