

not been determined. It has spread continuously in bluegrass bent turf since 1940 at State College, Pennsylvania. In this combination it has not been conspicuous even in the dormant season. No sweeping claims are made for this strain because wider testing is required. Samples are offered to anyone for trial.

The testing program at Tifton, Georgia of the fine-bladed strains of Bermuda for southern putting greens is still too new to be able to rate the several promising strains on a comparative basis.

Centipede Grass—Reproduced vegetatively only heretofore the future of this excellent southern turf grass appears brighter because it can be encouraged to produce good viable seed. Seed production is not yet on a commercial scale because research on seed production by Dr. G. W. Burton at Tifton, Georgia was begun only two years ago. Adapted as far north as southern Virginia, this grass offers hope for fairways and lawns which chiefly for financial reasons, do not receive sufficient plant food to grow good Bermuda turf. It produces a dense, firm, weed-free turf and stands drought and close cutting well.

CLUB MANAGEMENT

The most encouraging trend in club management is that growing tendency to retain able green chairmen in office for relatively long periods. The practice of changing the green chairman every year fortunately is on the decline. The value of a good greenkeeping superintendent is being recognized more fully and the trend is to place full responsibility for course upkeep on that office.

There is also a significant trend toward more golf matches between the greenkeeper, the professional, the green chairman and a member. More clubs are recognizing that, if the greenkeeper is to see the course as the members see it, (and maintain it as they like it) he must be encouraged to play more golf as part of his official duties.

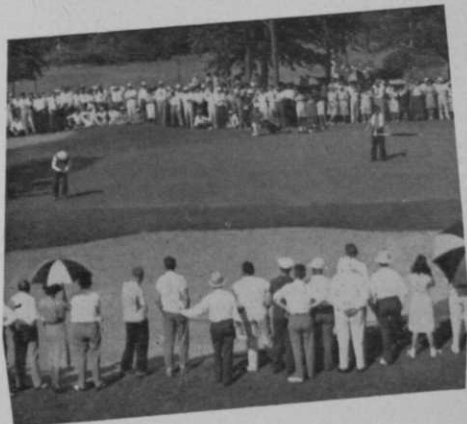
PERSONNEL

O. J. Noer is nominated as the "Turf Man of the Year" for his unselfish devotion to the cause of "Better Turf," for his willingness to cover the trouble spots at a moments' notice, and for his wide and accurate knowledge of the field and for the dissemination of that knowledge (with pictures) through Golfdom and The Greenkeepers Reporter and various meetings all over the United States. Mrs. Noer receives Honorable Mention.

COOPERATION

A highly significant trend is the growing desire of various turf interests to cooperate in matters of mutual interest. One matter

VELVETY GREENS AND FIRM FAIRWAYS DRAW GOLFERS TO YOUR COURSE



Feed **VIGORO** **NOW!**

● Smooth, uniform greens — even, thick fairways attract golfers. And naturally that means more profits.

Managers of golf courses everywhere have discovered how Vigoro — complete, balanced plant food — helps produce play-attracting turf. Vigoro supplies *all eleven* nutrient elements grass must have for best growth and development. So order Vigoro today and feed it regularly. You'll be mighty pleased with the results Vigoro helps produce.

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Plant Food Division
U. S. Yards
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SNOW-PROOF

*Leather's
Best
Friend*

Get your share of the profitable SNOW-PROOF business. Nationally advertised. Water-proofs, reconditions golf shoes, golf bags, etc. Stops dry rot. Prevents mildew. Odorless, colorless, not sticky. Sold only in Bismark Brown cans. Retail at 3¢ oz. 25c. 1 lb. 75c. 5 lbs. \$3. Money-back guarantee. Descriptive folder and sample can sent FREE on request.

Dept. 13
THE SNOW PROOF CO.
Livonia, N. Y.



O. J. "Red" Noer nominated "Turf Man of the year" for his unselfish devotion to the cause of better turf.

FREE TO GOLF COURSE MANAGERS

A Generous Sample of the New
"WEED MARKER"

The Only 2-4D Weed Killer that "Marks" as it Sprays. ELIMINATES Double Spraying.

- ✓ Leaves a faint white residue where sprayed.
- ✓ Kills dandelions and clover; destroys the roots.
- ✓ Gets results on the fairway by covering ALL the weeds. Request free sample on Club Letterhead.

