issued to them. If a player failed to pass the exam he was given the opportunity of taking it again. If any youngster missed out on both the study course and exam during the school term, the Madison board made provisions for starters at the municipal courses to distribute the mimeographed etiquette sheets and then issue permits after the exam was passed.

Kids with permits play the Madison courses for only 20 cents a round on weekdays.

Little, if any, resentment was voiced when the Madison board announced the "permit" plan and the young golfers gave 100 per cent cooperation in preparing for and qualifying for the right to play. Older players who once groused about the conduct of some of the Juniors now talk about the improved attitude and good sportsmanship of the younger set.

Since it is estimated that more than 6,000 Junior rounds will be played on Madison muny courses by the end of the season, the park board already is counting the money that will be saved in repairs and replacements now that the young golfers have been educated as to their responsibilities.

Golf's Who Who to be Ready on April 1

"Golf's Who's Who" (publishing date, Apr. 1) is a new, factual reference book in the golf publication field, a practical, down to earth record book, covering many interesting facts about the game.

According to Phil Gundelfinger Jr., (Pittsburgh Post-Gazette golf writer) the editor, the publication will contain personal records of tournament professionals — men and women, including money won, complete career records in seven major tournaments, member's of the PGA Hall of Fame, Pro Golfer of the Year feature, records of many foreign pros, winners of foreign tournaments, top finishers in most 1957 tournaments, past masters honor roll and golf association data.

Golf's Who's Who will be of pocket size, 80 pages plus covers, and will be in the pro shops Apr. 1. Many golfers will want a copy for information and reference.

Additional information on this book can be obtained by writing Associated Sales and Service Co., 525 Penwood ave., Pittsburgh 21, Pa.
CMAA St. Louis Conference
Program Completed

Registration for the Club Managers Assoc. of America's annual conference, to be held in St. Louis, has been set for Feb. 12 with the business and educational sessions getting underway on the following day and lasting through the 16th.

Among the conference speakers will be Walter Slowinski, CMAA counsel, who will speak on legal aspects of the profession; Charles E. Smith, lecturer at the Cornell University short course, who will discuss automation; Harry J. Fawcett of Kansas City, speaking on the banquet menu; Ervin A. Pickel, Jr., who will talk about club publicity; and Robert E. Beck of Cornell, who will go into the matter of selecting and training personnel.

II-Course Dinner

On the 13th, the U.S. Brewers Fdn. will sponsor an 11-course German dinner and on the following day, 25-year members of the CMAA will be honored at a Valentine Day's brunch. Saturday has been designated as past president's day with the conference winding up that evening with a formal dinner dance sponsored by the Distillers' hospitality committee. The CMAA board meeting is scheduled for Sunday.

The St. Louis host chapter, working with CMAA officers in handling conference arrangements, has planned special entertainment programs for women on each day of the conference.

J. C. Maiden, Jones' Teacher, Dies at Age of 76

James C. Maiden, one of the pros who came to U.S. from Carnoustie, Scotland, in the early 1900s, died at his home in Glen Cove, L.I. on Jan. 13. He was 76. Best known as Bobby Jones' instructor, Mr. Maiden distinguished himself as a player by winning the Ohio Open in 1906, the Eastern PGA in 1909 and the Long Island Open in 1924. Watts Gunn and Max Marston also were tutored by the veteran professional.

Mr. Maiden served at Inverness in Toledo and the East Lake Club in Atlanta. During World War I he played numerous Red Cross benefit matches on the East Coast. In addition to his widow, the former Elizabeth McGillivray, he is survived by a daughter, Mrs. Natalie Vasiliu, a son, J. Cameron, Jr., and two grandchildren.

USGA 1959 Competitions

May 15-16 Walker Cup Match, Muirfield, Scotland.
June 11-13 National Open, Winged Foot, Mamaroneck, N.Y.
July 13-18 Amateur Public Links, Denver, Colo.
Aug. 5-8 Junior Amateur, Stanford U. GC, Palo, Alto, Calif.
17-21 Girls' Junior (site to be selected).
24-29 Women's Amateur, Congressional CC, Washington, D. C.
Oct. 5-10 Senior Amateur, Memphis (Tenn.) CC.

