EDGEWATER GULF HOTEL

one of the fine courses piped with CAST IRON

One of the greens of the Edgewater Gulf Hotel Course on the Gulf of Mexico.

A majority of the finest links in America are piped with cast iron. Cast iron pipe serves for a century. Once installed it can be forgotten -no digging and interference with play for repairs or replacements - no maintenance cost. Cast iron pipe is the standard material for underground mains. Sizes from 11/4 inches. Address inquiries to The Cast Iron Pipe Research Association, Thomas F. Wolfe, Research Engineer, Peoples Gas Bldg., Chicago, Ill.

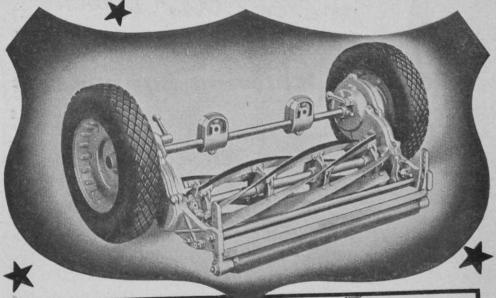
Courtesy of Edgewater Gulf Hotel, Edgewater Park, Miss.

CAST IRON PIPE

The Standard Material for Underground Mains



DRAFT THESE WORKERS



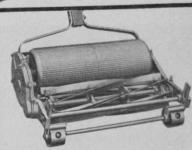
TO SOLVE Your PREPAREDNESS PROBLEMS

Your Government's preparation requirements are absorbing millions of quirements are absorbing millions of men in the military services and private in dustry, creating an unskilled labor shortage that will complicate your maintenance problem this coming season—UNLESS you avail yourself of the labor-saving advantages of up-to-date maintenance equipment, such as the Pennsylvania DeLuxe 35-inch Fairway which saves 20% over conventional sized mowers. This means one hour less in five—one dollar less in five—and, most important, at this time—one MAN less in five!

This physical advantage is typical of the

This physical advantage is typical of the structural and design advantages offered by the entire Pennsylvania golf line.

Make plans now to draft this additional maintenance help to meet YOUR preparedness problems. Send for catalog today.



(In Shield)
PENNSYLVANIA DE LUXE FAIRWAY
(Available in 30 and 35 inch Sizes)
Unbreakable malleable iron construction.
Reversible raised-edge lower blade. Lower
blade casting removable without dismantling

blade casting removable without dismantling mower. Timken bearings. Alemite lubrication. Train of gears on both sides. Pneumatic tires optional. (Details in catalog.)

(Above)

SUPER-ROLLER GREENSMOWER
(Used by championship courses to produce fast—smooth—accurate putting surfaces.)

8 bladed high-speed cylinder. Train of 3 gears runs in grease in dust-tight case. Castor wheels mounted in hardened steel bushing, alemite lubricated. Aluminum rollers. (Details in catalog.)

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LAWN MOWER WORKS, PRIMOS, (Del Co.), PENNA.



AS FAMILIAR AS FORE ON EVERY GOLF COURSE

BUCKNER Watering Equipment

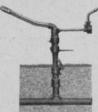
Today Buckner Watering Equipment is giving efficient, economical service to thousands of users. Pioneers for 25 years in developing hoseless irrigation, the Buckner organization continues to improve its products through constant scientific research.

Turn with confidence to BUCKNER for assistance with your irrigation problems.

Bucknerize NOW!

BUCKNER MANUFACTURING CO.

FRESNO, CALIFORNIA



Buckner quick-coupling valve and sprinkler in place.

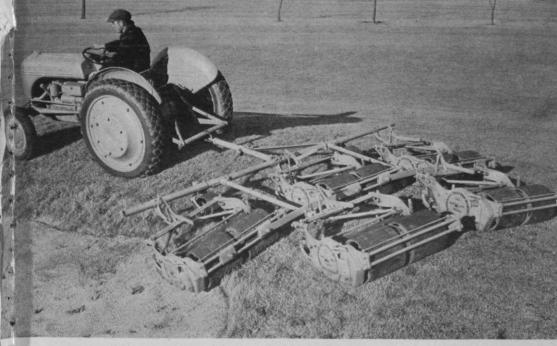
7658 Calumet Ave. Chicago, III.

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THE FATE-ROOT-HEATH CO.

MANUFACTURERS OF THE Silver King GOLF COURSE TRACTOR



Roseman mower mowing over top of bunker and at same time trimming the unsightly fringe at lip of trap; hand labor and special equipment are eliminated.