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132 E. Ave. N.W. CEDAR RAPIDS, IOWA

FINE SEED FOR FINE TURF

IT PAYS TO GET THE BEST

WE SPECIALIZE IN GOLF TURF

GRASS SEED

SELECT VARIETIES — MIXTURES

KENTUCKY BLUE GRASS	
CHEWINGS FESCUE	FANCY RED TOP
ASTORIA BENT	PERENNIAL RYE GRASS
SEASIDE BENT	DOMESTIC RYE GRASS
WHITE CLOVER	ORCHARD GRASS

**KENTUCKY BLUE GRASS
MUCH LOWER IN PRICE.**

Plan your needs now. Ask for Prices

J. OLIVER JOHNSON SEED CO.

946-960 W. HURON STREET

CHICAGO 22, ILL.

Phone: Monroe 6580

of mutual interest to all turf interests is the training of more young men so that the extension or service phase of turf may be expanded. In the absence of interest on the part of State Extension Services to recognize the value of Turf in their work of service, commercial interests are hiring qualified men with whom turf management comes first and salesmanship second.

Another mutual interest is that of convincing state experiment stations and state legislatures that turf management is a legitimate and important part of the GRASS program and that any Grass program (research, teaching or extension) which omits turf is not complete.

Highest praises go to the state experiment stations and their personnel who are cooperating in the national turf program. Orchids go to the many golf associations and other turf groups who have contributed over \$11,000 in two years to the Green Section's decentralized research program. The trend in contributions is still upward.

SUMMARY OF TRENDS

Mixtures of grasses rather than pure stands.

Fewer and lighter topdressings.

Better drainage.

Unsatisfactory greens being rebuilt.

Less watering.

More crabgrass and clover resistant grasses.

Closer mowing on greens and tees.

Management of turf to make golf more FUN.

Morning watering of greens.

More cultivation of compact soils.

Weed-free roughs, naturally and with chemicals.

Better grasses on the way.

Fewer "new" green chairmen.

More golfing greenkeepers.

Fewer ants with chlordane.

ANNOUNCING

The makers of the famous Dunham Water-Weight Rollers again make available the Spike Disc Lawn and Green Cultivators. Putting Greens, Estates and Clubs use Spike Disc for healthier lawns—lawns that last throughout the summer's drying heat. Spike Disc breaks up hard-baked surfaces . . . forms mulch so necessary to retain moisture . . . aerates and cultivates in ONE simple operation. By means of a hand attachment the discs may be raised over walks and other hard surfaces, plus an added convenience for storing purposes.



Knife-like blades cut neat slots to root areas.

SEND FOR DETAILS TODAY

Sales Representatives

JOHN H. GRAHAM & CO.

105 DUANE STREET

NEW YORK, N. Y.

19th GSA

NATIONAL TURF CONFERENCE AND SHOW

Hotel Book-Cadillac, Detroit, Mich.

FEBRUARY 9-13, 1948

Sunday, February 8

10:00 A.M.—EXECUTIVE COMMITTEE MEETING

Monday, February 9

All Day—SETTING UP EXHIBITS

1:00 P.M.—TOUR OF GOLF COURSES

12 Noon—REGISTRATION

6:00 P.M.—GET - ACQUAINTED HOUR—Introduction of District Committees

Tuesday, February 10

8:30 A.M.—REGISTRATION

9:30 A.M.—EXHIBITS OPEN

10:00 A.M.—ADDRESS OF WELCOME—on behalf of city of Detroit

8:30 P.M.—MEMBERSHIP MEETING—First Session

Wednesday, February 11

9:30 A.M.—REGISTRATION

All Day—EXHIBITS

2:00 P.M.—EDUCATIONAL CONFERENCE—General Session

Thursday, February 12

9:30 A.M.—REGISTRATION

EXHIBITS—Close at 1:00 P.M.

EDUCATIONAL CONFERENCE—Section Meetings

10:00 A.M.—1. Turf Management for Landscapers, Parks, Cemeteries and Home Owners

2:00 P.M.—2. Northern Turf Grasses

2:00 P.M.—3. Southern Turf Grasses

8:30 P.M.—MEMBERSHIP MEETING—Second Session
New Business and election

Friday, February 13

10:00 A.M.—EDUCATIONAL CONFERENCE—General Session
Executive Committee Meeting

4:00 P.M.—EXECUTIVE COMMITTEE MEETING

REGISTRATION FEES

Member, \$5.00 Non-Member, \$10.00
Ladies, \$5.00

Five dollars of non-member registration fee can be applied to first year's dues should individual desire and qualify for membership. Application for membership must be made within 90 days of payment of non-member registration fee. GSA dues are \$10 yearly.

