permits a bronze precision metal-to-metal contact shut off.

The Sherman "Water Miser" washer comes in new faucets of that manufacture, and attachments can be bought for installed faucets. This is a monel metal ball-bearing assembly. The No-Pans

washer slips over a special screw head, between which is a free turning brass washer.

The last two devices permit the washer seals to turn freely, and reduce wear, after bibb seat is trued up, since the closing action becomes a straight down shut off.

Preventing Winter Kill on Greens

By I. R. STROME

Green-Chairman, Rivermead GC, Ottawa, Canada

In response to GOLFDOM's request for an outline of our experience in prevention of winter kill on greens at the Rivermead Golf Club, I must begin by asking the reader to bear in mind that the writer's experience in turf culture has been confined to the Ottawa Valley in Eastern Ontario and that the methods described may not be applicable to golf courses located in districts that are not subject to our rigorous winter climate.

The climate in the Ottawa Valley is typical of Eastern Canada and similar to that of the northern New England states. The winters are usually long and severe, with occasional mild spells sometimes accompanied by heavy rainfall. The snow cover varies to a considerable extent but averages from one to three feet in the open areas. The damage done by snow-mold and winter kill is, at times, most extensive and it is no exaggeration to say that in particularly bad years in the past our greens have been almost completely destroyed.

Some 10 years ago our members decided that something should be done to prevent the annual loss of turf due to snow-mold and winter kill and the greens-committee was requested to study the matter.

Starting from scratch and with no particular knowledge of the subject, we were fully determined to master the situation. We tried out various suggestions put forward by the locker-room experts, also a few ideas of our own. We put up snow fences to hold the snow from drifting on the banked greens, scattered brush on the exposed greens to hold snow, covered the greens with a layer of manure to protect the turf from severe frosts, and we even dug forked trenches through the greens in the fall to provide drainage when the snow melted in the spring. After a few

years of this hit and miss treatment we realized that we were not getting results and we became more determined than ever to find a solution to our troubles.

About this time we had the good fortune to meet J. R. Wilson of Toronto, who presently brought Dr. O. J. Noer of Milwaukee for a visit to our course. These two practical turf experts proceeded to take us in hand and give us a course in turf management, which has continued up to the present time. They made a complete inspection of our golf course and questioned us closely in regard to our methods of looking after the greens. Then they sat down and gave us the benefit of their experiences. As a result of several of these visits we gradually changed our methods and formulated a definite plan of procedure which we believed would bring about the desired results. Then we went to our board of directors and secured a free hand to put the plan into operation over a period of five years. We felt that we needed that period of years to protect us from the quite natural criticism that might arise should we meet with a bad year before we had made several basic preparations.

Our plan provided for a year-round program of turf culture that we believed would give us better greens and at the same time prevent the ravages of snowmold and winter kill.

The first item on our program was to gradually do away with the various types or strains of grass on our greens and adopt one strain of bent grass that would enable us to treat all our greens in exactly the same manner. To this end we put in about one acre of nursery and the change-over was completed in about three years. In transferring the new sod to the greens, we first improved the sur-

face and sub-surface drainage conditions and then made sure that the topsoil was so prepared that grass roots went down to a

depth of about three inches.

Several of the greens, although well placed from a golfer's standpoint, were too shaded and closed in by trees, which required thinning out and trimming in order to allow the free passage of air currents. This presented a problem in itself as certain of our members were strongly opposed to the cutting down of trees not realizing that you cannot have a forest and a golf green in the same place. This problem was solved by having the forestry work done in the winter time. It was surprising to see how very few members even noticed what had been done when they started to play the next spring.

While the foregoing preparations were being carried out we began to treat the

greens in the following manner:

In early March, as soon as the sun becomes strong enough to melt snow in the middle of the day, we start to remove the snow from the greens. Where the snow is deep and drifted we first dig trenches through it to provide drainage and then start to work removing the snow from the sheltered greens, leaving those that are located in the open to the last. If a layer of ice has formed under the snow, as is often the case, it is gradually removed as it is softened and loosened by the sun. Sometimes we have a late snowfall which merely adds to the work.

