pros to be the most potent golf lesson stimulator yet to be made available. Although this new edition on golf's fundamentals only came from the press in May, pro and school demand for copies to be distributed to club members and students necessitated early printing of a second edition which already is nearing depletion.

Pros desiring complete information as to prices at which quantities of the book, bearing the pro's name imprinted on the front cover, may be obtained, should write Instruction Aids Division, National Golf Foundation, 407 S. Dearborn St., Chicago 5, Ill.

CHEMICALS REMOVE CRABGRASS

Heavy coverings of crabgrass may be effectively removed just as seed heads are formed, by applying sodium chlorate. An application of two and-a-half pounds of this material to each 1,000 square feet, applied either in spray or dry form, has checked this undesirable grass on Pennsylvania fairways and enabled the reseeding program to be started in two weeks after the application of the chemical.

Chickweed, crabgrass in the seed head formation stage, and other weeds unaffected by 2,4-D, may be removed by applications of sodium arsenite. Sodium arsenite will assist also in checking clover and Poa Annua prior to and at the time of reseeding, so that the establishment of new seeding is accomplished successfully in areas where they would otherwise be smothered by clover or Poa annua. A most desirable factor in favor of sodium arsenite is that seeding may be done either at the time of application or immediately afterwards.

Western Amateur to be played at Wichita (Ks.) CC in 1948. Dates to be announced.

18-year-old Bob Buchanan, winner, national left-handers tournament encouraged by father-caddie, V. L. Buchanan, Indianapolis who flew to Chicago each day of tournament play.

SPALDING SALESMEN MEET—Spalding's salesmen meetings this year at Chicago and the Chicopee plant cover a schedule from July 14 to Sept. 11. This year, in addition to usual type of program on manufacturing and merchandising of Spalding goods special accent is being put on merchandising and selling.

THE PERFECTION SPRINKLER CO., Ann Arbor, Mich., again is manufacturing the ONE-MAN PROPORTIONER. This unusual device is used for applying chemicals and fertilizers to greens and is considered a great time saver by many greenkeepers who have used it.

Consisting of an oversize "hot-water bag" with a hole to fit over the head, the concentrated solution of chemical is mixed with water from a hose in a specially built mixing nozzle. Since no pump or tank is used the device is light and compact.

Wartime conditions have prevented the use of natural rubber until recently, but limited quantities will be available this year.
W. D. RICHARDSON, NY TIMES
GOLF EXPERT, DIES

William Duncan Richardson, 62, sports writer for the New York Times and widely known golf writer and editor, died at Cornwall (N.Y.) hospital Aug. 8. He had been stricken Aug. 6 while covering harness races at Goshen, N.Y. He is survived by his widow who was Genevieve Elizabeth Deming of Algonquin, Ill.; a son, William D., Jr., who served with the Marines, and a daughter, Judith, 12.

Bill Richardson was a grand fellow and a top authority on golf. He was a tremendous worker, having compiled and edited various golf guides and magazines, the latest job being the 1946 Golf Guide he compiled and edited for A. S. Barnes & Co. He wrote many magazine pieces, on golf especially, and was rated by his colleagues as a model in the interest and accuracy of his sports coverage. His work on horse racing, football and other collegiate sports was outstanding.

He was born in Milwaukee. His debut in college sports was as coxswain of the University of Wisconsin crews in 1909 and 1910. While doing post graduate work at Wisconsin he was on the Cardinal, the campus newspaper. Later he worked on the Milwaukee Journal and Wisconsin State Journal. He went to Bermuda and edited the Bermudian and Trinidadian. He served in World War 1 as a field artilleryman and left military service as a captain. He joined the New York Times Jan. 31, 1921 and early in 1922 he began covering sports for that paper.

Bill will be missed greatly at golf tournaments by players, veteran galleryites and his pals in the press quarters.

Making a Team
(Continued from page 29)

But when the chairman and the green committee consider alterations of greens or tees then is the time when the superintendent is wise to suggest consultation with a competent golf course architect before seemingly desirable alterations are made.

The filling in of an unused trap may be only part of the required job. Perhaps another trap should be built to add interest to the course and the earth from that construction job used in filling in the trap that is serving no purpose.

