until it has had a chance to be effective. Time is the great healer only when it has the right ointment and the chance to keep using it.

Some Problems Far from Solved

But, what about fairway maintenance and improvement problems for which it is impossible to set up a satisfactory corrective program because we don’t know the answers? Here again, the troubles may be either accidental or chronic or a combination of both. The list would have to include such things as disease epidemics, insect infestation, a system of feeding to avoid clover and other weed stimulation, and last, but by no means least, adaptation of both maintenance practices and the type of turf to playing demands. All these are problems that are worthy of the best thought of not only every green-keeping superintendent but also of every research agency interested in fine turf.

While it is true that a great deal of fundamental work must still be done before satisfactory answers can be found, it is encouraging that at least a start has been made in the direction of adequate solutions to some of these tougher problems. For example, take the case of disease epidemics, particularly of leaf spot of Kentucky bluegrass. This disease probably is much more prevalent and does much more damage to fairways than has been realized in the past. Because of the large areas involved any method of control by fungicides possibly would at best be only a stop gap. And so, it would seem that the best place to look for an answer is the development of resistant or at least highly tolerant types.

That there is hope in this direction is indicated by records on individual plant progenies in the plant breeding nursery at the Pennsylvania Experiment station. In 1937 under epidemic conditions of the disease approximately one-third of a total of 1,600 plants representing 83 separate progeny lines showed at least some degree of tolerance to attacks of the fungus. Additional evidence secured again this year indicates that there may be a real difference in susceptibility of different types of Kentucky bluegrass to the disease. If this is true, certainly it offers hope of materially reducing turf thinning from this cause.

Then take the matter of the control of clover, Poa annua, crab grass and others.
For Healthier Turf the Season Through With Less Time and Labor—use ROTOTILLER

YOU CAN HAVE PUTTING GREENS finer than you ever hoped for and fairways equally exceptional—with less time and labor with ROTOTILLER.

ENGINE DRIVEN, fast revolving tines tear up the ground, doing the work of plow, disc and harrow, in one operation—doing it far better. Once over, it prepares a deep, finely pulverized, completely aerated putting green foundation — fertilizer worked in evenly from top to bottom — ready for planting. And there is no packing down as fast as it's loosened up, no hand-raking necessary.

EQUIPPED WITH "MAJOR BUTT'S GOLF COURSE DISCS", ROTOTILLER cuts clean, sharp, narrow slits in the turf, deep enough for ideal aeration, moisture penetration and fertilization. With field-mower attachment, it cuts the rough, 42 inches wide at 3 miles an hour. Otherwise, you'll find any number of jobs to keep your ROTOTILLER busy—eliminating quack grass, weeding, tilling and cultivating club-house vegetable gardens.

FREE BOOKLETS — Profusely illustrated. Please mention approximate areas of greens, fairways and cultivated ground so we can send correct information. Also, let us arrange a demonstration which takes but a few minutes. Address Dept. K-1.

ROTOTILLER

Other Attack Methods

And there are indications that the clipping problem will be solved, too. As pointed out, clipping is a major problem, not because we do not know what is best for the grass, but because of the conflict between ideal clipping practices and conditions for play. There have been so many cases where attempts to bring these two antagonistic viewpoints together have been successful that it would appear to be the better part of valor to make a serious effort to reach this point. In the light of the very definite proof of the improvement in fairways where higher clipping has been practiced it would seem to be well worth while to keep hammering at the education of the golfing public to longer turf. Where it has been possible to keep club members in line until the virtue of the practice has been demonstrated, as a rule they have been more than satisfied to go along with such a program.

But even if it should develop that it is not practicable to persuade the golfing public to change its mind about clipping heights, there may still be a way out. It may be necessary in the future, if the mountain will not come to Mohammed, to take Mohammed to the mountain. It may be that the answer will be found in revising the entire picture of Kentucky bluegrass, fescue and bent turf to meet the situation. If these grasses are not adapted
to present fairway requirements and if the requirements cannot be changed, then the grasses will have to be changed.