Ord Group Plans Nationwide Junior Golf Clubs

The Junior golf program, sponsored by civic minded golfers of Ord, Neb., and which was described in the October, 1957, issue of GOLFDOM (page 75) has gone nationwide. It is now known as the Ben Hogan Junior Golf Club of America. A. J. Auble, who played a big part in organizing the Ord group, has announced that membership cards are available to organizations in other cities that wish to form Hogan JGCA units. They will be furnished at printing and postage costs.

To belong to the Junior club, the applicant must agree to observe all rules and regulations at courses on which he plays, keep an honest and accurate record of his scores and practice good sportsmanship at all times.

Complete information can be obtained by writing Auble at the Shadelite Marquee Co., Inc., Ord, Neb.

Northern Calif. PGA Plans Monthly Amateur Tourneys

In order to keep golf interest at the same high pitch it has enjoyed for the past several years, the Northern Calif. PGA section has planned a series of all-amateur tournaments to be played once a month at different courses in its territory. The competitions will be held only on courses that are in top condition, according to Bill Corbett, Pleasanton pro, who is secy. of the NCPGA. Persons entering the tourneys will pay $5.00, be divided into three classifications and gross and net prizes will be awarded. The first of these amateur sweeps was to have been held on Feb. 10.
YOU’LL LIKE
THE IMPROVED
Jacobsen
GREENS MOWER
even better!

Even though the Jacobsen Greens Mower has been judged tops in performance, durability and easy handling by experienced Golf Course Superintendents for years, Jacobsen engineers are never satisfied. The Model 9A Greens Mower performs even better.

- Power has been stepped up. It is equipped with a 3.0 hp Jacobsen-built Hi-Torque engine for smoother starting and acceleration on the green. Mounted horizontally for low center of gravity and easy handling. Famous for long life, minimum maintenance.
- Simplified Main Drive Clutch, completely re-engineered for simplicity and durability.
- 5 inch Diameter Reel. 9 tough heat-treated chrome nickel alloy steel blades, specially designed for today’s smooth-texture greens. Turf slicer attachment available.
- Balanced Design. Mower weight is evenly distributed over entire length of rear roller, with balance point at center— for even, smooth greens.
- All Chain Drive, prevents slippage, eliminates uneven cutting.
- Cutting Height—low, ¼-inch; high, 1¼-inch. Quickly adjusted with easy turning hand wheels on each side of frame.
- Plastic Grass Catcher, standard equipment.

Ask for a demonstration. Prove its better performance yourself.

JACOBSEN MANUFACTURING COMPANY
Department G-2, Racine, Wisconsin

February, 1958
Many informative pamphlets and booklets covering various phases of turf management are available from companies that manufacture golf course maintenance products. Here is a list of titles that can be obtained by writing the manufacturers indicated:

**Fertilizer & Growth Products**

W. A. Cleary Corp., New Brunswick, N. J. - Phenyl Mercuric Acetate Aids; Gibberellic Acid.
American Agricultural Chemical Co., 50 Church st., New York 7 - Suggestion for Feeding Greens; Estimates of Fertilizers Required on Courses.
The Sewerage Commission, Milwaukee, Wis. - It's in the Bag; Milorganite; The Role of Lime in Turf Management.

**Aquatrols Corp.**

- Phenyl Mercuric Acetate Aids; Gibberellic Acid.

**W. A. Cleary Corp.**

- Phenyl Mercuric Acetate Aids; Gibberellic Acid.

**American Agricultural Chemical Co.**

- Phenyl Mercuric Acetate Aids; Gibberellic Acid.

**The Sewerage Commission**

- Milorganite; The Role of Lime in Turf Management.

**Aquatrols Corp.**

- A New Water.

**Dow Chemical Co.**

- Versenol Iron Chelate (2 pamphlets).

**Nitroform Agricultural Chemicals Div.**

- A New Nitrogen-Nitroform.

**E. I. duPont de Nemours & Co.**

- Turfgrass Fertilization, Its Theory & Practice.