The greenkeeper knows that millions of dollars have been wasted in ill-advised alterations and he, if he has the standing he should have with his committee, can advise them to get expert advice that will enable them and him to work toward a definite goal instead of being distracted by far too frequent and futile construction jobs.
Mildred (Babe Didrikson) Zaharias describes a long drive to W. L. (Wallie) Robb (left), assistant to the president, and L. B. Icely, president, on the occasion of her contract signing as a member of the Wilson Sporting Goods Co. advisory staff.

THE "BABE" JOINS WILSON STAFF

The first one-two punch in women's golf has been completed by Wilson Sporting Goods Co. with the signing of the fabulous Mildred (Babe Didrickson) Zaharias to join the advisory board with Patty Berg.

After putting her signature on the dotted line Aug. 22, the Babe remained to take in Wilson's press luncheon and travel on to the All-Star football game the same evening where she went on the air for the announcement of her new affiliation with Wilson.

The Babe will represent Wilson in all of her exhibition play and as much as possible in her series of movie shorts and her approaching radio broadcasting program, both of which will start soon.

It is tentatively planned to introduce a set of clubs carrying her name in time for the 1949 line. The addition of this line will further extend Wilson's long established position in the field of women's golf clubs with the present Patty Berg line and Walter Hagen Golf division's American Lady line.

A series of exhibitions and clinics much along the type now being carried on by Miss Berg can be expected in the future featuring the colorful Babe and her superlative golfing ability.

"Babe represents one of the top names in golf," President L. B. Icely pointed out. "We feel she will be a real asset to the Wilson trademark for a long time to come."

OCTOBER—ANNUAL PLAN ISSUE

September, 1947

HARDWOOD
FLAG POLES

Made of the finest, kiln dried, second growth, tough White Ash. Tapered from approximately 1" at bottom to 3/4" at top, and fitted with flanged aluminum ferrules to fit standard 1½" cup. Sanded finish with prime coat of lead and oil and finished coat of finest white enamel. Available in 2 or 3 color combinations. Immediate delivery.

Your inquiries and orders will be referred to a nearby distributor.

LEAVITT CORP.
(Est. 1895)
URBANA, ILLINOIS
Builders of

Knockdown
bleachers
for sports events of all kinds.
FOR the past 10 years, AGRICO COUNTRY CLUB FERTILIZER has given us excellent results," writes Mr. Mellon. "We fertilize greens with 15 lbs. per 1000 sq. ft. of Agrico in early Fall for quick recovery after the season's play, and use a similar application in early Spring to get the jump on weeds." Get Agrico now — it's America's No. One Golf Course Fertilizer. Ask your regular supplier, phone nearest A.A.C. Sales Office, or write to The AMERICAN AGRICULTURAL CHEMICAL Co., 50 Church St., New York 7, N. Y.

JOHN BEAN POWER SPRayers
Some models available for immediate and fall delivery.

JOHN BEAN 20 NOZZLE GOLF BOOM
Please write for prices and Information.

RAINBIRD SPRINKLERS
Heads only, No. 20 covers to 84 ft. $2.75; No. 40 covers to 102 ft. $5.50; No. 70 covers to 147 ft. $7.90; No. 80 covers to 215 ft. $15.70; 18" roller bases $4.00 each.
Prices Subject to Change Without Notice.

PAUL E. BURDETT
SEEDS—FERTILIZERS—GOLF COURSE SUPPLIES
P. O. BOX 241, LOMBARD, ILLINOIS


These new registered irons feature the "prescription" Two-Action Shaft in varying degrees of adaptability to fit the individual swing needs of each golfer. With the "prescription" Two-Action Shaft, the professional is able to prescribe, for his members or pupils, clubs that fit a custom-made standard. Every set of "Custombuilds" is provided with a shaft in any one of the following Two-Action classifications: Pro-Flex, for the hard-hitting professional; Tourna-Flex, for the tournament-playing amateur; Club-Flex, for the average golfer; Maxi-Flex, for the older golfer.

