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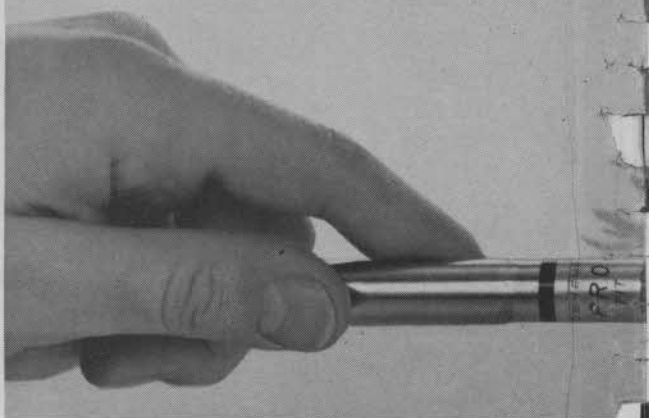
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This is what will amaze you with Pro Fit shafts . . . not just but the consistency of their performance.

The top club makers will offer you a complete set of clubs adapted to each manufacturer's needs. You will offer it in a complete set, from an extra-stiff flex for men to a special flex for women. By and taking into account your individual needs, you can "fit" you with clubs that you (see right). The True Temper shafts are available in 10 flexes on each shaft. Look for the True Temper logo in for your biggest golfing.

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You know about our new Pro Fit shaft. Your customers get their first look in the May 19 issue of *Sports Illustrated*. Many will become "live" prospects. And here's something im-

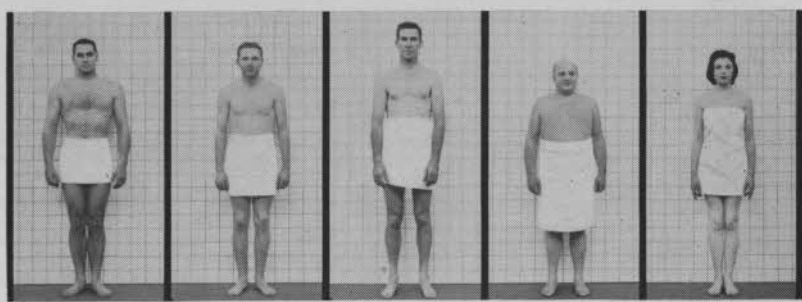
portant about the new Pro Fit. At last you have a way to sell new clubs to the golfer who claims his old ones are "good enough". Maybe they were—but once he gets his hands on a

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shaft

When you try clubs with a Pro Fit shaft, you'll experience a wonderful "feel", performance, and balance. Each Pro Fit shaft is custom designed for your length and flex. Professionals to amateurs, regardless of your swing, age, and build, your Pro Fit shaft is exactly right for you. The Pro Fit label will tell you exactly what club you need. You'll be that first birdie.



There's a Pro Fit shaft for the extra-strong player with an extra-powerful swing. A pro can "custom fit" the man with an average swing with the right Pro Fit shaft. A man with less weight behind his swing can get a Pro Fit shaft that will help his game. There's a Pro Fit shaft to provide extra "whip" for the player with a slower-than-average swing. For women there's a special Pro Fit design, "flexed" just right for them.

Your "pro" will fit you with just the right PRO FIT shafts for your build, your height, your swing



club with a Pro Fit shaft—he's sold. We know you have no waste space in your shop, so our displays are few and simple: A blow-up of this ad (you can see why it makes sense to tack it up) and a mobile display you can hang from the ceiling. It's free—

send for yours today. Write Gurdon Leslie, True Temper Corporation, Geneva, Ohio.

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Nitrogen Application in Brown Patch Control

By HOUSTON B. COUCH

Asst. Prof., Plant Pathology, Penn State University

Recent work conducted under controlled greenhouse conditions at the Pennsylvania State University has revealed that while large brown patch (*Rhizoctonia solani*) on Seaside bentgrass responds very readily to different levels of nitrogen fertility, these reactions can be offset by varying additions of phosphorous and potassium. Plants grown under low nitrogen fertility, with normal phosphorous and potassium levels, were definitely less susceptible to large brown patch than those grown at normal balanced fertility.