Chemical Kills Fungus

As soon as the greens are completely clear of snow and ice they are treated with a standard fungicide to kill any snow-mold fungus that may have started. When the frost is out of the ground the sod is well rolled down with a heavy roller and this is the only time that the greens are rolled.

Early in May we spike the greens, using a three-section fairway spiker drawn by a light tractor. This may seem like rough treatment but it really does the turf a lot of good and is much faster and more economical than using a small greens spiker. The turf is then given a treatment of sulphate of ammonia in solution, at the rate of about 2 lbs. per 1,000 sq. ft., applied with a barrel sprayer.

At the end of May, or early in June, we apply a light topdressing with the following:

- 2/3 prepared topsoil
- 1/3 coarse sand to which is added
- 10 per cent (by volume, of top soil and sand) peat mold
- 40 pounds Milorganite
 - 8 pounds 20 per cent super phosphate
 - 2 pounds muriate of potash

per 1,000 sq. ft.

(The peat mold is added because our soil has a clay content that packs easily and the peat mold keeps it loose. This assists in retaining moisture and makes for a softer surface on the greens.)

The topdressing is well worked into the turf by dragging and cross-dragging with large steel door mats. This has the effect of eliminating all minor uneven surfaces and makes for true putting greens.

Arsenate of lead mixed with fine sand is then broadcast on the turf to eliminate dew worms and as our greens have been given this treatment for several years, we now use only about 2 lbs. per 1,000 sq. ft.

During the months of July and August, if the greens start to lose color, they are given one or two treatments with sulphate of ammonia in solution which is well watered into the turf to prevent burning. They are also treated regularly with the fungicide to prevent brown-patch and also to build up an immunity against snowmold.

Early in September a second light topdressing is applied but at this time we leave out the muriate of potash.

Spiked Again in October

In mid-October the greens are again heavily spiked to loosen up the turf and admit air, and they are given a final treatment with mercury salts just before we expect to have the first snowfall. If heavy rains occur after this treatment, a second treatment is applied using half the regular quantity of fungicide.

In general the greens are mowed six times a week, i. e., every day except Sunday, but in particularly hot weather the daily cutting is sometimes omitted. Three or four times during the growing season the greens are well raked with a Del Monte rake to prevent the bent from growing on its creepers and forming a mat.

It might be stated here that our turf nursery is given the same treatment as our greens except that we do not cut it quite as often.

At this point the reader will have decided that we have not mentioned any specific treatment for the prevention of winter kill. In our opinion there is no specific treatment and the answer is in keeping the turf strong, healthy, and deeprooted by means of a regular routine based on sound principles.

The results obtained to date have been most satisfactory. We do not use temporary greens and our members are allowed to play on the permanent greens throughout the entire season. The amount of turf that we lose annually due to snow-mold and winter kill is negligible and our turf nursery has been reduced from one acre to about one-third of an acre.

On two occasions in the last seven years we have lost some turf due to dehydration during particularly dry springs, as we cannot use our water system until the frost is all out of the ground. In the spring of 1941 we lost about one-fifth of an acre of turf due to this cause but it was all turf that was at least five years old and, as such, not very deep-rooted. This trouble could probably be avoided by hauling water to the greens, but we doubt very much if this would be more economical than replacing the turf.

We realize that we are dealing with a very tricky subject and that we may have plenty of trouble in the future but it is a matter of record that over a period of years we have succeeded in reducing turf losses and in providing our members with greatly improved putting greens.

Everybody But Salesmen Play in Salesmen's Event

GOLF Salesmen's Assn. of Northern California held its annual Salesmen's tournament at the California GC, Sept. 22, with a field of 195 players. About 160 stayed for the dinner and evening entertainment.

The salesmen themselves will have to play for their trophies later as they were kept too busy running the tourney and being hosts to get a chance to whack around.

Harry Bassler's 68 led the pro contingent, and the 69 of Jack Finger led the amateurs. Teams of John Battini-Mat Palacio and Dewey Longworth-Don Neher tied at 65 in the pro-am class. Al Schoux's 70 won among the asst. pros.