Enthusiastic over this patent pending Two-Action Shaft development, H. E. Savaria, Pres. of Sporting Goods, Inc., says:

"With the aid of the Two-Action Shaft, Springfield is able to offer the professional trade a development in club making through which the professional can prescribe for his customer with all of the skill and certainty of fit that his predecessor achieved with the simple tools of his trade in wood shaft days. All that the professional needs is his intimate knowledge of his member's game to enable him to select for that member a set of clubs that fits to a custom-made standard.

Milton B. Reach, Jr., nationally-known amateur golfer, is now bringing the story of the new irons to the pro trade.

CREEPING BENT STOLONS — FROM THE MOUNTAINS OF NORTH CAROLINA

The finest and most prolific Bent Grass that has come under my observation in 35 years' experience in growing grass for putting greens. Free of weeds and clover. Place order now for fall planting.
Write for Prices and Information.

BREVARD COUNTRY CLUB NURSERY, E. E. FRASER, PROP.
Brevard, North Carolina
MacGREGOR PLANS EXPANSION
IN 1948

Expanded outlets through domestic and foreign distribution, accelerated production schedules and further broadening of types of manufactured items for golf, tennis, badminton and sportswear will supply major objectives for the 1948 season of MacGregor Golf, Inc., it was announced by the company following the annual summer sales—merchandising-advertising conference.

Convened for this week-long conference held at the Hotel Netherland, Plaza Hotel and the firm's factory in Cincinnati were sales representatives from all parts of the United States and home office administrative, sales, advertising, research and production executives.

Henry P. Cowen, president and general manager of golf firm disclosed that recently completed branch offices in Chicago, San Francisco, Los Angeles, Seattle and Detroit (Birmingham, Mich.) areas will expedite service to dealers, golf professionals and consumer-users.

Continued development of the firm's New York office and the rapidly growing home office facilities in Cincinnati were also expected to implement the expansion program.

NORTH & SOUTH AS INVITATION —
North and South Open championship at Pinehurst will be played Nov. 3-6, Donald Ross announced. It's the oldest major tournament in the country in unbroken annual competition. This year, its 45th, it becomes an invitation affair, but with a preliminary qualifying round for those not eligible by previous championship records.
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.

Clarence W. (Cussy) Custenborder, who pioneered establishment of "Personal Use Department" in which sets of clubs were "personalized" for leading professionals has been re-appointed superintendent of the golf manufacturing division of MacGregor Golf, Inc., Cincinnati, Henry P. Cowen, president and general manager has announced. "Cussy," as the veteran golf manufacturing executive is known in golf circles and by his co-workers, first became associated with MacGregor back in 1919 when he started on the golf bench in the firm's Dayton, Ohio factory.

Wm. J. Fix, supt. of Veterans' Administration course at McKinney, Tex. says due to sadly inadequate maintenance funds course is not in fit condition to attract patients. Bill is hoping somebody will donate maintenance equipment, fertilizer and peat moss so he really could do the sort of job he wants to do for the casualties. We've heard of other cases where inadequate budgets have the veterans' hospital courses deteriorating fast.

Greenmaster Putter, designed by Francis Gallet and with grip and head of plastics, now is on a production schedule that is catching up on heavy demand. The Greenmaster putter is made by Merilite Products Co., Milwaukee.

EUGENE "SKIP" WOGAN
GOLF COURSE ARCHITECT
Design, Supervision and Construction
110 Summer St. Manchester, Mass.
Phone Manchester 309
A New, Better Cultivator

GREEN DRAGON

Opens up and aerates packed areas — Makes top-dressing and fertilizer accessible to root bed — removes grain — easy to operate without interference to turf surface.


Write for price and literature.

Manufactured by FRED BUEL, Woburn, Mass.

IT'S BALL BEARING!

The NEW GREENKEEPER $13.50

... offers greater distance ... better coverage ... positive action ... longer life!

At leading golf supply houses, or order direct.

DOUBLE ROTARY SPRINKLER CO.

816A LOCUST ST. KANSAS CITY, MO.

HENDERSON'S

GOLF GRASSES

We have special, tried and proven golf mixtures for every purpose — and our complete service to Greenskeepers also includes blending special formulas to your own specifications.

PETER HENDERSON & CO.

35 Cortlandt Street New York 7, N.Y.

September, 1947

STUART IS U.S. RUBBER PROMOTION MGR.