However, when phosphorous and potassium levels were reduced in conjunction with nitrogen, susceptibility to large brown patch increased. High nitrogen, with normal levels of phosphorous and potassium, brought about a definite increase in susceptibility to disease. When phosphorous and potassium were increased concurrently with nitrogen, however, the increased susceptibility to large brown patch was offset.

There was no alteration in disease reaction when plants were grown under balanced nutrition from pH 4.0 to 7.0. However, at pH 8.5, and above, bentgrass plants became less susceptible to disease. Under conditions of high nitrogen, with normal phosphorous levels, the plants were less susceptible to large brown patch at pH 7.0 than at pH 4.0 or 5.6.

Soil moisture in the readily available range (field capacity to permanent wilting percentage) had no influence on disease development.

In Washington State, more red thread disease (*Corticium fuciforme*) was observed in poorly nourished lawns during the winter of 1956-1957 than in well nourished ones. Field tests, under naturally occurring disease conditions, revealed that an increase in overall fertility gave a decrease in disease severity. Heavy nitrogen applications were particularly beneficial in disease reduction.

South Converting Greens to Fine Leaf Bermuda

By J. R. WATSON, JR.

Chief Agronomist, Toro Mfg. Corp.

Probably the advent of improved strains of fine leaf Bermudagrass has been responsible for more greens renovation than any other single factor during the past few years. Throughout the South greens are being converted from common to fine leaved Bermudagrass. Conversion, in some cases, is accomplished in connection with a rebuilding program; in others it is strictly a renovation process. Conversion to improved strains of Bermuda in the southern areas, and to improved strains of bentgrass in the northern areas is a clear indication of progress.

A. W. Crain, agronomist for Goldthwaite's Texas Toro, reports that during 1957 several Texas clubs converted all or some of their greens to an improved strain of Bermudagrass. Strains used were Tifgreen, Gene Tift and Sun-turf. The basic reason for renovation was, in all cases, to replace the existing Bermuda with an improved strain. No soil or design changes were made.

Techniques employed in the renovation program were as follows: The greens were severely verticut, thoroughly aerated and sterilized. A temporary soil sterilant, Vapam, was used. After the proper waiting period, the greens were stolonized, (sprigs spread over the surface), topdressed and fertilized (heavy application of a 10-5-5 organic base fertilizer).

Results: within six weeks (including the two week waiting period) most of the greens were back in play.

Necessity for Fertilizer

Previous work on these and other courses in the area indicated that the procedure outlined was the most desirable method of converting to an improved variety of Bermudagrass. Sprigging into aerator holes, and the use of 4-in. plugs on 12-in. centers had proved to be unsatisfactory under their conditions. Experience had also shown the necessity of adequate fertilization at the time of renovation.

Crain also reported that during the past four years, courses at Weimar, Eagle Lake, Navasota and Yoakum, all located in South Texas, converted from sand to grass greens. Sub-grades were established, stone and pea gravel spread, seedbed prepared, and Gene Tift Bermuda established. The conversion of these courses to grass greens is a milestone of progress worthy of note — there are no courses left with sand greens in the south Texas area.

The work of Carl Anderson, supt. of Woodhill CC in Minneapolis, during late 1956 and 1957 serves to illustrate two other types of renovation.

Anderson's Renovation

The No. 4 green was shaped similar to an inverted saucer — high in the middle and sloping to all sides. The membership wanted the back raised and the green sloped to the front so that shots pitched to the front would hold.

