gram was arranged between C. F. Irish, president of The Chas. F. Irish Company; L. M. Gariety, Superintendent of Grounds of the Cleveland Fine Arts Museum; and the writer, representing the Department of Entomology of the Ohio Agricultural Experiment Station. The objective sought was the evaluation of several materials for the control of this insect. The formulae used were as follows:

1. Nicotine sulfate .......................... 1 gal.
   Pine Tar Soap ............................ 3 gal.
   (Grandpa’s Wonder)
   Water .................................... 300 gal.

2. Nicotine sulfate .......... 1 gal.
   SS—3* .................................. 1½ pt.
   Water .................................... 300 gal.

3. Loro .............................. 1 gal.
   SS—3 ................................... 1½ gal.
   Water .................................... 300 gal.

4. Nicotine sulfate .......................... 1 gal.
   Penetrol ................................ 1½ gal.
   Water .................................... 300 gal.

5. Nicotine sulfate ........... 6 lb.
   Hydrated lime ......................... 50 lb.

6. Commercial tobacco dust
   (Containing 1% nicotine)

7. Cyanogas G—Fumigant (free flowing)

The four liquid formulae were used at the rate of 150 gals. per 1000 sq. ft. of surface and the dusts were used at the rate of 25 lbs. per acre. The liquid sprays were applied with a power sprayer operated at 360 lbs. pressure and were liberated through a three-nozzle spray broom directed by hand and held about 6 inches above the grass. By this device, the liquid was driven into the grass and was found to penetrate the soil to a depth of about 1-inch, when used in the amount indicated. At least a part of each area which received a liquid application was covered with waterproof canvas immediately after the material was applied.

One section of lawn was sprayed with the nicotine sulfate-pine tar soap combination on May 10, July 19, and July 26, and other sections were sprayed July 26 with all four of the liquid formulae. None of the liquid sprays gave a commercial degree of control when used as indicated, although the weather conditions attending the applications of July 19 and 26 were almost ideal for work of this sort. The temperature was about 100° F. and the

*This material is a sulfated alcohol composition, the value of which for use in spray formulas has been discovered recently by the Post Control Division of the Grasselli Chemical Co.

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When we say Golf Ball Marking can be satisfactory as well as profitable—we mean it.

AND PROVE IT!

Our proposition for installing the nationally known Fulname Marker puts you under no obligation unless satisfied. Our Trial plan will bring the outfit to you for demonstration to your players. Write for details.

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Put and Take

Put a Royer on the job—put more and finer turf on your greens and fairways—put more players on your course. All of which means putting more business in your club.

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Compost Mixers

Take less time to make better compost—take less material—take the raw material as it comes, lumps or sod, wet or dry—take less handling because it loads the compost—take fewer men to operate. All of which means they take less money to do the job—better and quicker.

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bugs were very active. To be sure, many dead bugs were found in each spray plot but the number surviving the treatment was much too large. It is possible that, had conditions permitted a more concentrated program on the first-brood insects, a greater degree of success would have been obtained.

The nicotine-lime dust and the commercial tobacco dust were applied July 31 and the Cyanogas was applied August 19. The plots treated with nicotine-lime dust and with tobacco dust were covered with canvas, which was left in place for a period of 5 hours. The Cyanogas plot likewise was covered but for a period of 15 minutes only. This period was considered adequate from the standpoint of the effect of the treatment on the insects, and it was deemed inadvisable to continue it longer because of the possibility of damage to the grass.

In general, it may be said that all of the dust treatments yielded a satisfactory degree of control. When all points are considered, including that of safety to plants, the ground tobacco dust perhaps should be given the highest standing insofar as this test is considered, but further work might alter the relative standing indicated. Slight burning was caused by the Cyanogas, particularly at points where unevenness of distribution caused undue concentrations of the material. To supplement our findings, it may be said that Dr. Van Dyke of Canton states that he secured satisfactory control from tobacco dust. Prof. H. E. Hodgkiss of Pennsylvania State College reports that he obtained good results from the use of nicotine-lime dust.