Annual Turf Field Day Held at N. J. Station

A putting contest was held on the show plots of the N. J. Agricultural Experiment Station, New Brunswick, at the annual Turf Field Day held Sept. 8. Winner was R. E. Harman, Essex County agricultural agent; his score was 17 putts for the 9 holes. Prize was a pound of Raritan velvet bent seed—a grass strain developed at the N. J. Station.

Dr. Wm. Martin, director of the Experiment Station, opened the program that was led by Dr. Howard B. Sprague, agronomist-in-charge. Weed control, turf disease, heights of cut, fertilization, and liming were main topics. A fungicide used with good results in rubber plantations was tried this year, and while excellent for its purpose, was found to be of no value in controlling brown-patch.

Relatively new lime experiment plots were of interest. It was found that finely ground limestone penetrated into turf soil quicker than hydrated lime. The latter tends to cake on the surface.

Attendence was somewhat off the usual volume, this due to the fact that the nearby Connecticut and Philadelphia golf course superintendents held their regular monthly meetings on the same date. Golf course men comprise the largest interested group at this event.—CKB.

PGA to Name Cup Team—Tom Walsh has announced the appointment of the following to serve on the PGA Ryder Cup selection committee: Ed Dudley, chairman of the PGA tournament committee; Olin Dutra, Billy Burke, and Leo Diegel. The purpose of this group is to recommend to the executive committee of the PGA the players who will constitute the 1942-43 Ryder Cup team. The final selection of the Ryder Cup team will then be made by the executive committee November 10, 1941, at which time the annual meeting of the association takes place.

Due to the war, the official Ryder Cup matches have not been played the past two years. However, the American PGA Ryder Cup team has carried on in style by playing matches for the benefit of the American Red Cross and the U.S.O. Walsh stated that word has been received from PGA officials in Great Britain that "it was of great encouragement to them that the Ryder Cup team was being

continued in America."



With conditions uncertain as they are, it's difficult to make definite statements regarding the future—particularly where manufacturing or materials are concerned. But looking always ahead, and right now looking to '42, we should like to take this opportunity to inform our golf professional friends throughout the country just what policies and plans they may expect from MacGregor. We're going to continue to make the very highest grade clubs and balls—"Tourneys"—that quality materials and superior player-craftsmanship can produce. We're going to use every bit of material that we can get our hands on for that purpose. Revising our policy, we're now selling our entire output of MacGregor golf balls through the golf professional.

Play the Clubs the Pros Play

PROGRAM FOR 42 IMPROVED PRO POLICY

PRO only policy on MacGregor golf balls

PROduction concentrated on pro only merchandise

PROmotional support to strengthen the golf professional

We're going to back you more aggressively than ever and give you more promotional support. We are aware that members trade upon the pro's knowledge and reputation, and, naturally, do so to the extent of their confidence in him and their respect for his position and ability. We're going to supply more point-of-sale material — more consumer advertising — more radio interviews — all of which will help you to improve your position, to make you the top man in golf in your community, and to assist you to earn more money on your job—with the MacGregor line. You'll find it to your financial advantage to cut down on broken stocks of too many lines and, instead, to concentrate on, and to push a leading line—"TOURNEYS."

Tommy Crimour TOURNEYS THE GREATEST NAME ON GOLF
CRAWFORD, MACGREGOR, CANBY CO., DAYTON, OHIO

Walsh Steps Down

By HERB GRAFFIS

PGA, richly benefited by constructive, troublefree terms of Tom Walsh, to elect new head at annual meeting, November 10-13, in Chicago

A NNUAL meeting of the PGA of America will be held at the Chicago Towers Club, 505 north Michigan Ave., Chicago, Nov. 10-13. Educational conference will start at 2 P.M. Tuesday, Nov. 11. Effort is being made to get Dr. John Anderson of the University of Minnesota to be a feature speaker on the educational program. Prof. Anderson is a national authority on motor skills and his talk at the Minnesota pro conference advanced many interesting scientific suggestions for increasing effectiveness of golf instruction.