Cut Your Mowing Costs 50%!

Why pay so much to mow your course when you can reduce your season's mowing cost oftentimes by 50%—in some cases, even more!

Consider what a saving of \$200, \$500, or even \$1,000 in a single year's operations would mean in meeting reduced budgets—or when applied toward the improvement of your course.

How is this possible, you say? It is made possible by the exclusive design of the improved Roseman Hollow Roller All-Purpose Mower—the mower that is 10 years ahead of all others in design and construction.

The Roseman All-Purpose mower cuts fairway and rough equally well, and at greater speeds. Knolls, mounds and bunkers, lips of traps, borders of greens, no longer require specialized equipment and tedious hand labor. Consider how this ability to do practically all your mowing in one operation will drastically reduce your mowing budget. The additional savings possible in the cost of buying, operating and maintaining specialized grass-cutting equipment are unbelievable!

Insist on a demonstration of the Roseman mower before you buy-no obligation

ROSEMAN TRACTOR MOWER COMPANY CRAWFORD, CENTRAL AND RIDGE RD., EVANSTON, ILLINOIS

Proof of Roseman acceptance—north, south, east, west—where results are more important now than ever before. Gangs of Roseman Mowers have just been delivered to: Chanute Field, Rantoul, Ill.; Hickman Field and Wheeler Field, Honolulu, T. H.; Nichols Field, Texas; Olmsted Field, Middletown, Pa.; Field, Washington, D. C.; Hamilton Field, California; Borinquen Field, Puerto Rico; Patterson Field, Osborn, Ohio; Randolph Field, Texas; Olmsted Field, Middletown, Pa.; Barksdale Field, Shreveport, La.; Kelly Field, Texas; Selfridge Field, Mich.; MacDill Field, Tampa, Fla.; Westover Field, Chicopee, Mass.; Sacramento Air Depot, Planehaven, Calif.; Duncan Field, Texas: Roseman mowers are also used exclusively for airport mowing at Wright Field, Dayton, Ohio.

The Roseman gang mower in lift position, mows the toughest of roughs, eliminating sickle-bar mower equipment. (Tractor shown is the new Ford tractor—Ferguson System)



TIMELY TURF TIPS

SOME ASPECTS OF RESEARCH IN GREENKEEPING

An interesting report, prepared by E. Bruce Levy, Director, Greenkeeping Research, appeared in the Proceedings of the Seventh Annual Meeting and Conference of the New Zealand Greenkeepers' Association, held at Palmerton, February 7th to 9th, 1939, under the above title. His remarks about S/A (Sulphate of Ammonia) and S/I (Sulphate of Iron), are of especial interest and, therefore, reproduced herewith.

"It can be shown that regular treatments with toxic fertilizers such as S/A and S/I produce weed, clover and worm free swards houbeit accompanied by a dryness and openness of the sward that is unsatisfactory in practice. The additions of superphosphate to S/A and S/I has to some extent improved the turf generally, but there is still much to be desired, particularly in the summer so far as the appearance of the turf is concerned.

the appearance of the turf is concerned.

"A new series of topdressing plots commencing this year contains treatments designed to give information on the effect of adding non-toxic fertilizers to the standard dressings of superphosphate plus toxic fertilizers that in the past have given adequate control of weeds, clover and worms. Thus to the toxic standard mixture of S/A, Super. S/I and K (potash) are added to individual plots dried blood, nitrate of soda, Humber lish manure, carbonate of lime. Steamed bone flour is also being tried as a substitute for superphosphate.

for superphosphate.

"... From information secured to date it would appear as though it is not really a question of how much toxic fertilizer one may apply over a period of time, but largely on the degree of acidity secured as a result of those applications. Thus, where lime has been applied in sufficient quantities to neutralize the acidifying effects of S/A and S/I. it has reduced almost entirely the toxic effect of S/A and S/I. and this is reflected in an almost entire lack of control of weeds, clover and worms, but howbeit accompanied by a greener and more thrifty sward.

"The real problem in greenmaking is to

greener and more thrifty sward.

"The real problem in greenmaking is to combine fertilizers and apply these in such a way as to promote a healthy green color in the sward coupled with weed and clover control, and from the experience of the past it would appear as if toxic fertilizers must be persisted with until the green is free of weeds and clover, and when this condition is reached, judicious applications of lime and other non-toxic fertilizers may be advantageously applied."