**Monsanto Chemical Co.**

- Uses of Krilium Soil Conditioner in Course Maintenance & Construction; Krilium Loamaker.

**Terra-Lite Div.**

- Versatile Vermiculite.

**Royer Foundry & Machine Co.**

- Better Soil Management.

**Jacobsen Mfg. Co.**

- Jacobsen Greens Mower.

**Michigan Peat, Inc.**


**Old Orchard Turf Nurseries**

- Chopped, Shredded vs. Long Runner Stolons; How to Plant Creeping Bent Stolons; Suggested System for Maintenance of Putting Green Turf.

**Royer Foundry & Machine Co.**

- Better Soil Management.

**Pool Maintenance & Clubhouse**

Inertol Co., Inc., 480 Frelinghuysen av., Newark 12, N. J. - Handbook on Painting Swimming Pools; Ramuc; Enamel; Ramuc Masonry Paint; Mildew Resistant Enamel; Swimming Pool Maintenance & Operation; Inertol Patching Cement; Exalgae for A Refreshing Swim; Florwear; Rustarmor.

**C. B. Dole Co.**

- Westport, Conn. - The Cleanup; Athlete's Foot; Dolcopine Cleaner.

**Turf Disease**

W. A. Cleary Corp., New Brunswick, N. J. - Helminthosporium - Curvalaria, Blights of Turf and Their Cure.

**Mallinckrodt Chemical Works**

- Turf Disease Handbook.

**Water & Irrigation Equipment**

Triangle Conduit & Cable Co., Inc. New Brunswick, N. J. - Prospectus on Course Irrigation; Triangle Semi-Rigid Plastic Pipe and Fittings.

**Yardley Plastics Co.**

- Columbus, O. - Yardley ClearStream Pipe.

**Orangeburg Mfg. Co.**

- 488 Madison ave., New York 22 - Root-Proof or Perforated Pipe & Fittings; Orangeburg SP Plastic Pipe.

**The Upjohn Co.**

- Actidione - the Tested Antibiotic Turf Fungicide; Large Brown Patch; Anti-Hone and Actidione RZ.

**Virginia-Carolina Chemical Corp.**

- V-C 13 Nemacide; Don't Let Nematodes Destroy Your Plants.

**Turf & Soil Management**


**The Sewerage Commission**

- Madison 1, Wis. - Chopped, Shredded vs. Long Runner Stolons; How to Plant Creeping Bent Stolons; Suggested System for Maintenance of Putting Green Turf.

**Royer Foundry & Machine Co.**

- New Brunswick, N. J. - Greenzit.

**Virginia-Carolina Chemical Corp.**

- V-C 13 Nemacide; Don't Let Nematodes Destroy Your Plants.
Everyone of the Worthington Dealers listed below is a demonstrating dealer. He handles the most complete line of large area grass maintenance equipment in the world. In this extensive line of tractors and gang mowers there's a model that's just the right answer to your problem. Ask the Worthington Dealer in your area for a "no obligation" demonstration today. See for yourself how Worthington can handle your grass maintenance problem ... faster ... cheaper. And — all these Worthington Dealers are equipped to handle your service problems quickly and efficiently.

Akron (Cuyahoga Falls), Ohio
Jacobsen Power Lawn Mower

Albany, N. Y.
Wacksman Lawn & Golf Equip.

Asheville, N. C., Henry Westall Co.

Atlanta, Ga., Evans Implement Co.

Bethesda, Md., G. L. Cornell Co.

Birmingham, Ala., Yielding Brothers Co.

Birmingham, Mich., Miller's Lawn & Garden

Boise, Idaho, Tuck’s Lawn Service

Boston (Danvers), Mass., Sawtelle Brothers

Buffalo, N. Y., Albert Kassman

Chilton, Wis.
Horst Engineering & Equip. Sales

Cincinnati, Ohio, Turf Equipment, Inc.

Cleveland, Ohio
Jacobsen Power Lawn Mower

Columbus, Ohio, Jacobsen Power Mower Co.