Techniques employed were as follows: The sod was cut from the center of the green back, rolled and stacked. A sandy type topsoil was applied to the depth necessary to acquire the desired grade. The seedbed was then graded and firmed. A 1- to 2-in. layer of compost consisting of 1/2 soil, 1/4 sand and 1/4 peat was spread over the surface and the sod laid. The job was completed in November of 1956. When the season opened in 1957, the green was topdressed and put in play. Carl reports if he were doing the job over he would remove sod from the entire green and rework the soil.

An interesting aside to this project was the removal and utilization of a series of "chocolate drops" as a source of topsoil. These were erected near the green during an earlier period of construction and the surrounding topsoil had been

(Continued on page 113)



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Grand Rapids, Michigan

Superintendents like these, with that disease prevention has been



BOB POLLOCK

In the 36 years Bob Pollock was superintendent at Llanerch Country Club, Manoa, Penna., he helped build the original club, plus three separate nine-hole courses. In 1920, he also helped build the Grosseisle Country Club, Wyandotte, Michigan. His leadership brought better insect and disease control and new strains of grasses to Llanerch. Retired in 1956 on pension, Bob now serves the club as consultant.



BILL BASKIN

During his 32 years of experience, Bill Baskin was superintendent of the Manufacturers Golf and Country Club, Oreland, Penna., for 16 years and of Cedarbrook Country Club, Cheltenham, Penna., for 10 years. Bill also spent six years helping build many courses, some with architect Donald Ross. Retired in 1956 on pension, Bill is now consultant for the Manufacturers Golf and Country Club.



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JOE RYAN

In his 35 years of service, Joe Ryan was superintendent of the Rolling Green Golf Club, Philadelphia, Penna., for 31 years and of the Town and Country Club, Bethesda, Md., for four years. He served the G.C.S.A. as a director and a president, and also the Philadelphia Association of Golf Course Superintendents as president. Joe was retired on pension from Rolling Green Golf Club in 1956.



JOE VALENTINE

For 50 years, Joe Valentine has been superintendent of Merion Golf Club, Merion, Penna. During that time he has introduced improved insect and disease control practices, sound management procedures and better equipment. Because of these advances, the turf at the club today is in better condition for normal play than it was in 1916 for the U.S.G.A. championship tournament held there.

For superior disease protection use Du Pont Turf Fungicides

These superintendents and many others all over the country rely on Du Pont Turf Fungicides to keep brown patch, dollar spot and snow mold from taking over greens. They've found the most effective way to control these diseases is to prevent them

from attacking by using Du Pont "Tersan" 75 and "Semesan" Turf Fungicide on a regular schedule. Packaged separately for tank mixing, Du Pont Turf Fungicides are easy to apply with regular spray equipment. Ask your dealer today for these proven fungicides.

VPM Soil Fumigant

DU PONT VPM SOIL FUMIGANT . . . use Du Pont VPM before seeding new greens, tees and nurseries to kill germinating weed seeds. VPM is convenient and easy to use, no tarpaulins needed.

On all chemicals, follow label instructions and warnings carefully.



Bob Allen, photo

Recently opened, the Century CC at Phoenix, Ariz., has its shop for Pro Tom Lambie and locker-room combined in the above building which is convenient to first tee (foreground). Lawrence B. Hughes was golf architect for the new club. Construction of clubhouse and swimming pool is under way. George Wolf is pres. Land similar to that on which Century has its 175-acre plant is selling for \$3,000 an acre. Property was given to the Century Club by Paul M. and Roger C. Thomas.

Sargent Outlines Format for '58 PGA Championship

With the PGA Championship, to be held July 17-20 at Llanerch CC, Haverstown, Pa., being held on a medal play basis for the first time, Pres. Harold Sargent recently outlined the format for the 1958 competition.

Special invitations will be given to the first five PGA approved tournament players among the 52 leading PGA money winners for the period from Jan. 1 through the USGA Open, which will be held June 12-14. This year, for the first time, a definite number of approved tournament players will get bids to the Championship. Gene Littler was the only person who received such a bid in 1957.