Additional details can be obtained in the complete report mentioned above . . . furnished on request. Write:

Turf Service Bureau

THE SEWERAGE COMMISSION

Milwaukee

Wisconsin

MILORGANITE for BETTER TURF

GOLF DIVOTS OF THE MONTH

BEN HOGAN finished among the first five golfers in the recent Miami \$10,000 Open, and thereby won the PGA Vardon trophy-symbolic of professional golfing consis-Hogan finished with 423 tency. points; Sam Snead was second with 393. Snead, defending Miami Open champion, needed to win the event again to capture the PGA trophy ... Cleveland District Greenkeepers 1941 officers are: pres., Howard Simmons, Highland Park GC: 1st vice-pres.. Earl Yesberger, Homelinks GC; 2nd vice-pres., Elmer Corlett, Beechmont CC; sec'y-treas., Nelson Monical, Westfield CC.

Fire continues its unpopular rating as one of the golf clubs' greatest hazards. Word has been received of the following recent fire damage at golf clubs: \$12,000 loss at Joe Kirkwood's pro-shop at Huntingdon Vallev CC in the Philadelphia district the clubs of more than 100 members, along with new stocks of equipment to handle the Christmas rush, were destroyed; \$4,500 fire damage at the Oakley CC, Watertown, Mass .- the blaze, which originated in a chimney, swept through two floors of the Oakley clubhouse before firemen could bring the fire under control; only slight damage at the Waubanakee GC clubhouse at Burlington, Vt .flames caused by a defect in the fireplace had burned into a partition and were starting to go through into the kitchen, when firemen arrived with a booster line.

Annual Midwest amateur tournament at French Lick Springs, Ind., will be held April 4-6. Gus Novotny of Cincinnati is defending champion.

... Horton McVeigh, pro at the Breezy Point Lodge course in Pequot, Minn., has been appointed winter pro at the Wood Hills GC, Girard, Calif. Horton is still a few months shy of his 20th birthday.... Doug Turnesa has terminated his three-year contract at the Pine

(Continued on Page 7)

DON'T LET ANYTHING KEEP

Your Greenkeeper Away from the 15th Annual NATIONAL TURE CONFERENCE and EQUIPMENT SHOW

of the

GREENKEEPING SUPERINTENDENTS ASSOCIATION

Book-Cadillac Hotel, Detroit February 4, 5, 6, 7

Your greenkeeper must keep ers' annual meeting; the latest adposted on the latest advances in turf culture and in maintenance equipment if he is to keep your course in the best possible condition - most economically. The Detroit educational program promises to be the most timely ever presented at the greenkeep-

vances and designs in maintenance equipment, too, will be exhibited daily. Detroit was the scene of the first greenkeepers show-so you can depend on it that nothing will be left undone in making this 15th annual show the biggest and best ever held. . . .

See That Your Greenkeeper Attends

(His expenses to this meeting are a legitimate charge against your course budget)

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

Greenkeeping Superintendents Association

c/o Don Boyd, Chairman Show Committee Portage Country Club, Akron, Ohio



You Are Invited

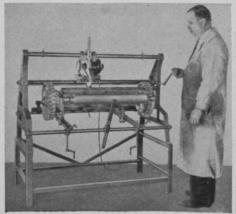


... to visit Skinner System Booth No. 29 at the Greenkeeping Superintendents Equipment Show at Detroit, Michigan, February 4, 5 and 6, 1941.

See the comprehensive line of sprinklers and valves. Examine the 1941 improvements and developments found exclusively in Skinner System equipment.

THE SKINNER IRRIGATION COMPANY, 415 Canal Street, Troy, Ohio





Unbelievably simple, fast and accurate, the Carpenter Grinder keeps your mowers razor-sharp — improves turf and saves money. Grinds any power or hand lawn mower, including large power or tractor-drawn units. No experience needed . . . no attachments . . . no lapping. Many satisfied users.

The CARPENTER Mower Grinder

Write for literature and name of nearest dealer.

NARRAGANSETT PRODUCTS CORP. EAST GREENWICH, R. I. Brook GC, Gloversville, N. Y. . . . M. N. (Mac) Parsons, greens superintendent at the Wooster (Ohio) CC the past 14 years, is now serving in a similar capacity at the Brookside CC, Columbus, Ohio.