Dallas, Texas, Colonial Motors

Decatur, Illinoa, H. A. Kuhle Company

Denver, Colo., Carson Brothers

Des Moines, Iowa
Globe Machinery & Supply Co.

Eau Claire, Mich., Ferguson & Sons


Fargo, N. Dak., Broadway Hardware Co.

Fort Wayne, Indiana, The Garden Gate

Gary, Indiana
Steel City Lawn & Garden Equipment Co.

Grays Lake, Ill., Frandsen Brothers

Great Falls, Mont., Lease's Garden Center

Houston, Texas, Watson Distributing Co.

Indianapolis, Ind., Riley's Lawn & Golf

Jackson, Tenn., Wilson's Equipment Co.

Jacksonville, Fla., Lawn & Golf Supply Co.

Janesville, Wisconsin
Wisconsin Turf Equipment Co.

Kansas City, Mo.
Robison's Lawn & Golf Supply

Keokuk, Iowa, Leon Short & Son

Lake Worth, Fla., Barco, Inc.

Little Rock, Ark., Capital Cycle Co.

Los Angeles (Vernon), Calif., B. Hayman Co.

Louisville, Ky., Jack Dayton & Son

Lubbock, Texas, Lawn Service & Supply Co.

Mamaroneck, N. Y.
Sawtelle Equipment Co., Inc.

Matawan, N. J., M. S. Whaley Co.

Memphis, Tenn., Weakley Equipment Co., Inc.

Milwaukee, Wisc., Aving Equipment Co., Inc.

Milwaukee, Wisc., Golf & Garden Supply Co.

Nashville, Tenn., Tankleff's Sales & Service

New Hyde Park, Long Island, N. Y.
Malveze Mowers & Equip.

New Orleans, La.
Southern Specialty Sales Co.

Oklahoma City, Okla., Paul Blakney

Orland Park, Ill., Illinois Lawn Equipment

Philadelphia, Pa., Lawn & Golf Supply Co.

Phoenix, Ariz., Lawn & Garden Supply Co.

Pittsburgh, Pa., Krigger & Co. Inc.


Providence, R. I., Worthwood Bradley, Inc.

Racine, Wisc., Einer T. Brown

York, N. Y., Grass Cutting Equip. Co.

St. Louis, Mo., C. G. Kruckemeyer Mach.


Salt Lake City, Utah, Boyd Martin Company

San Antonio, Texas, Cattle & Putty

San Francisco, Calif., H. V. Carter Co., Inc.

Seattle, Washington, Ivan W. Lee & Sons

Seattle, Washington
Northwest Mower & Marine

So. Glastonbury, Conn., C. M. Jenkins

Springfield, Mass.
The Magovna Company

Strodesburg, Pa., George Sebring & Son

Tampa, Florida
Crenshaw-McMichael Seed Co.

Toledo, Ohio, Barton Equipment Co.

West Sioux Falls, S. D., Dakota Turf Supply

Wethersfield, Conn., The Magoven Co.

Calgary, Alberta
Calgary Farm Machinery, Ltd.

Charlottesville, P. E. I., W. R. Jenkins

Edmonton, Alberta, Rototiller Sales & Service

Frederickton, New Brunswick
FouIis Engineering Sales Ltd.

Halifax, N. S.
FouIis Engineering Sales Ltd.

London, Ontario
Spramotor Sales & Equip. Ltd.

Montreal, Que.
Spramotor Sales & Equip. Ltd.

c/o Webb Seed Co.

New Westminster, B. C.
Rotary Equipment Sales Ltd.

Regina, Saskatchewan, Elmer’s Machine Shop

Toronto, Ont., Spramotor Sales & Equip. Ltd.

Winnipeg, Manitoba, C. C. King & Co., Ltd.

Guadalajara, Jal, Mexico, Carlos B. Smith

Honolua, Hawaii, Lewers & Cooke, Ltd.

Oslo, Norway, A/S Eik & Hauskens

Stockholm, Sweden
Vihelsson & Co., A. C.

Wettingen A/B, Switzerland, Otto Richei

Bogota, Colombia, S. A.
Fernando Escobar, U.
Dow Chemical Co., Midland, Mich. — Control Grass Chemically; Reldon Hits Your Brush Target; Dowfume MC-2, Grass Problem? — Get Dowpon.