Appointment of Robert D. Stuart as sales promotion mgr., General Products Div., United States Rubber Co., is announced today by Henry J. Haflin, gen. sales mgr. of the division. Stuart was graduated in 1941 from Wesleyan University, Middletown, Conn. While in college he was active in radio work and he established WES, a campus radio station. He was one of the founders of the Intercollegiate Broadcasting System. He was also an announcer for WDRC, Hartford, Conn., and assistant program manager of the station's FM facilities. In 1942 Stuart enlisted as a private in the United States Army Infantry. When released in February, 1946, he was chief of AAF personnel in the India-Burma theatre, with the rank of captain. After leaving the Army he spent some time as free-lance writer and as producer for the Mutual Broadcasting System. He became associated with United States Rubber in January of this year as an assistant to the advertising director. In his new position he will supervise advertising and sales promotion for a variety of rubber products, including golf balls.
INNOVATIONS PLANNED FOR WILSON 1948 GOLF CLUB LINE

Golf club improvements, no subsequent increases in price and expanded production plans furnished the golf platform presented at the spring and summer sales meeting of Wilson Sporting Goods Co. held recently in Chicago's Drake Hotel.

"There will be practically no increase in selling prices of the new improved golf club line, which we feel is the finest Wilson has ever presented," William F. King, vice-pres. and gen. sales mgr., told the group, pointing out that this is the first time since the war that the industry is able to offer well-rounded lines of golf equipment with substantial quantities of clubs in popular price ranges.

Mike Behrendt, factory supt., told of technical improvements planned for 1948 and Tom Flynn in charge of golf merchandising described numerous improvements and additions to the 1948 Wilson golf club line.

"There will be few special orders for some time to come," Flynn stressed, "with left-handed clubs being equally scarce."

Among the improvements announced were Gruv-Grip in the 1948 K-28 line, Patty Berg Signatures and Sam Snead Signatures with the latter being constructed in Strata-Bloc. There will be new Gene Sarazen personal model woods and irons. One of the new putters will be the Jim Ferrier with a stiff shaft like a sandiron.

A return to production in number five woods for the first time since the war and a general face-lifting in appearance with decals on the woods instead of stamping was announced.

The meeting was advised of increased production in golf balls to meet the growing demand.

Fred J. Bowman, vice-pres. in charge of manufacturing stated that, "With all natural rubber being used in Wilson golf balls for the past year,
the trend is for the average golfer to play balls with lower compression."

Bowman also advised that the company planned to make more bags in 1948 than 1947 and expected to fill every order.

L. R. Freeburg, company sec'y., pointed out that golf has changed. "The butcher, baker, barkeeper, all play. The priest, the preacher and the professional all can be found on the same course. Out of the service came 1,000,000 new golfers and there's 1,000,000 more waiting the chance to play."

Science Helps Greenkeeping
(Continued from page 57)

continued feedings of sulfate are going to cause trouble. The trace elements in soils can likewise be lost by nitrogen feeding; boron, copper, zinc, iron, manganese and others. The plant must have these if it is to be healthy.

A greenhouse technician pointed out to our greenkeeping association that when their flowers get too much nitrogen they get soft, lush and will not stand shipping. To make the flowers more turgid and tough they wash out the bench and feed potash. If that applies in the greenhouse, why won't it apply to a green? We want a tough healthy turf that will take the abuse of 500 pair of spiked shoes a day and come back smiling.

Then, is it the thing to do to apply more nitrogen and one or two ounces of mercury compound per week and pray for the weather to be just right? That hardly seems like business methods. It may be a waste of both nitrogen and fungicide plus time.

Feeding What Plants Need

There are greenkeepers who are "spoon feeding" the tiny plants on their greens by a system that is based on "asking" the plants what they need to grow in a healthy way.

Dr. G. N. Hoffer, American Potash Institute, described plant tissue testing at the Purdue University short course in 1945 and again at the Midwest Regional Turf Conference March 17-19, 1947.

Those using the system know it is not perfect. A bit of common sense has to be used in interpreting the readings of the tests. No set quantity of materials can be specified to meet the needs of the plants. And yet, the tests do show the major plant foods that are needed.