Other workers have reported favorable results from nicotine-soap sprays, and some have obtained indications of success when rotenone was used as the killing agent.

The general consensus seems to be that some additional work remains before recommendations concerning the control of this troublesome pest can be made with absolute assurance.

New England PGA’s Get-Together
at Boston, April 9

Third annual Get-Together dinner of the New England PGA will be held at Hotel Somerset, Boston, Mass., April 9 at 6:30 P. M.

The event brings together the section’s pros, officials and manufacturers’ representatives for a day that brings out smart
planning and buying for the forthcoming season.


ANNUAL dinner of the Service Section of the Massachusetts GA will be held at Woodland GC, April 16. Executives and green-chairmen of clubs and members of the New England Greenkeepers Assn. are invited. Program following the dinner will concern practical problems of officials and greenkeepers.

WET weather golf apparel is being given a strong play by smart pros early this year. There are some new ideas in golf rainjackets and trousers that look well and are comfortable at all times. The spiked rubber shoes so popular in England and Scotland finally have registered with American players and are selling big in several districts.

Pros see, in their success with rain apparel, a good chance for offsetting to some extent the adverse effect of weather on shop sales.

GOLF'S MARKET PLACE

Dunlop Tire & Rubber Co., Sports Dept., 500 Fifth ave., New York City, has a limited supply of pocket-size golf penalty books with rules condensed, which pros can obtain for distribution to their members until the supply is exhausted.

The company also has 1936 appointment books for pros which may be secured free from Dunlop salesmen, as may the usual tournament score-sheets.

Better Golf Service, St. Cloud, Minn., has a "Correct Timing" practice golf club that has received pro endorsement. The club has a recess in the woodhead in which a regulation or knitted golf ball is held. There is a latch over the face of the club which holds the ball in place until a wrist snap at the right time flips the ball out of its recess.

READY AND ABLE TO SERVE YOU.
Three Nurseries Growing Old Orchard, Metropolitan and Washington.

OLD ORCHARD TURF NURSERIES
Box 350    R. R. Bond, Owner    Madison, Wisc.
A. N. PECKHAM
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has produced and furnished direct to golf clubs, parks, etc., different varieties of

**Bent Grass Seed**

This seed grown under the rigid climatic conditions of New England produces grass that has built up RESISTANCE to the various fungus diseases prevailing in our northern States.

It is, of necessity, WINTER HARDY and makes a fine bladed, permanent, desirable turf for your greens, lawns, etc.

We also furnish a FAIRWAY MIXTURE composed of 5 different varieties of fine turf grass seed which produces a BALANCED closely woven turf on lawns, tees, tennis courts, fairways, etc.

**PURCHASE YOUR SEED DIRECT FROM THE FARMS WHERE IT IS GROWN AND THUS SAVE FOR YOUR CLUB ALL MIDDLE-MEN’S PROFIT.**

Price details may be obtained from the manufacturers.

The new Par golf ball washer, manufactured by Par Golf Products, Inc., 410 Hanna Bldg., Cleveland, Ohio, will be ready for shipment April 15, according to the manufacturers. Back orders are being filled first, but the new production schedule will allow shipment of new orders by April 20. The Par was subjected to many tests and much intensive study during the past several months, and the makers assert it a great advance in golf course equipment. The Par, which can handle up to three balls at a time, sells for $8.50, or $10 complete with the mounting post.

Extra! Believe It Or Not—Mac Smith Changes to Steel!

MACDONALD SMITH signalized his 46th birthday, March 18, by announcing he had changed to steel shafts. Mac’s choice is the Vickery shaft made by True Temper. The veteran Carnoustie star had held out against steel, stating he feared sacrifice of feel and control of shots if he switched to steel shafts.

Extensive tests with the Vickery shaft convinced Mac that the new True Temper development supplied the delicacy of touch he desired from a shaft as well as the zip for added length.

The Vickery shafts selected by Mac for his personal use also are used in Macdonald Smith clubs made by Link-Lyon, Inc., Nashville, Tenn., and sold through pros exclusively.