Word has leaked out that the Indiana professionals will soon go on an 'all out' offensive to return the course record at Indianapolis' Speedway layout to a professional golfer. It was Emil Masciocchi, Ontwentsia's (Chicago District) greenkeeper, who shot that 64 in the recent GSA annual tournament, you remember. ... John Thoren, pro at the Woodland (Mass.) GC, has enlisted in the 101st field artillery, thus becoming the first professional golfer of the New England PGA section subject to military service. John was the fourth man drawn in his district, so enlisted instead of waiting for the order to report.

Mush March, veteran wing of the Chicago Blackhawks hockey team and pro for several years at the Valparaiso (Ind.) CC, has been appointed pro at the Mesaba (Minn.) CC. He will take over the job May 1. . . . Jock Hutchison, Sr., pro at the Glen View club in the Chicago district for the past 24 years, has assumed his duties as chief associate professional at the Bobby Jones course in Sarasota, Fla. Jock, Jr., is also on the teaching staff at the club. . . . Formal opening of the new Indian Hills G & CC at Fort Pierce, Fla., will be held sometime this month. The new \$100,000 layout has been informally open for play for the past two weeks, but officials have been waiting the completion of the clubhouse before holding any formal affair.

Work has already begun on the new Forsyth CC clubhouse at Winston-Salem, N. C. According to present plans, partitions in the present clubhouse building will be removed and the entire floor space converted into a large ballroom. Also planned are the construction of two large wings adjoining the ballroom; bowling alleys, and a new swimming pool.



THERE IS A DIFFERENCE!

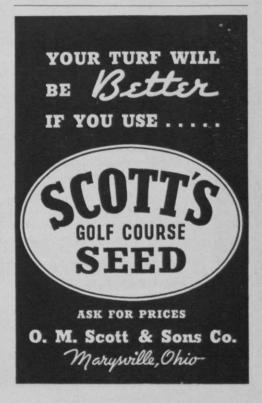
Judging the quality of turf would be limited to the visible growth by the inexperienced... but not by a greenkeeper. He knows that the difference in roots has a direct bearing on the resistance of turf to adverse weather and hard play. The way your greens and fairways are fed has a lot to do with the root development of the turf. The Swift Feeding Plan assures:

LOW COST MAINTENANCE IMPROVED PLAYING TURF

This plan is based on early feeding (before the grass starts to grow) with the plant food your turf needs! Investigate promptly! Write:

SWIFT & COMPANY FERTILIZER WORKS.
Chicago, Illinois, maker of Vigoro and a complete range of plant foods for

golf courses.





THE 1941 PROFESSIONAL

The Most Amazing Mower We Have Ever Built

THE Professional cuts a swath almost six and one-half feet wide and at a speed of $4\frac{1}{2}$ miles an hour it will do almost as much work as a tractor costing twice as much. It is so strong that it can be driven down a flight of concrete steps and bumped headlong into trees without injury, yet it is so carefully engineered it will keep a lawn as smooth as velvet.

Highly flexible and easy to handle, a Professional straddles a golf course bunker and cuts 30 degrees up or down, rings trees easily and cuts close to and under overhanging shrubbery. The Professional will pay for itself in labor saved. Every modern golf course should have one.

TORO MANUFACTURING CORPORATION MINNEAPOLIS MINNESOTA

Minneapolis . . . City of Beautiful Lakes, Homes, Parks, Golf Courses, Championship Football Teams, Pretty Girls and Fine Mowing Machinery.



JANUARY, 1941

Golf Due to Grow in '41

By Herb Graffis

Defense act is sure to spur golf nationally, but clubs will face several unusual operating problems, too.

ELEMENTS having definite bearing on golf in 1941 now begin to indicate the game is due for a busy year.

Difference between the present situation and that of the previous period influenced by war seems to be mainly that golf's base is broader.

In 1916 there were 742 golf courses in the U. S. There were 1,161 more courses built in the next 5 years, bringing the U. S. total to 1,903. Not many of these courses were public. Most of the increase was direct result of munitions profit distribution among higher-salaried workers and officials who previously had considered golf principally a rich society game. Generally the labor sector splurged with spending for wide-striped silk shirts and patent leather shoes.

More Public Play than Private

Now there is about 20% more rounds of golf played annually on public and fee courses than on private courses, although the private courses account for 3,288 of the nation's 5,209 courses. Availability of golf for working women also is beginning to figure in the pay-course picture.