Miscellaneous
E. I. duPont de Nemours & Co., Wilmington, Dela. — Tournament Turf in ’58; The Golf Course — What to do This Fall; The Golf Course — Planning & Records
American Chemical Paint Co., Ambler, Pa. — ACP News
Prior Jewelry & Award Co., 220 5th ave., New York 1 — Everlasting Trophies for All Sports.

Discuss Cost Cutting at Green Section Meeting
(Continued from page 26)

The long range course alteration program going on at Beverly CC, Chicago, described by Robert M. Williams, the supt. there, pretty well summed up thought on re-design for easing the maintenance burden.

Continuous Improvement
Williams and his staff have been improving Beverly on a tee to fairway to green schedule for the last 10 years. Bob supplemented his talk by providing those at the conference a complete resume of work already completed as well as that which is planned. It could serve as a very useful model for any supt. who is thinking of re-tooling his course.

The Beverly greenmaster stated that after a long range plan is mapped out the supt. should take equal pains in preparing to sell it to his committee and membership. One almost foolproof way of doing this is to show the club how little is actually spent for course upkeep in comparison with over-all expenditures. At Beverly it is about 10 per cent, a figure that may apply to possibly half of the clubs in the country.‘

Taylor Boyd, supt. at the Camargo Club in Cincinnati, speaking on labor relations, advanced an idea that other clubs may do well in copying if it is practicable or possible for them to do so.

Camargo is surrounded by large estates and during what normally would be idle time, Boyd dispatches his employees to work at these places. The income realized from this extracurricular work more than pays for the chemicals used in a year’s time at Camargo. In addition, it enables the Cincinnati club to keep a larger year-around staff than it could afford if the outside work wasn’t taken on.

Uses Employee Suggestions
Boyd has equipment sheds located at various spots on the course for more efficient use of machinery and manpower. He also holds weekly meetings with his crew not only to straighten out grievances but to listen to their suggestions for improving operations. Ideas that come from employees, Boyd declared, can result in material and labor savings that probably would amaze supts. who haven’t investigated them.

Talking on general aspects of maintenance, J. Porter Henry, longtime green chmn. at the Algonquin CC, St. Louis, warned against uneconomical paring of the supt’s budget. He cited a case where little or no fertilizer was applied for several years to a course in St. Louis only to have the club spend an almost prohibitive sum of money in a single season in attempting to reclaim its turf.

“What we often tend to forget,” Henry said, “is that the course is the club’s reason for being. If it is necessary to economize, it’s folly to take it all out on the supt.”

Cutbacks Can Boomerang
Charles Eckstein, pres. of the Chicago Dist. Golf Assn., added an ‘Amen’ to Henry’s views. Declaring that the budget determines the standard of maintenance, the CDCA head said that it has been repeatedly proved that severe cutbacks in the course appropriation have been the costliest kind of economizing yet conceived.

On the other hand, Eckstein stated that the supt. has a duty to use his maintenance appropriation to its ultimate value. To do this, requires knowing where every dollar goes. Eckstein feels that course accounting should be standardized, and that all items should be charged against proper accounts even though the appropriation for that particular account has been exhausted. “That is the only way,” said the CDCA pres., “we’ll ever get a true picture of our costs.” As a final word, Eckstein recommended that supts. familiarize themselves with accounting methods as a matter of self protection.

The afternoon panel, made up of Jim Latham, Charles Chapman and Herb
Good Greens
Don't
Just Happen

How important greens are to a course!
And how well you know that good greens don't just happen.
To get greens that measure up to your high standard, it takes thinking . . . planning . . . proper scheduling . . . careful experimenting . . . and plenty of the ingredient called hard work. . . .
And it also takes the right kind of equipment shown here: the Aerifier*, the Verti-Cut*, and the West Point ATCO Greens Mower—all modern turfgrass tools and all from West Point.