And that immediately raises several pertinent questions. Is it probable or even possible that grasses can be found to replace those commonly used on fairways? Where should we look, and what characteristics specifically should a grass possess to make it worthy of consideration?

Can Answers Be Found?

There are two major directions which a search for such material may take—namely, the possibility of finding entirely new species of grasses that are adapted to fairway use, or of developing new types of the species already in use by controlled breeding. It is encouraging that a good start has already been made on both fronts. A number of individual clubs as well as the Green Section of the USGA and several state experiment stations are trying out such species as zoysia, timothy, Canada blue, and orchard and perennial rye grass. While this work is still too recent to be of much value as far as results are concerned, at least it does serve to show that the problem is recognized and that thought is being concentrated on it.

And efforts are not confined only to the search for new species. It is quite possible that there may be strains of the species commonly used at present, such as Kentucky blue, which will have just exactly the characteristics that would adapt them to modern fairway requirements. The Green Section in its experimental work at Arlington together with some of the state experiment stations are developing rather ambitious programs of breeding and selection work, aimed at finding such types. For example, at the Pennsylvania experiment station, a nursery of from 3,000 to 4,000 individual plants is maintained each year from which promising types may be selected for testing their possibilities as fairway turf.

While no very definite figures are available because so many selected strains are continually being discarded due to weaknesses which show up early, it is probable that the various agencies interested in the problem have already examined at least 300 or 400 such strains. And it is quite likely that if a canvass were made it would be found that well over 100 of these are being grown at present under critical experimental conditions to check on their possibilities for use as fairway turf.

Of course, all this sifting and testing presupposes a very definite conception of

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**Another New Golf Tenant For The Lytton Building**

"The Lytton Building, headquarters for golf in the great Middle West, announces another addition to its all-star golfing lineup. Taking its place February 1st among the golf companies, golf publishers, and golf associations located in the Lytton Building, was the Chicago Daily Fee Golf Assn.

**Your Chicago Office Should Be Here!**

Reduce your sales effort! Locate in the Lytton Building and 'cash in' on the drawing power of golf's most famous address—14 E. Jackson Blvd. Let us tell you ALL the advantages of being in

**THE LYTON BUILDING**

14 E. Jackson Blvd.  Chicago, Ill.
the requirements for a good fairway grass.

For example, a grass must have the stiffness necessary to support a ball. It must be able to start growth early in the spring so that Poa annua and other weeds do not get the jump on it. And it must be such a vigorous grower that it can successfully compete with weeds such as crab grass that come along later. Then too, the distance it can go into midsummer weather and its drought resistance are important. It must recover quickly from injury and stand up under constant play. And, while not necessities, a rather wide tolerance to soil acidity and fertility conditions would be desirable.

But, above everything else, it must show a high degree of resistance to disease and a very definite ability to prosper under close clipping. Very often it is quite possible to adjust maintenance practices to take care of weaknesses in many of the desirable characters listed, but it would seem to be almost hopeless to solve adequately the disease-clipping problem until types are found that are better able to take care of themselves when subjected to such a combination. While it would be jumping the gun to say that they will be found, there is encouragement in the fact that a conscientious search is being made.

In conclusion, it might be worth while to point out again that this whole problem of satisfactory fairways is relative. They may be good, bad or indifferent, depending on the point of view, and with what they are compared. But certainly it is true that in many cases conditions have already become acute, and it appears that many more fairways will reach that stage in the not too distant future. The troubles can and will be corrected, but let's call a spade a spade, let's admit the gravity of the situation and concentrate our best thinking on it.

Advises Check-Up on Locker-Room Facilities

"LOCATION, size, arrangement, ventilation and lighting equipment of quarters for locker-room men's work rarely is such that the men can do their work with the speed and uniformly excellent results expected in a first class club," says Paul Hendiard, veteran and well known locker-room man.

"Generally the locker-room force is not large enough to handle the rush of work that comes on Saturdays, Sundays and holidays, hence there is a possibility of disorder in locker aisles, delay in drink service, and slowness in shining shoes and packing. The wonder is that so many locker-room men have been able to produce a high standard of service despite the handicaps under which they must work.

