from the floor allowing storage of carts above and below, without necessity of folding carts or detaching bags... Arrangement practically doubled Newell's bag cart storage room.

Valuable addition to history of golf in midwest is "The First Fifty Years" book of LaGrange (Ill.) CC golden anniversary... Club's original course was laid out by Herbert Tweedle as 9-hole job... Club moved in 1913 onto new 18-hole course designed by Tom Bendelow and Wm. Langford... R. F. Burns, chmn., Historical committee and associates have done an excellent job of digging up information showing how closely the club has been associated with development of the suburban community.

Helen B. and Roy F. Perkins have compiled and edited a handsome and entertaining 50th anniversary book for Wannamoisett CC, Rumford, R.I... Three lads fresh from college started Wannamoisett after the sheriff had forbidden their Sunday play which consisted of knocking golf balls with a few irons cross-country... Nucleus of present clubhouse is a pre-Revolutionary War building... First course was laid out by Willie Campbell... Donald Ross designed present course which was opened in 1916... Wannamoisett's first pro

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Tire Floor-Mats in long runners and special sizes for locker room, grills, entrances, and shower rooms. Pay for themselves by saving floors, spikes, and preventing accidents. Low prices due to high production.

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Ready for immediate shipment while our supply lasts. Carefully crated. As easy to assemble as tightening a screw. Sold only in groups of three. Mail your order today. All shipments K.D., F.O.B., New Britain.

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New Britain, Conn.
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• The AIR CUSHION INSOLE of Superior Quality, originated and perfected by AIR WALK

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FLEXISOLEs are custom made of selected first quality U. S. KOYLON foam to insure proper resiliency, buoyant support and long wear. GILON, the elastic leather type coating, an AIR WALK development, further provides soft, luxurious foot comfort.

Attractive package in two color sports design.

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was Alec H. Findlay. .. Hugh Gordon was hired as pro in 1911 on two months’ trial and has been there ever since. .. Martin Greene came from the Country Club of Brookline in 1923 as greenkeeper and has stayed on the job.

Algonquin CC (St. Louis dist.) green chmn. J. Porter Henry and gkpr. Oscar Bowman, in cooperation with the club’s entertainment committee, put on a Grass meeting for members. .. Henry gave a general talk on grass with slides showing effect of length of cut on root system and other turf maintenance details. .. Bowman did the answering in a “Questions and Answers” session which gave members considerable help with their lawns as well as acquainted them with problems and achievements in course maintenance. .. The evening meeting was well attended and pronounced by members exceptionally valuable and interesting. .. It’s a swell hunch for other club programs next spring.

Looks like Ayton family may again supply bright chapter in British golf with a son Laurie being frequently named as most promising of younger British pros. .. The boy started in golf when his dad, now back at St. Andrews, was pro at Evanston (III.) GC. .. First of the golfing Aytons was Wm., Sr., who was a chief petty officer under

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Nelson at Trafalgar... Wm., Sr., who died at 99, was one of the 12 who founded St. Andrews GC and was its captain in 1843... His son, Wm., Jr., was 11 years St. Andrews captain... Wm., Jr.'s son, Davie, father of present older generation of the tribe once lost a British Open by taking 11 on next to final hole... Of Davie's six sons Alec is in the U.S. and until recently pro at St. Louis (Mo.) CC... Davie, Jr. and Laurie are at St. Andrews.

Beginning Golf Booklets

Set of four booklets containing illustrations and script of the highly popular "Beginning Golf" series of four colored slide sound films for school golf instruction, now are available at 20 cents a set. The booklets are on the history, elements and etiquette of golf; the grip, stance and swing; iron shots and putting; and the rules simplified. Pros may secure sets for distribution to junior class members by ordering from National Golf Foundation, 407 S. Dearborn st., Chicago 5, Ill. Usual procedure in school instruction is to distribute each booklet of the set after class showing of the sound slide film, with pupils paying for the booklets.

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FITS
1" Diameter
Regular
Receptacle

The Swing is to the
LARGER BASE
• WILL NOT TILT or Break Through Sole.
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(White Plated or Black Finish)
WILL NOT TURN BY THE THREADS
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... again in '49

One important reason for the outstanding success of the Wagner De Luxe Golf Cart is that each year more and more owners recommend it to their friends... a most important reason why you should stock this popular, profitable item.

$27.50 List price
Write for discount information

PAUL G. WAGNER CO.
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“Split-second” action!