Walter Roberts and John Miller, pro dept. managers of Spalding's, advise that suitable display cards advertising their company’s products for display in pro-shops are now being distributed. Walt and John feel that the pros will be highly enthusiastic about this year’s sales helps, for they’re more attractive than ever and carry plenty of punch. Included in each set are cards pointing out the merits of Jones irons and woods, Spalding golf balls, etc.

Arthur D. Peterson Co., Inc., 420 Lexington ave., New York City, has issued a 1936 catalog of course maintenance equipment and supplies, which combines a buying guide and operating handbook sure to find active service with the greenkeeper, park and estate supt.

This valuable reference book will be sent free on request by the Peterson organization.

**HYDROLIZE for PERFECT GREENS**

. . . AND CUT MAINTENANCE COSTS!

The Hydrolizer System provides a new precision service for brown patching, fertilizing, worming, insecticiding, and limeing—with new savings in costs—a new sale method that requires no preliminary mixing or pumping, and guards against the misuse of chemical values. You set a simple control for the mildness or richness desired and the Hydrolizer does the rest, automatically. The Hydrolizer System is highly recommended by greenkeepers and horticulturists throughout the country. Write for complete information telling of the many advantages and savings in labor, time, and money.

WRITE TODAY! AMERICAN HYDROLIZER CO., ELMHURST, ILLINOIS.
What happens when lightning strikes a tree.

New Equipment Protects Clubhouse From Lightning Damage

Most golfers can recall some particular tee where the shade of a paternal old oak, maple or elm really "makes the hole". Such trees, and there are thousands of them on American golf courses, stand in constant danger of damage by lightning. Once it is struck, a tree usually dies, even though the damage is not at first apparent.

The danger from lightning is considerably less for trees in groups, or single trees located on low ground. Isolated trees on high ground are more likely to be damaged.

Tree experts, with the help of electrical engineers, have designed material which adequately protects and may be applied without damage to the tree. A system of solid copper-woven cables are used as conductors, the ends being attached to ground rods or plates buried to the depth of permanent moisture at some distance from the trunk of the tree. The conductor cables are attached to the trunk and major branches of the tree and special "points" are fastened to the top terminals. A lightning charge is thus grounded without damage to the tree.

New concealed and semi-concealed lightning protection equipment for club buildings has also been designed, which

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Canyou Afford

To guess how to tackle course architectural problems when you can just as well know what, when, and how to handle them?—Right!

Of course you can't.

Whether it be a knotty problem of course design, treatment of tees and fairway layout, or other construction puzzles—you'll find the right answer in "The Links," by Robert Hunter.

GOLFDOM purchased the remaining supply of this book, which formerly sold widely at $4, and now offers it at the extremely low price of $1.25. When these books are gone, there will be no chance of getting your copy of "The Links."

62 full page photographs and illustrations make this book appeal to anyone interested in golf architecture. No club's library is complete without a copy. Act now! Order yours tomorrow.

Deal with GOLFDOM advertisers; they pay for your subscription
PERFECTIONS

LARGER—SLOWER—
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Combined with simplicity and lower prices has made Perfections the first choice of careful buyers.

For 1936 there is a Perfection to meet every requirement—from the New Fairway Size, No. WH15, to cover up to 200 ft. circle, at only $20.00—down to the old reliable No. T9 at $7.50 covering 75 ft. circle on only 20 lb. pressure.

Then there are the HD and HD Jr., especially designed, heavy duty Tee Sprinklers, $4.50 and $3.00.

Ask your dealer or write direct for full description and prices. Better still, ask for 10 day free trial.

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MOWERS

A new type Sickle Bar Mower for cutting hay and weeds in rough

Before purchasing any mowers, it will pay you to write us and have our complete mower catalog on hand

Power, Fairway, Greens mowers, Tractors.

ATTRACTIVE PRICES

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NATIONAL MOWER CO.
839 Cromwell Ave., St. Paul, Minn.