Here are some results of "spoon feeding" that are worthy of noting: On one course only 4 ounces of fungicide per 1000 sq. ft. was used during an entire season. Proper feeding is cheap, and one can have confidence in the results if science is substituted for guess work.

Greenkeepers from so many states have asked the writer for his program of green feeding that it is being presented here for argument in the hope that it will induce more examination and discussion of greens fertilization.

As soon as mat or "winter nap" is removed and the bent shows signs of new life I feed 40 lbs. of 6-10-4 or other good grade of lawn fertilizer as my spring feeding.

After 4 to 6 weeks ask the plants what if anything they need by tissue testing. Then if weather is cool I feed:

2 to 3 lbs. of sulfate of ammonia;
1 to 2 lbs. of mono calcium phosphate;
1 to 2 lbs. of 60% muriate of potash per 1000 sq. ft.

Add 1 lb. of Es-Min-El per green of 6000 sq. ft. or less. More if larger.

Apply the mixture in 150 gallons of water, follow immediately from a shower nozzle making "rain" on the green.

If fungicide is to be used it can be applied with this mixture.

Weigh chemicals accurately. Know exact size of every green. Grind chemicals helps hold in suspension in the sprayer.

Dissolve 50 lbs. of Es-Min-El in 50 gals. of water. One gal. of solution will be same as the soluble nutrients from 1 lb. of material. It's only the water soluble material the plant can use.

Two or 3 light feedings per season of organic nitrogen applied dry are made when tests show the plants need only nitrogen. In putting our greens to bed for the winter, 20 to 30 lbs. of 0-12-12 is applied per 1000 sq. ft.

To reduce snow mold greens are spiked just before winter freeze and 3 oz. of fungicide applied per 1000 sq. ft. Some greenkeepers claim the spiking is enough if greens are taken into the winter well aerated. But this does not always hold true.
GOLF LIGHTING BULLETIN — Benjamin Electric Mfg. Co., 20 N. Wacker Drive, Chicago, has issued a bulletin sheet on its new lighting equipment for practice putting greens.

A brand new product—"NY-MITS"—a "new" in golf mits is now being introduced to the sporting goods market by one of the country's outstanding manufacturers of knit goods, NY-AN Co., of Albany, N. Y.

NY-MITS have all the desirable features of Nylon . . . the colors will not run or fade, the yarn will not stretch, shrink, or lose its original shape, it will not snag or tear. A survey of pros and weekend golfers, made by the Ny-An Company revealed that they wanted their mits to be colorful, to hug the club closely, and to be attached to each other to prevent loss. All these features are incorporated in NY-MITS. They are available in sets of three and four in a beautiful display package that will lend distinction to any pro shop display.

GOLF PEDDLERS REORGANIZE — After wartime shutdown the Golf Peddlers' Assn. has been reorganized by golf salesmen covering Ohio and part of Michigan. The boys put on three peddler-pro tournaments before the war. Tim McGrath, Ohio representative for Spalding, is pres., and Harry Hull, Dunlop's Michigan and Ohio representative is sec.-treas. Dues are $1 a year. The organization is planning a big party next year.

LEFT-HANDERS ACTIVE — If you've got left-handed players they may want to join the National Assn. of Left-handed Golfers. They can get full information from sec.-treas. Larry Nielsen, 252 Hubbard, Battle Creek, Mich. Left-handers' 1947 national championship at Cog-hill (Chicago dist.) this year showed the organization of great fellows to be full of pep, high purposes, fun, and growing fast.

ATTENTION

Competent Greenkeeper will consider year round position with club or other organization. Good maintenance man, willing worker, and able to handle and train men. Top salary will be required on 3 or 5 year contract in return for modern, efficient maintenance program that will justify the salary. Member of G.S.A. Excellent record of achievement that speaks for itself. Available October 15, 1947. Address Ad 905, c/o Golfdom.

Wanted: Position as Pro or Pro-Greenkeeper for club with year around proposition. Age 35, married. Class A member of P.G.A. Best of references upon request. 15 years' experience with large clubs. Address Ad 906, c/o Golfdom.

Pro or Pro-Greenkeeper. 40. Class A. P.G.A. member. Best references and credit. Anywhere in U. S. Address Ad 907, c/o Golfdom.

(Classified ads continued on page 80)