"A sudden shower at many of the better clubs where there are not adequate drying facilities, will so upset work that
members may leave the club dissatisfied.

"A check-up of the facilities supplied locker-room men for doing their work, if made before the start of the season, will bring to light many details that can be easily and inexpensively corrected, and make possible better service with the same size of staff."

United States Rubber Co.'s golf ball department, for counter display this year, has designed a new type sales package that not only contains one dozen U. S. Royal Blue golf balls, but which also serves as an attention-getting advertising medium.

This new combination package, compact and attractive in appearance, is made so that it can be set up on the pro-shop counter with its contents in full view of customers, or placed flat in the show case.

In announcing the new display package, E. C. Conlin, sales manager, stated that with the company embarking on a broad merchandising campaign during the coming season, the outlook for increased business and profits is most promising.

General Bandages, Inc., makers of Gauztex, the self-adhering gauze, one of the biggest small item successes in recent years, predicts 1939 sales of Gauztex to golfers will reach at least 300,000 packages, as against the 100,000 sold to golfers last year when Gauztex was first offered to the golf market.

Golfers use Gauztex for taping hands and fingers and to prevent blisters, or to protect fingers after blisters have formed; also for taping clubs for more certain grip. It is an immediate and effective answer to the question "How can I prevent the club turning or slipping in my hands?" One golfer will use from three to a dozen or more packages a season.

Gauztex is pure white surgical gauze, treated to make it cohesive—sticks only to itself. It is medicated with mercuric chloride antiseptic, is guaranteed to remain cohesive and is as white as the gauze itself.

Display packages are filled with merchandise, ready for the counter. Each deal also includes additional merchandise and free goods which may be used to tape the members' fingers, or for taping
THE REMINDER — BALL —
reminds you what to do
— Fore —
cardinal points of golf instruction on the ball:
"Keep Head Down"—"Follow Thru"
"Don't Press" — "Keep Eye on Ball"
$4.00 A DOZEN
Anywhere In U. S.
S. BILLINGS VAUGHN
STATLER BLDG., BOSTON, MASS.

McClain HYDRO-MIXER
GREATEST DEVICE EVER
SOLD FOR GETTING GREENS
TREATED AND FERTILIZED QUICKLY

Last word in getting Greens treated at race horse speed. Nothing like the Hydro-Mixer for handling this big job with least labor and expense. Hundreds of Hydro-Mixers now saving owners money everywhere. Dependability, accuracy of Hydro-Mixer unequalled. Hand or power operated. Write for Literature.
McClain BROTHERS COMPANY, Canton, Ohio

GOLFDOM

Pros who handled it last year are especially enthusiastic over Gauztex as a profit-making item, and have been reordering early this season. An advertising campaign for Gauztex, on a national scale and in several leading magazines, will create a greatly increased demand for Gauztex this year in the pro-shops over the country. Complete details on Gauztex may be obtained from the manufacturers, General Bandages, Inc., 508 S. Dearborn st., Chicago; or, pros may order direct through their wholesaler.

Dunlop, continuing its policy of personalizing its merchandising tie-ups with the golf professional, is again supplying the golf pros with a display stand for the new 1939 Maxfli ball. Stand, which is finished in dull black and lettered in gold, is imprinted with the pro's own name.

"The golf pro is so important in the merchandising picture," says Robert N. Pryor, Dunlop's Pro-

motion and Publicity Director, "that the 1939 display stand has been created with his problems in mind. Club members need to be reminded of the professional's services. Here is a 'shingle' designed for the pro. One that will add to the attractiveness of his shop and bring in members for lessons."

Bryant Procter, Chicago, inventor of several golf specialties, has developed the Procter Mechanical Caddie, a device that enables clubs to be easily wheeled around a course. Procter's invention is especially handy where caddies are not available. Clubs are held by either a clip or snap-button strap arrangement. The Mechanical Caddie is available in either leather or canvas bag.