AERATOR FOR GREENS—Aeration of greens without damage to turf regardless of number of cuttings, leaving it in perfect playing condition, is made possible by the development of the "Rotoblade Aerator." Of rigid construction with base plate slotted for the cutting discs, the cutting depth is adjustable from 1½ to 2½ inches and can be removed for occasional sharpening. Shipping wt. 115 lbs., manufacturer, The Sabin Machine Co., 6536 Carnegie Ave., Cleveland 3, O.

DEAR MR. SANTA CLAUS:

Please extend to the Golfing World and especially the Green Superintendents a most hearty

Merry Christmas

and a NEW YEAR full of Prosperity and Happiness.

Yours for Better Turf,

Old Orchard Turf Nurseries

R. R. BOND, Prop. Madison 1, Wisconsin

MANUFACTURER'S PREVIEW

GOLF BALLS PLENTIFUL IN 1948, RESEARCH TO BEST PRE-WAR BALL

By G. T. McCarthy, Mgr., Golf Ball Sales
U. S. Rubber Co.

It is apparent that the shortage of golf balls is over and the pro will have plenty of balls to sell in 1948. The U. S. Rubber Co. will again offer to the golfing public through pro shops only, balls in two price classes—the U. S. Royal (Blue) for the pro and expert amateur and the U. S. Royal (Red), a specially built ball for the golfer who likes extra durability and good distance. These brands will retail for 95c each. The U. S. Fairway will retail for 70c each and will be available in greater quantities throughout 1948.

It is doubtful, because of material and labor costs, that golf balls to retail for less than 70c each will make their appearance in 1948.

Since the return of natural rubber, the U. S. Rubber Co. has concentrated its research and development resources at their plant in Providence, R.I., in developing better balls than pre-war. The picture for 1948, due to further improvements, is even brighter than it was in 1947. Announcements about these improvements will be made later.

U. S. Royal golf gloves will be available in greater quantities to meet demands. They will be offered to the pro for his members, in a DeLuxe Table Cut style as well as in an improved and more competitive, Block Cut type. New posters, as well as improved score cards, together with other sales helps, will be offered to the pro to aid him in making 1948 a banner year.

U. S. sales representatives are now taking advance orders for spring delivery to assure pro plenty of U. S. Royals and U. S. Royal golf gloves to start the new season.

To make it easy for the pro to wind up 1947 in a blaze of plus business, the U. S. Rubber Co. is offering U. S. Royal and U. S. Fairway golf balls put up in attractive Christmas gift packages.

MACGREGOR'S 1948 LINE OF MER- CHANDISE MOST COMPLETE IN COMPANY HISTORY

By Robert D. Rickey,
MacGregor Golf, Inc.

We will offer next year the most complete line in our Company's long history.

The Tommy Armour and Byron Nelson Tourney lines will again be featured. Both of these models have been vastly improved and should offer the professional a completely representative line to choose from. We are featuring several new wood laminated models in our line, which are manufactured in their entirety in our plant. There are also several new pitching irons exemplified by the Double Service Niblick, the most radical innovation in our golf club line.

Fred Metz, widely known in Rocky Mountain area sports equipment circles, recently appointed golf sales rep. of MacGregor Golf, Inc., Cincinnati, for Co'o., Wyo., and New Mexico with headquarters in Denver, by Henry P. Cowen, pres. and gen. mgr.



We have "field tested" the new Tourney golf ball these past six months in all the major tournaments and hope to announce very soon our anticipated program for the ensuing year.

Bill McNulty, sales mgr., has contracted for an extremely representative golf bag and accessory line, which features many of the favorites of the past season, such as the popular G-10 Golf Pax.

The stability acquired by the textile market in the past year has allowed Mac to assemble a complete sportswear line, too. The actual number of units in the line has been reduced in order to achieve greater continuity.