If you don't see what you need advertised in GOLFDOM, write us
sportswear to his line for the south central and southwestern territory.

Canvas Products Corp., Fond du Lac, Wisc., has just issued its new illustrated catalog showing a complete golf bag line for the pro. Special 1936 tailor-made Can-Pro bags that should make a big hit in the pro-shop this year are featured in the circular. Can-Pro's modern equipped golf bag plant has bags answering every pro's needs. Pros displaying the complete Can-Pro line of bags for both men and women are assured prompt delivery of all orders, due to the recently enlarged plant.

Stumpp & Walter Co., 132-138 Church St., New York, has issued a new edition of its famous operating and buying reference book, Golf Turf. The value of this book is well known to experienced greenkeepers. Copies will be sent free on request to greenkeepers and chairmen advising of their club connections.

Eastern Indicator Co., Inc., 22 East 40th st., New York, is supplying a number of country clubs with flood lights for club ground, parking space and pool lighting. The company also is doing considerable...
LIGHTNING PROTECTION
FOR CLUB BUILDINGS AND TREES


INDEPENDENT PROTECTION CO., Inc.
Dept. A  Goshen, Indiana

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That Happy Combination of Quality and Economy is offered in our

New Broadmoor One-Color Score Card

Produced by a New Process, its price is $21 for 5,000. The card, fully complete and comprehensive, is not small and the stock is heavy.

Samples to clubs on request
JOHN H. VESTAL CO., Printers
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BENT GRASS

BOTH SOD AND STOLONs

Vigorous, healthy stock that develops fine, true putting surfaces. Write for full information.

HIRAM F. GODWIN
Box A, Redford Sta.,
Detroit, Mich.

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business with driving ranges. The feature of the Bart floodlight that has found high endorsement in the golf field is the rhodium surfaced metal reflectors which combine tarnish-proof construction with lighting capacity that covers larger areas or makes it possible to reduce current bills for lighting restricted areas, such as the pool and parking territories.

All-Steel Equipment Co., Aurora, Ill., offers its new catalog completely illustrating and describing a revolutionary new line of lockers. Complete locker information showing all standard styles and sizes of lockers is included in the 16 page catalog, printed in 3 colors.

Polling 3,500 golf clubs on preference for stolon or seeded greens O. M. Scott & Sons Co., seedsmen of Marysville, O., report early balloting as 217 for stolons and 146 for seed, with a small number undecided.

Early vote shows Illinois 25 to 2 for stolons and New York 32 to 12 for seeded greens. Interesting details of the vote are given in Turf Talks, a bulletin that Scott publishes.

E. E. Chapman, Vice-President of The L. A. Young Golf Co. has announced two promotions within that organization. Dan A. Finch goes to Kansas City in charge of the Missouri, Oklahoma and Kansas territory, while Tom Stevens will make headquarters in Boston in charge of the Massachusetts, Connecticut, Vermont, New Hampshire and Rhode Island section.

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Dan A. Finch  Tom Stevens

In advancing Finch and Stevens to the field sales organization, Chapman has given recognition to the capabilities of two men who have been with the company for years and know its policies intimately.

Finch has been with company since its inception, coming from the original Walter Hagen Golf Products Co., Longwood, Fla. Recently he has been in charge of the order desk at the home office, but his experience has familiarized him with every detail of the manufacturing processes.

Tom Stevens has been with the com-
pany six years. For the past four years Stevens has been in charge of the factory display and sales room. He, too, knows Hagen products in every phase of their construction, and his years of contact with golf professionals will prove a real asset in his new field of activity.

Premier Peat Moss Corp., 150 Nassau st., New York, has an interesting new booklet telling the "how, when and why" of Premier peat moss, which will be sent free to greenkeepers upon request.

L. R. Nelson Mfg. Co. announce a new sprinkler head, the Pop-Up No. 3, which does away with hose and portable sprinklers for watering tees. They are set in the ground, even with the top surface, allowing a mower to run over them.