Corporation employee recreation authorities have been boosting golf play among their workers, although complaining that moderate-price arrangements encouraging employees to play the game are more than offset by slot machines and bars which make many employees visits to fee courses expensive.

Golf goes through the same thing at private clubs. More rounds of drinks are bought than rounds of golf played at U. S. golf clubs. Bar business at U. S. golf clubs averages—over the years since repeal—about \$9,000,000 per year more than golf ball, club and bag sales.

With a war-time situation taking form, foresighted club officials and managers are beginning to wonder what will happen to house business if hard liquor sales are curtailed by government edict. There's no denying that many golf clubhouse operations have drunk themselves into the black. After the prohibition experiment, the break for which forward-looking executives of golf clubs look, in case of hard liquor control, is an even bigger build-up

Works Projects Administration reports that during 5 years—July 1, 1935 to July 1, 1940— WPA did new construction of 2,373 golf holes on 15,340 acres; and reconstructed or improved 4,315 holes on 32,321 acres. of beer volume and the domestic wines finally coming into their own at clubs.

Numerous club managers noted last year that beer volume increased despite shortage of days popularly considered most favorable for stein-histing.

Golf can't expect any more of a beating from the weatherman than it took in 1940. In most parts of the country it rained like Pago-Pago, then got hotter than east of Suez. Spring was slow and that didn't do pro-shop sales any good.

do pro-snop sales any good.

But golf has no kick when its attention is called to the suffering of minor league baseball which had more than 2,000 games—many of them week-end games—rained out in 1940 and wound up with attendance about 33% under 1939.

Auguries of a Good '41

Right now promise for a great golf season seems to have substantial foundation in two current signs:

(1) Winter golf resort business is booming. Reservations at the majority of the winter resorts in all price classes are

ahead of any other time.

(2) Resignations from private clubs are far fewer than normal. Representative clubs generally count on about 10% annual turn-over. This winter many clubs report resignations are surprisingly under usual figures.

Retention of the older members may be explained, partially, by broadened entertainment programs, both indoors and out-

doors.

Another factor that analyists regard as figuring with increased strength in the golf situation is that of physical conditioning. Disturbing reports of Americans losing the ability to walk for any considerable length came out of the 1940 National Guard exercises. That warning, and doctors' emphasis on office and factory workers' recreation for physical and mental conditioning, has given golf a boost in making it a pleasant treatment as well as a social enterprise.

Greenkeepers and chairmen already are beginning to be seriously concerned about the course labor situation in 1941. Wages are being increased. Golf course maintenance has been handicapped by its seasonal nature. Course workmen usually laid off in the winter now are having but little difficulty in getting work for more money than they ever earned at golf clubs. Therefore spring will bring the problem of recruiting new men and training them in maintenance work that's a lot more ex-

acting in technique and experience than most golfers appreciate.

In most metropolitan districts and in many of the smaller cities greenkeepers already are reconciled to getting only their older men back. These men can't handle the strenuous manual jobs with speed or thoroughness. Consequently the machinery requirements of golf maintenance work are getting a foresighted survey by greenkeepers and club officials.

The condition points to extensive buying of maintenance equipment this spring

and summer.

Caddie Shortage?

Toward the latter part of last summer a caddie shortage made itself felt at many clubs. Boys of the low income families had replaced middle-class family sons as caddies since 1929. The 10 year slump in development of private golf club potential members had begun to be felt. Kids of the 1929-39 decade were in golf to help their families eat, rather than for spending money pleasantly earned in association with a game they were to support when they grew into adult earning class.

Now pros and club officials are reviewing the caddie recruiting and training methods followed back in the boom twenties when high schools and Boy Scout outfits were visited by shanghaiing squads

from golf clubs.

Effects of the first draft have not hit golf clubs to any extent interfering with operation. However, most golf clubs have assured drafted employees that their jobs will be given back to them after they've done their draft hitch. Replacement employes have been hired with this understanding.

This handling of the draft situation has been particularly consoling to pros who have secured, built-up and retained jobs in a keen competitive situation. To the credit of the clubs that have announced this draft retention of job policy, they haven't bragged about it but have handled the matter strictly in stride as a decent, sporting thing. None of them, so far as we know, even has considered the legal phase of re-employment of draftees.

And wouldn't it be a hell of a thing for a draftee to go to court in an effort to get back on his job with an organization of sportsmen after doing his draft year? Then we would have the 1940 election's raps about the country club and stationwagon set dusted off and put into circula-

tion again.