The new Wolwood shirt I'm sure will be headlined in many pro shops. The line again includes the popular Field shirt, the washable cotton shirt that retails at \$4.00.

In our recent publicity release we told of an expansion program we had undertaken to offer better service from our branch offices with new locations in Chicago, Detroit, Los Angeles, and San Francisco, which afford us much better facilities to service our professional accounts in those territories.

NEW SPRINGFIELD CUSTOMBILT PRO LINE ANNOUNCED FOR 1948

By Norrie Savaria, Pres.,
Sporting Goods, Inc.

Here is the golfing news-of-the-year—a club-making development which permits pros to prescribe clubs to fit the player with prescription-like certainty. It's done with the four new models of the Two-Action Shaft. With every set of CUSTOMBUILTS sold by the professional, the correct Two-Action Shaft can be prescribed—the one that fits the member's personal requirements;

PRO-FLEX for the hard hitting professional,
TOURNA-FLEX for the tournament-playing amateur,

CLUB-FLEX for the average golfer, and
MAXI-FLEX for the older golfer.

There are, in addition, three features of the prescription clubs which provide the opportunity to resell every member of the club with these

CUSTOMBUILT special pro models. 1. A solid copper "Personalizing" seal is permanently brazed into the stainless steel head. 2. It provides ample room for the member's initials—stamped in by the pro with a lifetime "Personalizing" Kit furnished without cost. (The "Personalizing" feature is optional, but we've a hunch they will like it.) 3. To credit the pro as the source of these custom-made clubs, we will stamp on the "Personalizing" seal, by request, either the club name or the pro's name.

We think our pro line for 1948 will be a "hit" with the pro trade.

"PAX" GOLF BAGS FEATURE OF 25 MODELS IN PRODUCTION FOR '48

By John R. Thompson
Des Moines Glove & Mfg. Co.

Particular sales emphasis will again be placed on the outside compartment "Pax" bags, which provide separate compartments for each club. This style, pioneered by Tufhorse, has gained much popularity.

Our new numbers are now in production. Style selections have been widened to twenty-five models, ranging from lightweight canvas and plastic to fine leather, at retail prices ranging from \$3.50 to around \$100.

New style pockets, hoods, straps and zipper closures have been streamlined. New strengthened bottom construction has been adopted, balance and ease of carrying has been improved. Oval, oblong and pear shaped designs for collar on top of bag are being stressed. Some models feature full length pocket with curved zipper that permits outside hood, relieving golfer of necessity of taking out divider straps.

1948 will find these new models ready with many of the stock numbers the same as last year.

Over-all ORGANIC FERTILIZERS For the Fall

Pure bone meal, and mixed fertilizers containing a guaranteed substantial percentage of bone meal and other organics.

For—Flowers—grass—shrubbery—evergreens.

Applied in the Fall, it is active in the Spring and carries through to make luxuriant vegetation and dark friable soil—a lasting investment with gratifying results.

Get in touch with our Red W dealer in your neighborhood or, if you do not know his name, communicate with us direct and we will advise you.



4100S. Ashland Ave., Chicago, Ill., Dept. 11
Packers and Producers
of Red W Brand Feeds and Fertilizer

Look at the SAVINGS you get with HENRY BALL WASHERS

... backed by years of thrifty performance

Saves players' clothes and tempers because it is sloop-proof. Saves time because it is quicker, more thorough and easier to use. Saves cover paint of balls because it has no scouring bristle brushes. Saves frequent replacement costs because its cleaning units won't rot and warp . . . and its unbreakable steel jacket is rust proof.

Attractive — stays tidy — easy to drain and refill — Allen Set Screws make them theft proof

BALL WASHER . . . \$12.75
Tee Data Plate . . . \$ 1.25
Waste Paper Cont'n'r \$ 2.35
Complete Tee Ensemble . . . \$16.35

HENRY TEE ENSEMBLE includes Ball Washer, Tee Data Plate and Waste Paper Container.

Send score card when ordering Tee Data Plates.

PRICES F. O. B.
ELM GROVE, WISC.