Wilson Sporting Goods Co's. new 1939 catalog and price-list will soon be in the hands of pros, detailing its three-way line of clubs to reach a three-way market. The Wilson Promotion club line is designed to handle the trade-in problem or one where a discount incentive is involved; the Sam Snead and Helen Hicks Autographed clubs, top-flight names in personality appeal in professional golf, handle the situation where customers want equipment bearing the name of outstanding golf celebrities; and, the nationally advertised feature-clubs, Aerflo Turf Rider and Strata-Face woods,
Kleersite and Offset irons are for the members who select their equipment on the basis of proven, practical playing value features.

Sam Sharrow, pro golfer, 1045 St. John's Place, Brooklyn, N. Y., has come out with a gadget called The Little Golf Pal, a small knife-shaped affair that can be put to a hundred and one uses when playing golf, tennis, baseball, etc. Around a golf course, the gadget is especially effective in roughening the grips of golf clubs, cleaning mud between shoe spikes, cleaning and roughening wood club faces, opening bottles, and opening cigarette packages. The Little Golf Pal will also cut paper and string, and even pare fruit. Sam reports the item is going over in great shape, and that special discounts are given pros when they order in quantity lots. Sharrow will send complete information on request.

Jackman Sportswear Co., Chicago, will shortly open an Eastern sales office at 88 Westchester ave., White Plains, N. Y., according to Fred Newman, president. Stocks of Jackman sportswear will be carried at the new branch, together with the Tuf-horse line of bags, gloves and accessories.

A. G. Spalding & Bros. has recently assigned William Shafter, for ten years a Spalding salesman, to cover the pro trade in New Jersey for Spalding during the coming season. Shafter replaces Reginald Couture, who recently resigned. Shafter's previous work has been in the pro golfing department of the Manhattan Spalding offices.

William Shafter

Reginald Couture, who recently resigned. Shafter's previous work has been in the pro golfing department of the Manhattan Spalding offices.

Flexrock Co., 2301 Manning st., Philadelphia, manufacturers of Ruggedwear Resurfacer, popular concrete floor repair material, announces a major improvement on the product—the addition of mont-

**BETTER GOLF • • •**

when players use FULNAME-marked balls. FULNAME markers now in use at thousands of clubs speed up play by preventing mistakes, give closer control over caddies—and make money for pros. No club shop fully equipped without one. Write for details today! THE FULNAME CO., Station “O,” Cincinnati, Ohio.

**FREE HENDERSON'S**

"Sports Turf"

Write for this useful guide to golf grasses, equipment, fertilizers, and insecticides. It contains useful information on soil preparation, drainage, sports turf on athletic fields, irrigation, controlling turf troubles, and a reference table of sports turf fertilizers. Write today.

**R. H. TRACTOR WHEEL SPUDS**

quickest to put on or take off. Increases tractor efficiency and cultivates turf...that's why more than half the U.S. and Canadian clubs use them. Durable and low priced. All sizes for all purposes. Sample spud and circular on request; advice make of tractor and purpose for which intended. Immediate shipment. If your Ford or equipment dealer cannot supply, write direct to R. S. HORNER

Geneva, Ohio

MFR. OF SPUDS, FORD-SON WHEELS, ETC.

**GIVE YOUR GREENS A CHANCE TO BREATHE**

Loosen up that hard packed soil for quick action of chemicals and faster grass growth. Long, smooth, bright stainless steel spikes open up turf for aeration and moisture...necessary to first-class grass growth.


**ATTENTION**

Copies of Robert Hunter’s famous book on golf course architecture, “The Links,” are still available at the bargain price of 75¢ each. Send cash, check or money order today!
Want Prices? Information?

What you want is probably offered on our advertising pages. If not, tear out this page, draw a line through item wanted, sign and mail to GOLFDOM, 14 E. Jackson, Chicago. Information and prices will be sent you.