The West Point Aerifier—the basic tool for putting green maintenance—makes every other treatment more successful.
The West Point Verti-Cut—the world's one and only vertical mower that keeps putting surfaces free from grain.
The West Point ATCO Greens Mower—the sturdy yet lightweight mower with 12 blade Sheffield steel—gives greens the precision cut that is so necessary.


West Point
MODERN TURFGRASS TOOLS

Literature is available from the West Point Products distributors . . .
or write West Point Products Corporation, West Point, Pennsylvania.

February, 1958
Graffis, was kept busy seeking answers as to how course labor can be most effectively used. It was pretty well established that supts. aren't getting a full eight hours out of employees because of poor work scheduling and difficulties in transporting their men to various job sites. Another shortcoming that was discussed is failure to get maximum results from equipment because employees aren't trained to properly operate it.

The supts. agreed that they, individually, have to work out answers to these problems and that the solutions are, to a certain degree, dependent upon conditions at their clubs.

**USGA Rules Against Pros**

*(Continued from page 39)*

**Museum** – C. W. Benedict, White Plains, N. Y.

**Bob Jones Award** – Wm. Ward Foshay, New York.

**Finance** – Charles L. Pierson, Boston.

"On the Green," the new color sound film of the USGA Rules of Golf series and "Golf's Longest Hour," the color sound picture of the finish of the National Open at Rochester in 1956, were shown before the annual meeting began. Both pictures run about 18 minutes. They're very good. Rental fee is $20 per film. National Educational Films, 165 W. 46th st., New York 36, handles the rentals.

**Rules Violations Via TV**

John Winters, chairman of the Rules of Golf committee, added to his printed report comment on flagrant violations of the rules of golf that are seen during telecasts of golf matches. Winters referred particularly to a couple of violations during the Crosby tournament, both of which were so raw they were funny.

The violations showed rules ignorance that shouldn't have occurred in the consolation flight of Class D of the women's championship at the Whistle Post (Wyo.) CC.

One guy did everything but dig a ditch in a green between his ball and the cup. Another, while a putt was on the lip, waited for a considerable period, expecting an earthquake, gale, circus seal or a buffalo stampede to jiggle the ball in. The announcer, also showing that he was no bookworm as far as golf's rule manual is concerned, said the player was allowed a wait of five minutes while the ball was resting on the lip.

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**Sarazen’s Final Round 70**

**Gives Him Seniors Title**

Five strokes off the pace as he went into the last round, Gene Sarazen shot a 2-under par 70 on the final 18 to win the annual PGA Seniors at Dunedin, Fla., in January. Sarazen finished with a 288 total, three strokes ahead of Charley Sheppard, the runnerup.

Ed Burke and Bill Black, with 293s, finished in a tie for third. Jules Blanton had a 294 while Mort Dutra, Al Watrous, the 1957 champion, Tony Manero, Bert Montresser and Jack Patrioni produced 295s to share sixth place. Dutra, who led at the halfway point with a 140, won the Bourne trophy. Mort also was ahead at the end of the third round, checking in with a 213.

Sarazen's victory, which netted him $1200 and a trip to England this summer to meet the English Seniors champ, both compliments of Teachers, Ltd., was his second in the over-50 competition. Charley Sheppard took home $800 for his second place effort.

Tom Mahan stole part of Sarazen's thunder on the final day by batting in a 159-yard ace on the sixth hole. Miserable weather conditions in the early part of the tournament made it necessary for the Seniors to spend four days getting in the first two rounds.

**Watson, McDonald Preside**

**at PGA Seniors Banquet**

Guests at the annual banquet and dance of the PGA Seniors held at the Ft. Harrison hotel, Clearwater, Jan. 23, heard Pres. John Watson in an eloquent, mood and, listened to the cheerful message brought from Roland Teacher, ill in Glasgow, by the company's export mgr., Adam Burgess. Al McDonald did a masterful job in planning the party and staging it so it ran smoothly. Former presidents of the PGA Seniors and officers of the Ladies' Auxiliary were honored by Watson; Herb Graffis, GOLFDOM editor, in reviewing achievements of the senior pros declared they'd had more influence on the pursuit of happiness in the U. S. than professional athletes in any other sport.