Manufactured by
GOLF & GARDEN EQUIPMENT CO.
BLUE MOUND ROAD, ELM GROVE, WISCONSIN



THE POCKET GOLF BALL CLEANER

Small Round Plastic Box
Leak Proof Cover

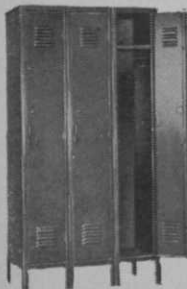
Handy • Clean • Sanitary
Efficient • Non-breakable
Non-Abrasive • No Destructive Action

The Golfer's Pocket Companion
The Answer to the Golfer's Prayer

Discount to Dealers

Price \$1.00

POCKET GOLF BALL CLEANER CO.
5735 Cass Ave. Detroit 2, Mich.



Storage or Wardrobe

CABINETS

72"x34"x18" Style 45T
shown with 4 adjustable shelves. Also available Wardrobe Type, Style 1WA.

\$42.95

(Combination Wardrobe and Storage Cabinet, Style 3CW, slightly higher.)

NEW ALL-STEEL EXTRA HEAVY GAUGE

Heavy construction, baked olive green enamel finish. Yale locks and keys. (All prices FOB plant). Send for quotations on your shelving requirements.



IMMEDIATE DELIVERY

**STANDARD STEEL
EQUIPMENT COMPANY, INC.**

Mfgs. of Steel Cabinets, Lockers and Shelving
Dept. 60, College Pt., L. I., N. Y.

LOCKERS

NOW AVAILABLE!

78"x12"x18" Single Tier. 3 or more wide. **\$15.50** per door



HAGEN PRESENTS LADIES' LINE, NEW GOLF BAG & IMPROVED WOODS

By E. P. Rankin, Gen. Mgr.,
Walter Hagen Golf Division

The Walter Hagen wood club line is almost entirely new. Many improvements in model design and new materials are featured.

Four new models using the Strata-Bloc head are offered in a wide range of prices.

The now famous groov-grip is no longer confined to our top number, but is used on all woods except the two lowest priced models.

The entire wood line is equipped with the True Temper shaft.

The Tri-Balanced feature assures the finest playing qualities that can be incorporated in golf clubs.

A new No. 5 wood for both men and ladies has been added to our line.

The very popular Haig iron will be carried on exactly as offered this year. The acceptance which our Haig model had in 1947 assures a continued sale through 1948.

A brand new model known as the Speed-Flo iron which incorporates fine material and workmanship is offered at attractive price.

Also new is the Strate Away, a fine iron in the medium price range.

Since our entire sale is confined to pro shops, we thought that we should build a wood and an iron that would put the pro in a position to meet any competition. Consequently, we have added a low priced wood and iron in men's and ladies' weight. This new low priced model will definitely meet any competition.

We are presenting a fine line of ladies' golf clubs, three models of woods and irons priced to meet any budget. No effort or expense has been spared to make this the finest ladies' line of Walter Hagen golf clubs ever offered.

Our ball line will still consist of the Trophy Plus, International, and Speed-Flo, all dressed up in brand new packages. We are constantly improving these golf balls and feel that 1948 holds a good future for all of them.

We are presenting a new golf bag line. Each new model a fine value in its price range. Many new features are to be had both in our fabric and leather bags that should greatly stimulate their sale.

We are offering a very complete line of sundry items such as shirts, shoes, hats, caps and, in fact, everything used by men and lady golfers.

I would say that this 1948 line of Hagen golf equipment, for Pro Shop Sale exclusively, is the most complete, finest styled line ever to bear Walter Hagen's name.

COMPLETE LINE OF EQUIPMENT OFFERED BY WILSON IN 1948

By William F. King, Vice-Pres. & Gen.
Sales Mgr., Wilson Sporting Goods Co.

Wilson Sporting Goods Co., for the first time since the war, will be able to offer in 1948 a well-rounded line of golf equipment with substantial quantities of clubs in popular price ranges.

When it is GOLF PRINTING!

Specialists, for years to many of America's largest and most exclusive courses, can best serve you, too.

Score Cards - - Charge Checks
Greens Maintenance Systems
Caddie Cards - - Handicap Systems
Forms for Locker and Dining Rooms
and for the Professional.

Samples to your club for the asking.

VESTAL CO., 703 S. La Salle, Chicago

WILLIAM P. BELL AND SON
GOLF ARCHITECTS

Member: American Society
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544 Sierra Vista Avenue
Pasadena 10, California

ROBERT BRUCE HARRIS
Golf Course Architect

Member: American Society of Golf Course Architects

664 N. Michigan Ave.
CHICAGO 11, ILL.

Phone: Whitehall 6530

There will be numerous improvements as well as additions to the club line; increased production of golf balls to meet the demand; refinements and style developments in golf bags; a new style spike with a broader base in the shoe line; and new knit head covers to complete a wide range of sundries in the Wilson line for 1948.