On turning on the water, the central stream stem rises and revolves slowly, covering an area 70 to 80 ft. in diameter. When the water is turned off, the stem drops down out of the way. They take from 7 to 12 gal. per minute, depending on the water pressure.

This No. 3 Pop-Up is similar to the Nelson No. 2 head that has been on the market for two or three years, the No. 2 being smaller and covering areas up to 60 feet in diameter, using 4 to 9 gal. per minute.

To install these heads, it is necessary only to dig a shallow trench in the center of the tee and lay a ¼ in. pipe from the edge of the tee to the sprinkler, connecting a shut-off at the edge of the tee. The pipe is laid a few inches under the sod. When the pipe and heads are in place the sod is replaced and all signs of the work will soon disappear. It is an inexpensive installation, and does away with the cost and trouble of handling hose and portable sprinklers on the tee.

U. S. Rubber Co. announces a $1,500 cash prize contest open to golf professionals, their assistants, and anyone engaged in the sale of golf balls at a golf club. A total of 102 prizes, including 1 first award of $500 will be given to winning entrants of the contest.

The one sending in on an official ballot the best reasons for an estimate of how many 3-ball Test Packages (U. S. Royal and Royal P.G.A. combined) will be sold...
TO MAKE YOUR GREENS AND FAIRWAYS GREENER, MORE DURABLE AND UNIFORM

**AMMO-PHOS**

High-Analysis Fertilizer

The performance of AMMO-PHOS in U.S.G.A. tests over several years was outstanding. From the beginning the AMMO-PHOS plots were the best.

AMERICAN CYANAMID COMPANY
New York, N.Y.

Finer Greens and Fairways—at Less Cost when you use a KEMP. A complete unit, it shreds, mixes and sifts any kind of soil in one operation. Easy to move. Gas or electric motor. Costs little to own or operate. Write for catalog. Kemp Manufacturing Co., Dept. G-46, 1919 Peach St., Erie, Pa.

KEMP POWER SOIL SHREDDERS

by all clubs and dealers in the United States from March 1, 1936 to June 30, 1936 inclusive, will be awarded first prize. Second prize is $250, third prize, $125, with four prizes of $25 each, 10 prizes of $10 each, and 85 prizes of $5.00 each. The company stresses the fact that it is the number of 3-ball Test Packages sold and not the number of U.S. balls sold that will determine the winning estimate.

Each dozen-size box, containing four U.S. Royal or Royal P.G.A. 3-ball Test Packages, is accompanied by one official ballot, to be used in sending in reasons and estimates. These ballots will be found only with the dozen-size containers and are not obtainable elsewhere. As many as these ballots may be sent in by one person as desired, providing official ballots are used. Neatness will count in the final awards.

The Test Package, containing the Royal Blue, Royal Arrow, and Royal Nassau balls, provides the golfer with the particular type of ball best suited to his game. After trying out each ball, the golfer is able to determine the ball particularly adapted to his style of play.

To be eligible for the contest, ballots must be mailed not later than midnight of July 3, 1936. Every one of the cash prizes will be paid the winners before August 15, 1936. Entries should be addressed to Contest Editor, Golf Ball Department, U.S. Rubber Products, Inc., 1790 Broadway, New York City.

Cohn & Rosenberger, Inc., 47 W. 34th st., New York, has three interesting tee-and-pencil-holder leather devices that retail for $1.95 and have a good pro margin. One of the holders is for wear around the wrist; the other two are to be attached to belt or shirt. They look like good possibilities to sell to women who usually are concerned with the problem of carrying tees and score pencils conveniently.

C. B. Dolge Co., Westport, Conn. has issued its 1936 Ground Maintenance Manual, a practical booklet of insect and weed problems together with data on Dolge products. The booklet is certain of a prominent and useful place in the greenkeeper's reference library. A copy of the manual will be sent free on request to greenkeepers, pros and green-chairmen.

Dolge reports a big spring business with golf clubs in its weed killer which greenkeepers have been extensively using for traps and tennis courts, and in its Diworma worm eradicator.