Tom Walsh will not be a candidate for re-election. Walsh has had two terms that have been richly beneficial to pro golf at a critical time. The PGA program has been constructive, the organization's public relations have been improved greatly, its educational program has made a tremendous advance, its promotion of activities have been extensive and effective, and its tournament work under the direction of Fred Corcoran has been richly productive.

One of the convention topics certain to be of great interest to the delegates, the pros they represent and the golfing public, will be the report of Joe Novak as chairman of the PGA's Teaching committee.

Basic Plan of Instruction

Simplified instruction in the fundamentals long has been an objective of the pros and their association. Based on research done at the PGA championship and at university pupils' classes, and test applications on adult pupils, Novak believes his committee has discovered something of keen interest and value to pros and their pupils. The principles and method are based on playing and teaching of highly successful pros. A major obstacle to fairly uniform agreement on golf instruction, of course, is the strong element of individual artistry in effective instruction. Gradually out of the pros' discussions on instruction methods is emerging a basic plan of instruction in the first principles of the game, with the teaching of the more advanced points being left as a matter between the expert instructor and the pupil.

Controversies have been conducted constructively and without inflammation of personalities, consequently the PGA approaches the problem of finding a successor to Walsh without offering the chosen president the delicate and important job of balming bruised spirits.

No political groups have been active in grooming candidates for the PGA presidency; it now having been generally agreed that the sacrifices of the job and the neglect of one's personal affairs make the position one to be occupied by one to whom is being done no great favor by his colleagues.

Walsh, in retiring, will make several recommendations to the organization, one of which will be a proposal that a business manager or executive secretary be hired to attend to numerous phases of organization now requiring personal attention and travel of pro officials who are compelled to take time off from their own jobs.

Suggests First Prize Increase

He also will suggest that the PGA increase first prize money of its annual championship to \$3,500 instead of \$1,100 as at present. There has been public question of the PGA plea for more prize money inasmuch as the PGA championship calls for the winner and runner-up to go through a grueling week of golf for less money per round than comparatively minor tournaments. The matter is especially well timed when it is reported that Joe Di Maggio intends to ask for \$80,000 for his 1942 labors on the basis of his record in hitting in 56 consecutive games while Ben Hogan for his phenomenal feat of placing in the money in 56 consecutive golf tournaments will get as his bonus next year just about what he can hack with his own clubs.

Financing of the PGA tournament bureau's successful work will be helped, beginning Dec. 1, 1941, by a 5% deduction from the tournament prize money. This action was endorsed by the PGA Tournament committee and made effective by vote of the PGA Executive committee.

Smart Promotion Makes Tournament Pay

GEORGE LAKE, pro at Long Beach (Calif.) Recreation Park GC, engineered the 1941 Southern California PGA championship at the Long Beach municipal course in a way that will give other boys some tips on how to profitably conduct a regional PGA event.

Lake is a good promoter of golf as a public recreation feature. He's had youngster and adult free class lessons at the Recreation course since he started and followed up the pioneering program of Larry Gleason effectively. He has coached high school golf teams that have won the Southern California championship 12 of the past 13 years. Lake also is one of the spark plugs of the free adult clinic pros in his locality are conducting at driving ranges. This clinic is in its second highly successful year.

The SC PGA championship hadn't been at Virginia Beach for 10 years. It was wanted as a example of the city's municipal golf course management's alertness in giving the local public a thorough program of first class golf. George put up the \$500 prize money himself.

Fay Coleman, Bud Oakley (eventual winner of the SC PGA), Howard Schmidt and George put on an exhibition the afternoon prior to the tournament's qualifying round. The three guest pros stayed for the Long Beach Men's Club dinner meeting where they were introduced. After the dinner the boys went to the first tee which George had lighted, and put on a shotmaking demonstration attended by about 300.

After the demonstration the crowd moved into the clubhouse where the pros answered questions. Many season tickets were sold for the championship to the clubhouse crowd. Ticket stubs gave holders an opportunity to cash in on golf balls and a set of clubs as a bonus.