Gruv-Grip and Strata-Bloc will be features of new Gene Sarazen personal model woods and irons, the Sam Snead and Patty Berg Signatures. The finish on wood heads now is composed of same ingredients as before the war with a general facelifting in appearance using decals instead of stamping. Number five woods will be in production for the first time since the war.

Golf balls require more technique in production than any other product. Our production is up because we have improved machinery thus assuring uniformity of quality and packaging with a special Christmas wrapper planned for Christmas selling.

Production in golf bags in 1948 is expected to exceed that of 1947. The hoseduck is back and available again. The plastic coated bag introduced a year ago has wide acceptance and will be improved for '48 trade.

The new style spike on Wilson golf shoes makes a lighter weight shoe, according to staff players. We feel the additions and improvements in equipment Wilson is making for 1948 will provide the pro and the player with the widest range of quality merchandise the company has offered.

**HILLERICH & BRADSBY ADD NEW
LINE FOR 1948 PRO TRADE**

By Bill Kaiser
Hillerich & Bradsby Co.

We are again featuring genuine persimmon in all wood models and we are carrying stainless steel in our top line of irons. In addition the True Temper shaft is being featured throughout our golf line.

A new line of woods and irons personally designed that will carry the Bill Kaiser autograph has been added for 1948 distribution. This line will be sold exclusively through golf professionals, the same as our Louisville Power Bilt line.

We have endeavored to keep our price within the range of every golfer, for we realize that if the price of clubs continues to rise, there will be some golfers who will think the game is getting out of bounds. We have golf clubs available in price ranges for all golfers.

Everything possible is being done as far as production is concerned to take care of the demand, but we will not do anything that will in any way effect the top quality we have always strived for in our Power Bilt equipment.

**HYSPEED AND FORESPOT BALLS
BURKE FEATURES FOR PROS IN '48**

By Sam Holler, Sales Manager,
Burke Golf, Inc.

Throughout the 1948 season Burke Golf, Inc. will be featuring the Recorded line of woods and

ROBERT TRENT JONES

Member:
American Society of Golf Course Architects

**Golf Course
Architect**

20 Vesey Street
Tel: Rector 2-2258
NEW YORK, N. Y.

ALFRED H. TULL
Golf Course Architect

420 Lexington Avenue
NEW YORK 17, N. Y.

12-YEAR SUCCESS!



RILEY E. HECKERT, Greenkeeper, Country Club of Harrisburg, Pa.

"TWELVE years' experience shows that AGRICO COUNTRY CLUB FERTILIZER produces a good, heavy turf that stands up under hardest play even in hot Summer," says Riley E. Heckert, President, Central Penna. Greenkeepers Assn. "I fertilize fairways in Fall with Agrico, about 600 lbs. per acre, and top dress greens with Agrico in September, April and June, supplementing this with an application of AGRINITE Tankage in early Summer. I'm glad to recommend Agrico and Agrinite to all Greenkeepers to keep their courses in tournament condition all year around." Order AGRICO from your supplier, phone nearest A.A.C. Sales Office, or write to The AMERICAN AGRICULTURAL CHEMICAL Co. 50 Church Street, New York 7, N. Y.

AGRICO Country Club Fertilizer

GRASS SEED of "Known Quality"

Tested For Purity and Germination
Golf Supplies & Equipment
Immediate Service

Stump & Walter Co.

SPECIALISTS IN GOLF GRASS SEEDS
FERTILIZERS AND EQUIPMENT

132-138 Church St. (Corner Warren St.)
NEW YORK 8, N. Y.

• BENT GRASS •

Stolons and Sod. Washington — Cl — and
other recommended strains.

HIRAM F. GODWIN

22366 Grand River Ave., Detroit 19, Mich.

irons for the professional trade and, if everything goes well, we will be in a position to do much better for them next year as far as delivery is concerned.

These clubs will be available in both men's and ladies' makeup. The wood club line will be strengthened considerably by the addition of the 24 model which carries a round head with a deep face on the driver and medium depth faces on the Nos. 2, 3, and 4 woods.