Another major innovation makes all current champions of the 32 local PGA sections automatic qualifiers for the Championship. Thus, many club pros who are outstanding players but seldom appear on the tournament circuit, will appear in the 40th renewal of the PGA event.

170 in Championship Field

Approximately 104 qualifiers for the Championship will be decided at 36 holes in local sectional tournaments to be played June 16. If weather forces postponement, trial rounds will be held on June

23. A field of about 170 will take part in the Championship.

Exempt from qualifying will be the following:

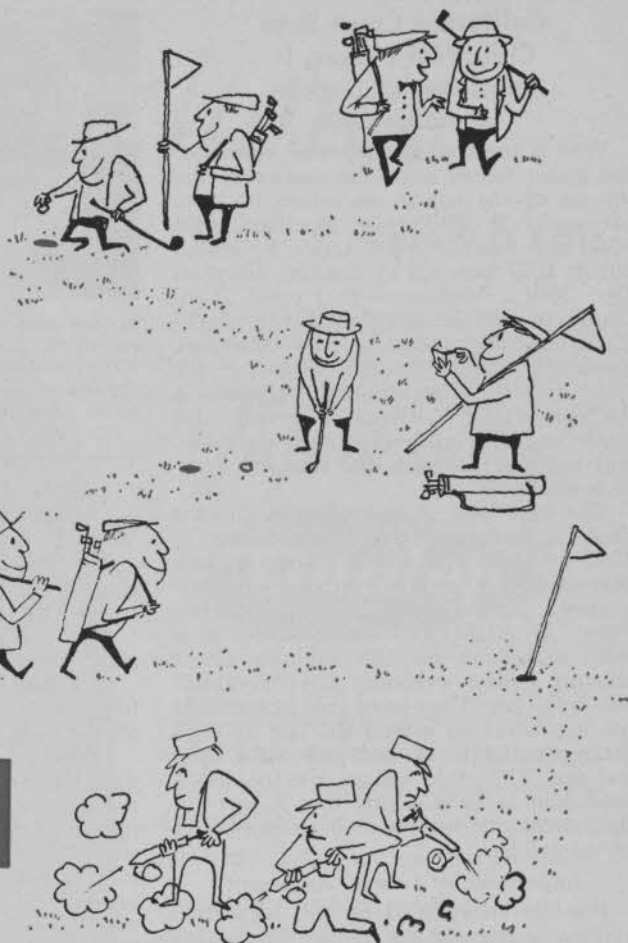
Lionel Hebert, the 1957 champion and all other previous PGA Championship winners; members of the 1957 Ryder Cup team; the eight quarter finalists of the 1957 event; Marty Lyons, Llanerch's resident pro; Gene Sarazen, '58 Seniors champ; Dick Mayer, the '57 Open winner; and current champions of the 32 local sections.

Mid-Atlantic PGA Seminars

During February and March, the Mid-Atlantic Section of the PGA conducted a series of seminars that were held primarily to instruct assistant pros in various phases of instruction and pro shop management. They were held at Sligo Park GC, Silver Spring, Md., with Max Elbin conducting the sessions. Among those who spoke at the seminars were Roger Peacock, Bill Hardy and Al Houghton. Forum discussions followed lectures at all sessions.

Northwest PGA Sponsorship

Northwest Section PGA and the Plantation GC, Boise, Ida., are co-sponsoring the annual Southwest Idaho Amateur, to be held July 3-6, and the Northwest Open which will be played July 24-27.



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Large brown patch, fading-out, melting-out, dollar spot, Pythium can all become a thing of the past. You can wipe out the turfgrass fungus disease and keep your greens in perfect-play condition with regular applications of ACTI-DIONE. Extensive field tests prove that ACTI-DIONE rapidly destroys the fungi that damage turf. Control of disease is often obtained within hours of the first application.

ACTI-DIONE is simple to prepare, easy to use, and economical too. Every drop of the solution controls and protects.