GOLF COURSES
Arsenate of lead
Bag racks for tees
Ball washers
Bent grass stolons
Brown-patch preventives
Compost distributors
Drinking fountains
Dump carts
Fencing
Fertilizers
Fertilizer distributors
Flags (greens)
Hole cutters
Hole rims (putting cups)
Hose, water
Humus (soil conditioner)
Insecticides
Irrigating equipment
Mole and gopher poisons
Mowers

Pumps (state capacity)

Putting cups
Rollers □ green □ fairway □ spiked
Sand green equipment
Scythes (motor driven)
Seed □ fairway □ green
Seeders
Shelters (golf course)
Sheet layouts
Soil cutters
Soil screeners
Soil shredders
Soil testers
Sprayers □ power engine □ barrel pump
Spike discs
Sprinklers □ fairway □ greens
Swimming pool information

Tractors
Tractor tires □ low pressure □ pneumatic
Tractor wheel spuds
Water systems □ greens

Weed killers

PRO SHOP
Bags □ canvas □ leather
Balls □ .35 □ .50 □ .75
Ball markers
Bandages
Buffing motors □ A.C. □ D.C.
Caddie badges
Caddie uniforms
Caps
Clubs

Brassies □ Drivers □ Irons □ Matched sets
Putters □ Spoons
Women's □ Juniors'

Gloves
Grip dressing
Handicap □ racks □ cards
Hats, duck with vizor
Movie cameras, projectors
Pencils, golf
Practice driving devices
Prizes
Rain jackets
Score cards
Shafts, steel
Sockets
Sweaters

Trapsheoting □ traps □ shells □ targets

CLUB HOUSE
Adding machine
Athletes foot remedies
Bar equipment
Bath slippers □ paper □ wood
Bars □ fixed □ portable
Bath towels
Beer □ bottle □ draught
Cash registers
Deodorants
Disinfectants
Kitchen equipment
Laundry equipment
Liquors □ gin □ whiskey □ wine □ mixers
Linens
Lockers
Refrigerators
Rugs—runners for aisles
Shower mixers (automatic)
Soda fountains

W We are trying to send GOLFDOM free to the right officials. Please fill in below.

ADDRESS

By........................................................................Club Position

No. of holes?.............daily fee or municipal?

CLUB HOUSE

President (or owner)

Green-Chairman

Club Manager

House Chairman

Golf Professional

Greenkeeper

Is liquor for sale at your club?..............Beer?..............Wine?
morillonite, which increases the coverage capacity per pound, thereby lowering the cost per sq. ft. of patching and resurfacing concrete floors. Montmorillonite gives a higher quality floor per dollar and also makes the material mix easier with cement, sand and stone, decreasing labor costs.

Around a golf course, Ruggedwear Resurfacer has been found useful in repairing verandas, outdoor dance floors, and swimming pools. Further information may be obtained by writing the manufacturers.

R. C. King & Co., 852 E. 57th st., Seattle, sporting goods factory representatives, announces that A. E. (Art) Hawker, on March 1, began work as its sales representative covering the professional and golf club trade in the Portland, Seattle and Tacoma territory. Art has been an active member of the PGA and a highly successful pro in this territory for a number of years, and is already well and favorably known to the trade.

Hawker will handle selling of Macdonald Smith clubs, Penfold balls, Hughes patent golf bags, Jackman Sportswear and accessory lines.

Royer Foundry & Machine Co., 158 Pringle st., Kingston, Pa., has recently issued a two-colored folder, "It's all Velvet—with a Royer" describing the Royer compost mixer. Diagrams and explanations of working parts in all Royer models are included in the folder, which may be obtained free upon request.

Stumpp & Walter Co., 132 Church St., New York City, now has available the 12th edition of "Golf Turf," and will be glad to mail a copy without cost on request.

The usual wealth of turf information will be found in the 80 pages of the book, including chapters on general turf maintenance, bowling greens, turf in the South, grass identification, insect pests, weeds, and control practices. Charts, photographs and diagrams helpful to the greenkeeper will be found throughout the book.

In addition, Golf Turf is a catalog of the complete stock of course equipment and supplies carried by Stumpp & Walter, and as such will serve as a helpful purchasing guide.

All in all, it is a book every greensman should write for.

Wilson Sporting Goods Co. announces that J. A. Patterson, for many years sec. of the PGA Southern California section and active in national PGA affairs, has become pro representative for the company on the Pacific Coast. Pat will work out of Los Angeles for the next few months, then transfer headquarters to the Wilson San Francisco and Portland branches for periods.