A special feature will be the Hyspeed ball next season which will carry a compression test of from 90 to 95 points. This will make an excellent ball for the low handicapped golfers. We are also glad to announce that the Burke Forespot ball will be back next season in the 70c retail price range. This brand is well known to the majority of our professional trade and will be made up in the same durable quality as supplied before the war.

Worthington Ball Production Up

By J. C. Brydon, Vice president,
The Worthington Ball Co.

We feel, on the basis of the past season's experience, that the prospects for the golf professional in 1948 will outdistance the strides made in his business in 1947. There will be a big increase in play in 1948. Every pro should set his sights for a successful season.

Worthington business with golf professionals throughout the country exceeded our expectations. We can safely say our pro trade business increased approximately 50 per cent over any previous year. This gives you some idea of why we are so enthusiastic about pro shop business for 1948.

Worthington ball production will be stepped up to meet the anticipated demand so there will be plenty for the pro trade. Pros with an eye for business should take advantage of the Christmas season and make his shop a center for appropriate gift purchases. Our policy of continual improvement in quality coupled with increased production should pave the way for better pro business.

Acushnet Looks to Banner Year

By F. W. Bommer, President,
Acushnet Process Sales Co.

The greatest season in company history presages a banner year in 1948 for ACUSHNET golf balls. The return of better materials to the market makes possible continued improvement in our Titleist line.

Cooperation of golf professionals in the majority of pro shops in this country leads us to make the statement that there is an even greater acceptance of ACUSHNETS than before. Increasing interest by pros in becoming better merchandisers—a result of the lean war years when golf clubs and balls were scarce or not available and they had to turn to other equipment items to sell—is proving a direct benefit to not only the pro but everyone in the industry. The appreciation and thanks of all of us go to those who have been able to carry on successful merchandising programs.

BENT GREENS

(Continued from page 66)

As grass clippings accumulate in the catcher box their weight affects the cut because the box is placed on the front of the mower. The effect is like a fulcrum with the added weight placed on the far end of the bar. It is accentuated when the grass is damp or wet at mowing time. The cut is closer and the likelihood of scalping is increased. Operators should be trained to empty the grass catchers before or when they are half filled. This will insure a better cut green.

Close cutting right up to the edge of banks and traps alongside the green is bad practice. Excessive wear is sure to occur when the mower turns on close-clipped grass. It is caused by the twisting and bruising action of the drum. Corrugated drums are worse than smooth ones in this respect. There should be a fringe or apron of longer grass around every green, wide enough so the operator can turn the mower on it. The best plan with power-operated equipment is to lift the cutter bar slightly by bearing down on the handle just before the fringe is reached. After crosswise cutting is completed, mowing is finished by cutting once or twice around the green next to the edge of the apron of longer grass.

Apron Cutting Practice

Aprons are usually cut at $\frac{1}{2}$ to $\frac{3}{4}$ inches. Golfers may complain that this is too high when the grass in the apron is one of the aggressive types of creeping bents. The dense turf along the edge of the apron acts like a wall. It stops the ball abruptly. When the ball is lodged against this wall the use of a putter is difficult or impossible. The objection is overcome at a few clubs by cutting the fringe a trifle closer for two widths of the mower. This necessitates keeping a mower for this purpose, or cutting the entire apron by hand with a power mower at less than $\frac{1}{2}$ inch, possibly at $\frac{3}{8}$ inch.

Reasonably close cutting of aggressive strains of creeping bents in the aprons is sound practice. Otherwise they become heavily matted and shallow rooted because air does not penetrate the mat. Localized dry spots develop in summer and the grass dies. On courses where the aprons are cut with fairway units, the mat should be removed by raking and close cutting in the spring when grass is ready to start growth.

It is best to have one man who is a good mechanic responsible for the putting green mowers. He should be conversant with their mechanical features and should adhere to the recommendations of the manufacturer about adjustments, oiling, greasing, etc.

Other workmen should not tinker with them. Setting for height of cut should be made in the shop by him and checked on a green. All mowers should cut alike. The reel should be sharp and set correctly in relation to the bed knife. Reel and other bearings should be replaced at the first sign of enough wear to create play in the reel shaft. Corrugations in the turf sometimes result from a low frequency but are more often evidence that the reel bearings are worn and that the mower is not functioning as it should. Only by keeping mowers in top mechanical condition at all times can one expect to have well cut greens.