**Boswell Honored**

Charley Bosewell, blind golfing star who lost his sight in World War II, has been named the most courageous athlete of 1957 by the Philadelphia Sports Writers assn.
Diplomat Course Data
Gives Golfers A Lift

Cary Middlecoff is responsible for the line on the new Diplomat CC scorecard which reads: "Regular course - 20 yards shorter than Championship course." The "championship" distances and pars for the holes on the 6,738 yd. course, and for the course from women's tees, appear on the card. Three sets of tee markers carry distance and par data.

Regular and women's markers are frequently changed because of heavy play. Middlecoff says the average golfer gets a psychological lift out of seeing his score on a card that shows a measurement at least 360 yards longer than he actually played. "The man needs encouragement, anyway," Doc adds.

Whalen Heads Seniors

Willie Whalen of New Britain, Conn., was elected pres. of the PGA Seniors at their annual meeting in Dunedin, Fla. Vps are George Ferrier, Danbury, Conn., and Jack Ryan, Louisville. Ralph Beach of Baltimore was chosen secy-treas.
One of the really great combinations in the turf irrigation field, Rain Bird and Nelson combine to give you unsurpassed watering capacity with economy and efficiency of operation.

Rain Bird Sprinklers provide maximum, penetrating coverage over large turf areas, and are available to cover any part of a circle, or full circle. As part circle they water the grass, shrubbery, trees without soaking walks, drives or buildings. Perfection of operation... ease of maintenance are assured by a minimum of moving parts.

Together, Rain Bird and Nelson offer you the most complete line of turf valves. Both, Nelson Quick Coupling Valves and Rain Bird Sure-Quick Turf Valves, are self-closing, foolproof, and afford fast, positive coupling and uncoupling without tools. Top flush with turf, they maintain landscape beauty... eliminate hazard to moving equipment and persons walking or playing.

Write for literature on the most complete line of valves and sprinklers, and see how easily... how completely your turf irrigation requirements can be satisfied.

Grau's Answers

(Continued from page 45)

results in lack of color in the leaf in spots — the color being whitish-yellow although very much of a white. In September the disease seemed to increase. White powder would rise from the grass and be deposited on your shoes, the same as if it were lime. By October this disease had spread all over the yard and in the areas where it first appeared, the grass turned brown and seemed to disappear.

This disease apparently does not affect other grasses in the neighborhood since they do not have any white coating or color. I have tried two applications of Tersan with apparently no results. I hope you will be able to help me since I am rapidly losing a very fine Merion lawn. (Pa.)

A. From your very good description it seems as though the Merion was affected by powdery mildew. This, however, you should determine definitely. I suggest that you have your county agent send specimens of your grass to the Department of Botany, Dr. Couch, Pennsylvania State University, University Park, Pa. Ask for positive identification of the disease.

It would help if you would describe fertilizer and water treatments that your Merion lawn has received during the past two years. It would help, also, if you would describe your mowing practices: how often you mow, at what height and whether or not you remove clippings.

There are many fine Merion bluegrass lawns in your area that apparently are completely free of the trouble you describe. I cannot believe that the disease, or the trouble, is so serious as to cause the Merion to disappear. There must be contributing factors and your self analysis of your management practices will help to diagnose the trouble.

Q. Can you help me determine the reason for the lack of use of creeping bent stolons in the Southern California area? I have failed to come up with a satisfactory answer. Out here, everything seems to be Seaside seeded bent. (Calif.)

A. Seaside bent seed is convenient and it's cheap. Bentgrass stolons are somewhat more expensive and have not been made available to any degree in Southern California. Although they have been proven in research plots, they haven't been accepted in the general sense of the word. They entail considerable work in planting and in care. Another thing is that favorable climate permits Seaside to develop turf that is quite satisfactory under good management. Dry air and relatively uniform temperatures represent quite a different condition than in the Midwest, where only the sturdiest creeping bents can stand up under the rigorous Iowa climate.

As of now, with Penncross creeping bent seed available in quantity and at a reasonable price, many of the new courses in your area, and elsewhere over the country probably will have greens seeded to this superior creeping bent seed.