Pat's job will be that of Wilson's pro relations man in which capacity he will endeavor to arrange things so pros can make the most out of the Wilson line's sales possibilities. He has had much.

Three Styles of One-Color Score Cards
of Excellent Quality are
Priced $20 to $25 for 5,000
Produced by a New Process they are complete and of correct size.
Samples of these and higher priced 2-color cards to clubs on request.
JOHN H. VESTAL CO., Printers
703 South La Salle Street - Chicago
to do as a pro representative in working for mutually profitable and satisfactory relations between pros and manufacturers and now, on the other side of the fence, is confident that he will be able to continue his work for pro profits.

Polaroid Corp., 285 Columbus ave., Boston, Mass., is now offering a new anti-glare sports glass, with "the view without the glare," which retails at $1.95. The Polaroid lenses contain billions of light-controlling crystals, the same material developed for use in eliminating headlight glare, producing three-dimensional movies and glareless lighting. The new glasses, attractively styled and cased, are designed only for daytime driving and outdoor sports.

The glasses are offered in acetate drop-eye frames, with bar-bridge and nose pads. They come in two colors—demi-amber for brunettes, and pink crystal for blondes; and in two sizes—for large and small faces. Cases are wrap-around style, in heavy piggrain artificial leather. The company will supply further information upon request.

The Kroydon Company, Maplewood, N. J., announces the election of Felix H. Ohaus, formerly General Sales Manager, to Vice-Presidency. Ohaus became associated with the sales department of Kroydon when the company was organized in 1921 and since that time has been prominently indentified with the company's extensive development in club manufacturing and sales. Other important promotions in the Kroydon organization include the naming of John Birkofer as Superintendent, and E. Aiken, Plant Manager.

For 1939 Kroydon has developed a new line of woods which it regards as having the finest balance and 'feel' of any woods it has made in 18 years of quality club making. The new Kroydon woods are available in deep and shallow faces, and Hy-Power or Rhythmic tapered shafts, which are made in the Kroydon plant. The feel and balance of the 1939 woods, which the Kroydon boys say pros already are crowing about, is gained through an entirely new idea in wood design and weight distribution.

In their 1939 line of irons, Kroydon has further developed and refined its off-set blade which will be offered this year at retail prices ranging from $6 up. Other new Kroydon irons with Hy-Power shafts will have a retail range from $5 upwards.

Kroydon's Chicago office in the Lytton Bldg., in charge of John Carnell, has doubled its space to 69 W. Washington st., Chicago, prominent amateur, is the sponsor of a new golf game that is selling at a swift rate. The game uses dice marked for distances or numbers of puts and is played on a board that carries a printed map of an Olympia Fields' course. The game retails for $1.

Mrs. Tilley invented the game and Earl went for the investment to put the game on a merchandising basis, just as a nice husbandly deed. The game took on in great shape. Department store game departments are selling hundreds of the games, and there's a national demand from clubs and retailers come to life on the game.

Plans of other famous courses will be put on other boards when conditions warrant.

Cooper Mfg. Co., Marshalltown, la., reports lively enthusiasm in the golf club market for its new Cooper Champion, world's lightest weight power greens mower. In the Champion, Cooper engineers say they have perfected a power greens mower that achieves top performance in the maintenance of velvety greens at the lowest possible cost.

All dead-weight has been eliminated without sacrificing strength and durability. Mower has full 20" cut with height control ranging from 0 to 1", and comes equipped with light weight transport cart and close coupled grass box. Complete details on the Champion will be supplied upon request to the manufacturers.

Spalding's all-year golf ball gift package was the unanimous choice of the judges in the 1938 All-America Package Competition, sponsored by Modern Packaging magazine, for top honors in the Set-Up Box Group. This outstanding gift package enters right into the spirit of the game, setting a dozen Spalding Kro-Flite, Top-Flite, or Tournament golf balls around a miniature 18th hole with miniature flag, ball, etc.

Added premium is offered in the two dozen trees, which are pegged around a square in the inner, relined lid which carries the A. G. Spalding & Bros. script trademark. The balls in the package are packed three to a carton, and they come