Power greens mowers are here to stay, partly because workmen rebel at hand mowing. Even the best ones appear to shock wilting grass in hot weather more than hand operated mowers. Club officials have been led to believe that power mowing of greens eliminates one or more workmen. Increased efficiency of the force is a better reason for using them because most clubs have too small crews already. The cry for greater speed to save mowing time is a desire of doubtful value. The craze for fast mowing on fairways was shortlived. Slower cutting has resulted in better cut fairways and has gone far toward the elimination of washboards or corrugations in the fairway turf. Some similar drawback is apt to occur from excessive speed in mowing greens. In time excessive speed will be frowned upon and a reasonable one, faster than hand cutting, will prevail.

STORE AUTHORITIES

(Continued from page 50)

mote human comfort. Such amenities are a subtle compliment to the customer and indicative of management's regard for them.

Buyers can hardly be regarded as customers until they form the habit of satisfying their needs through a certain firm because they have found conditions that entitle them to act on their own judgment. Store fixtures that assist customers in evaluating merchandise and determining prices without personal assistance are potent factors in developing a sense of assuredness.

To rely exclusively on personal contact is expensive and in many situations, it is inadequate. If persons who pass or enter a place of business are unfavorably impressed by what they see, they may not accord a merchant the opportunity for a personal contact. Hence, modernization of buildings and equipment to promote customer comfort is essential to a full penetration of the market.

COLONIAL EXPERIMENTS WITH GREENS



R. M. Alexander

Colonial Country Club, Ft. Worth, Tex., greens committee and greenkeeper R. M. Alexander are experimenting with new soil mixture for foundation in the rebuilding of two new greens after a study of existing greens with Fred Grau, Director, Green Section, USGA revealed present foundations were of the wrong texture with no tile drainage in any of the greens.

The new mixture will consist of Minnesota peat, sharp sand, soil with gravel base and tile drainage.

Minnesota peat has been used as top-dressing on all greens and milorganite for fertilizer for the first time since 1941 which Alexander reports gives very satisfactory results.

The Colonial CC greenkeeper is high in his praise of mechanical equipment which has made it possible to adopt new methods in the maintenance of his course. Use of the turferator, in his opinion, has afforded his club members much better greens than before. The Jari Mower has eliminated practically all hand work in keeping the more than two miles of fence clean and the Gandy Spreader has made possible a more even and efficient distribution of fertilizer on the greens as well as the fairways.

EUGENE "SKIP" WOGAN GOLF COURSE ARCHITECT

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Bob Williams, grnkpr., Beverly CC, Chicago, demonstrates his recently developed, permanently attached short spray boom.

WILLIAMS DEVELOPS SHORT SPRAY BOOM

A simple, practical, out-of-the-way spray boom that can be used as a permanent attachment on the front of a tractor has been developed by Robert M. Williams, greenkeeper at the Beverly Country Club, Chicago.

The "Bob Williams Boom" was intended for 2,4-D use only but Bob has found the new type boom effective for fairway fertilizing where wet applications of lead arsenate and DDT are used.

Permanently attached, the boom is not in the way when the tractor is used for other operations. The spraying equipment is ready as soon as the boom line hose is connected to the sprayer line hose.

The boom is only four feet wide but covers 36 feet of turf when spraying, enabling a person to blanket a fairway in four or five swaths in a matter of approximately 10 minutes or a complete 18-hole course in three hours. It has three adjustable nozzles each covering a 95 degree arc and they are so arranged as to cover a total arc of slightly over 180 degrees.

Excellent results have been obtained with 60 gallons of water per acre with recommended quantities of 2,4-D. Pressure is not a factor to contend with inasmuch as varying pressures ranging from 200 lbs. to 700 lbs. have been used with little noticeable difference. Wind drift is reported to be less with the short boom making it possible to do spraying on days that were formerly too windy.



300

Golf Clubs used **LIQUA-VITA**, the complete liquid fertilizer, on their greens this summer — report excellent results — no burning — better turf — generally improved condition. Applied with fungicide.

"A TRIAL WILL CONVINCING YOU"

Literature and prices will be sent on request.

AMERICAN LIQUID FERTILIZER CO., Inc.

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