The ticket for Friday, Saturday and Sunday play was only 85 cents. That low price involved taking a chance. You've got to sell a bunch of them to get off the nut on the prize money. But as a golf popularizing stunt the low price succeeded. George got his guarantee back and a bit more.

Another entertainment stunt was used with success in the clubhouse session. Lake asked questions about the rules of golf and about past performances. Golf balls were given for correct answers. This went over so well George plans to use it several times a year as an entertainment feature.

Group instruction classes were held at local driving ranges the Tuesday before and the Thursday after the championship. Ten pros teamed in conducting this affair. About 100 people took the lessons and a gallery of about 500 watched. Each class was followed by a demonstration by the pros. This affair developed considerable private lesson and club sales business for the pros.

With the help of Perry Ferguson, Recreation Park course manager, and of the Men's and Women's clubs at the Park, George was able to run the tournament

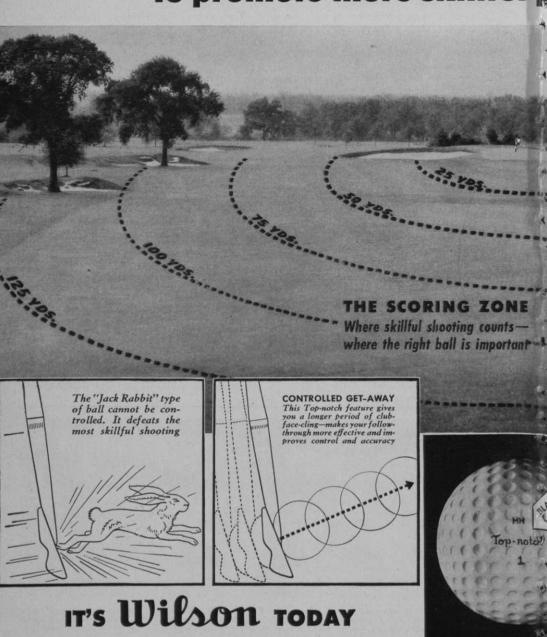


"Golfer, ahoy!" shouts this first-class yeoman as he tees off, abandoning the familiar "Fore!" He's playing at the U. S. Naval Training Station's Sail-Ho golf course in San Diego, Calif. Bags and clubs and playing privileges are all free to enlisted men at this course, where Mike Vesock is course manager.

October, 1941

THE ACCENT'S NOW

Wilson leads the field wit to promote more skillful



IN SPORTS EQUIPMENT

ON SKILL

a Golf Ball designed ay in the Scoring Zone

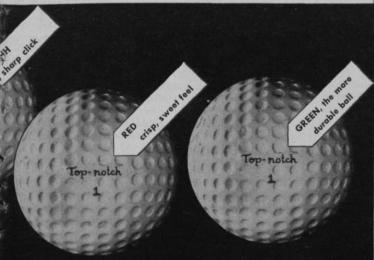
These new Wilson Top-notch Balls meet the maximum distance permitted under the new ruling. BUT, due to a new combination of vegetable oil center, controlled-tension winding, compression and cover, they give a new degree of control and accuracy in the scoring zone—where skillful golf will pay out from now on.

Controlled Get-Away—Playing these balls you will get a new feel of control. While you get a sweet, staccato click off your irons, you also get a feel of longer club-face-cling. The ball doesn't "jack rabbit" off the face of the club. It eases off. You get more of a fluid action—a controlled getaway, which makes your follow-through more effective, and your iron play more accurate.

The "Snuggle-Roll"—On the putting green you have the sweetest ball you ever played. No hop-along—just a sweet snuggle-roll that obeys your putter, holds to the green and improves accuracy.

Three balls make up this new Wilson Top-notch Line—the Black HH has a hard, sharp click. The Red, for most good players, has a crisp, sweet feel. The Green is toughhided for those who need a durable ball. All are 75c numbers. Be first with the first ball tuned to the new game. Wilson Sporting Goods Co., Chicago, New York and other leading cities.