Available in two forms:
ACTI-DIONE Ferrated—outstandingly effective against dollar spot, melting-out, and fading-out. Investigational studies indicate that Acti-dione Ferrated may control Leaf Spot of Kentucky bluegrass, as well as Rust and Powdery Mildew of Merion bluegrass.
ACTI-DIONE RZ**—especially effective against large brown patch and Pythium... also controls dollar spot, melting-out, and fading-out. When used on a regular preventive schedule, one package will protect 20,000 sq. ft. of turf.
 Both products can be obtained from golf course maintenance and supply stores.

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California Court Says Club, Not Player, Is Employer of Caddie

By WILLIAM JABINE

Who is the true employer of a caddie: the golfer whose clubs he carries or the owners of the course on which he does his work? A California appellate court (2nd dist. court of appeals, div. 1.) closed out its 1957 business by handing down on Dec. 30th a decision on that point. It includes an interesting although not wholly clarifying discussion of the question. Seemingly against its own judgment, the court felt itself constrained to follow a decision of the California supreme court made in 1917, and ruled that the club, and not the player, is the true employer of a caddie.

The case was started when California dept. of unemployment levied a tax in 1952 on clubs and course owners as employers of the caddies working on their courses. The date, 1952, is important because, as might well be expected in a state so famous for the mildness of its climate, golfers evidently have considerable influence. They were able to persuade the legislature to amend the law in 1953 in an attempt to exempt golf clubs from the tax. The state senate also passed a resolution in 1954 saying that it was not the intention to tax the clubs as employers of the caddies.

Impressed by Losers' Argument

Possibly encouraged by this legislative action, the Manchester Avenue Co., which ran a pay-as-you-play course, and the Virginia CC brought suit to recover the unemployment taxes they had paid in 1952, a total for the two organizations of a little more than \$500. The two causes were consolidated and it is this action that has just been decided by the appellate court. Usually a court devotes the bulk of its opinion to a discussion of the arguments put forth by the party in whose favor the action is decided. But in this case the court was so obviously impressed by the arguments of the losers that it set them out in considerable detail and even added a comment that they seemed most persuasive, but that the previous decision of the supreme court made it impossible to adopt them. As quoted in the opinion these arguments are:

(a) A caddie is engaged in a distinct occupation.

(b) He is under the direction of the player.



Summer can't be far away when you see pictures such as this. In the photo are (l. to r): Clyde Casey, Tucson, who will be chmn. of this year's Jaycees tournament which will be played Aug. 18-23; Bob Jones; Jerry Vaughan, Tucson; Ralph Garrard, Atlanta; and Gordon Bedford, Tucson.

(c) There is no particular skill required.

(d) The caddie supplies himself, i.e., 'he is the lad who carries the bags.'

(e) The length of time of the employment is for one round of golf.

(f) The caddies are paid by the job.

(g) The work is for the player not the club.

(h) Neither the player nor the club believes that it is creating a relationship of employer and employee.

Despite the strong appeal of these arguments, the court said that it was bound by the decision of the supreme court in *Claremont CC vs. Industrial Accident Commission*, 1917, 174 Cal. 395; 163 P. 209; L.R.A. 1918 F 177. That case was concerned with an accident which happened when a caddie leaned against the defective railing of a bridge and fell into the stream below. The club was held to be his employer.

Amendment Text Criticized

The wording of the 1953 amendment which attempts to exempt golf clubs from payment of the unemployment tax on caddies came in for some criticism. It reads as follows: "Sec. 651: 'Employment' does not include service performed by caddying, of carrying a golf player's clubs by an individual who is not in the employ of the golf club or the association."

Italicizing the word "employ" in the amendment, the court commented that it raised doubts as to who really is considered the employer, and sowed the "seeds of litigation".

As matters now stand, the 1952 tax will remain in the hands of the state unless the litigants feel that they can persuade the supreme court to overturn its decision of 40 years ago.