Wilson TOP-NOTCH GOLF BALLS





VEGETABLE OIL

This new fluid oil center operates on the principle of hy draulics—enclosed liquid under pressure. Being vege table, like rubber, it tends to keep the rubber in the core fresh and lively. Unaffected by extremes of temperature

SOLD THROUGH PRO SHOPS EXCLUSIVELY at minimum expense. Advertising in the program netted a profit although rates were low; only \$7.50 for a ¼ page, the largest unit of space sold. The program sold for a dime.

Members handled policing, scoring and ticket sales. The tournament was so interesting and successful the members of the Long Beach municipal course club have agreed to underwrite it next year.

In addition to the operation of the tournament in black ink it was a very successful event in adding to well publicized reputation of Recreation Park as "The Public Course With the Friendly Atmosphere."

Hawaii's New Hanakekua Course Is Beauty Spot

IF HAWAII'S new and beautiful 9-hole course lives up to its name it should be a great place for men concerned with the business end of golf, as well as for the hackers.

The new 2,470 yard course is called Hanakekua, meaning "work of the Lord." It is on the site of an old missionary home.

A. D. (Doug) Monro who formerly operated a practice course at Molokai was one of the moving spirits of the new club and is its manager.

Highlights of Hanakekua's development are given by Dick Faris in the magazine Hawaii. Dick tells:

"Frustated by the total lack of public recreational facilities on Molokai, where not even a public beach is available, the committee, headed by Wilson N. Jacobson, began organization of the club nine months ago.

"Surmounting financial and land problems in rapid order, Senator George P. Cooke was induced to make arrangements for his Molokai Ranch to turn over 50 acres of its finest pasture land on a tenyear, dollar a year rental basis, and an additional donation of \$1,000 for a clubhouse; Libby McNeill & Libby and California Packing Corp. contributed \$500 each; and a satisfactory membership list was subscribed.

"Three months of labor on the fertile pastures by Calpack men and material levelled rough spots, built up greens, mowed fairways and cleared courses through giant ironwood and cypress forests. Lush grass pastures easily shaped into fairways under the manicuring process, natural contour greens were marked, and clumps of forest hemmed fairways with tricky hazards. Permanent greens of finest top carpeting now mushroom beside the temporary installations. Nightly rains and heavy dew provide sufficient moisture for perpetual greenness.

"Cool trades sweep the 1,300-foot elevation from mountains to the East. A pause on any fairway commands a view of Maunaloa mountain in West Molokai, and two coastlines separated by the 20,000-acre richly fertile plain of Hoolehua, offering a stunning pattern of Hoolehua homestead farms outlined in the vivid red dirt, green crops and brightly painted roof tops far below. Spiraling fields of contour planted pineapples extend geometrically in wedges almost to the sea.

"An Hawaiian-styled clubhouse on a hill-top with lounge, locker-rooms and canteen bares a glassy front to the widest

sweep of the view.

"Wilson Jacobson became Hanakekua's first president, serving with Frank N. Kinnison, John W. Hoxie, Kenneth Auld, J. E. Milligan, Charles Meyer, Melville O. McGuire, George A. Will, James M. Hill, H. F. Cowan and Charles Kawano as officers and directors.

"An initiation fee of \$25 was receptive, and \$3 monthly dues complete all greens fees and assessments for full membership. An associate membership is secured by payment of \$25 and small greens fees."

Greensmen Face Another Tough Test

(Continued from Page 12)

in line. On many other requirements the policy enforced is to order and hope for delivery. The condition has focussed golf club attention on equipment requirements as never before.

Considerable filling in of unnecessary traps has been ticketed by clubs for fall and winter work. Clubs have been reminded that this work, too, costs money.

Dependent, of course, on weather, winter sports programs at the northern clubs seem due for emphasis. This will mean winter work for whatever men of the crew can be retained. Other work is planned to keep them on, should winter sports be ruled out by adverse weather.

And on the subject of weather, the greenkeeper and committeemen are, as customary, trusting to prayer but budgeting to fight the weather in case the

prayers are unanswered.