It’s the “split-second” getaway action that gives the Haig ball its extra yardage. And that “split-second” action is custom-built into every ball. In addition to exclusive Hagen features, the Haig ball has all the advantages of revolutionary Isotropic construction. Dynamic balance gives the Haig true flight and roll. Its livelier liquid center and extra high tension winding give it amazing new distance. You can recommend the Haig to your members with the assurance that no ball made can out-perform it.
Market Survey Selling Aid to be Supplied to Pros

By JOE GRAFFIS

Reaction to an April GOLFDOM article suggesting that pros make a market survey of playing equipment that golfers store in their shops has been so favorable and extensive that material is going to be supplied to enable all pros to take advantage of this merchandising service.

It was pointed out in April GOLFDOM that making a check of members' equipment corrects the opinion of some that golf equipment sales during the postwar years have been so strong a sales slump is inevitable. The fact is that the great majority of golfers would be benefited by being advised that much of their equipment is in bad condition, beyond repair, or is obsolete for their effective use.

Test inspections of bags and contents in rack storage have been made by pros and manufacturers' representatives at several clubs, particularly in the New York metropolitan district. These inspections have given pros specific and written evidence that they're a long way from having their markets adequately supplied.

As a matter of fact the evidence in black and white has been shocking to pros who have thought they are pretty lively merchants. Many sets owned by fairly active and financially solid members are from ten to 15 years old and are in badly worn bags that were ready for the junk pile before the war.

Another Pro Service

Keeping pro selling service in good balance may account for some of the pros leaning over backward lest they be thought guilty of pushing too hard for business. Funny thing about some golf club members is that they will brag that they belong to a club with rich members but when their pro tries to make a good living by serving them completely, the same proud members will complain that the pro is getting rich.

Consequently a lot of pros under-sell members below the point that represents first class pro department service. Too often the fear of members' complaint about the pro making a living is used as a consoling alibi for not selling enough in the shop.

To educate unknowing members to selling service being a part of the job for which he is hired the National Golf Foundation, 407 South Dearborn, Chicago 5, Ill., and GOLFDOM are preparing a pro market analysis form that will not appear as such to members, but will be supplied to them as a record of their equipment.

The dentist's girl calls the patients every six months or so suggesting a check-up. The service station man pastes a reminder in your car telling when a change of oil should be made. The automobile dealer has a follow-up system urging seasonal conditioning of your machine. The washing machine and vacuum cleaner dealers keep reminding your wife at regular intervals when equipment should have a check-up and repairs — or be traded in. But outside of the season-opening letter very few pros have such a service and merchandising follow-up.

That's one of the blind spots in pro merchandising service that the pro "market survey" material is to cover.

Detailed Reminder for Player

The proposed form will be furnished to pros in duplicate; one copy to be given to the member and the other to be kept by the pro in a "live" file to be a constant reminder that he should be applying diplomatic sales pressure in some instances.

Details of the form are being worked out with pros. Generally it's going to have the following data:

WOOD CLUBS—Kinds (Driver, brassie, spoon, No. 4, No. 5) Trade Names. Approximate year of manufacture.
IRON CLUBS — Numbers. Trade Names. Approximate year of manufacture.

BAG — Kind. Condition (Good, fair worn).

WOOD HEAD COVERS — Number. Material, Condition.

BALLS — New. Used.

SHOES — Condition.

GOLF GLOVE — Condition.

OTHER ACCESSORIES — (Condition as listed).

The original copy of the check-up is to be mailed by the pro to the member or pay-as-you-play course player whose golf bag and contents have been examined.

Along with that copy is to go a letter which can be on club stationery and signed by the pro, or will be supplied mimeographed on National Golf Foundation stationery and is to be signed by the pro. This letter will read:

Dear Golfer:

Enclosed is an inventory of your golf playing equipment.

Many players have requested such inventories for personal information or insurance purposes. Should you desire an appraisal of the value of your golfing outfit I'll be very glad to supply it without cost or obligation. Simply advise me and the figures will be given to you quickly.

The information attached has been compiled and is being sent you and to members of the nation's leading clubs in making professional department service thorough for all our players.

Sincerely,

(Signature)

Your Professional

The pro is to make use of the duplicates by compiling first, a list of members whose equipment should be replaced by modern equipment of greater aid to their enjoyment and scoring.

This list, broken down into needs of clubs, bags and accessories, will be of considerable help to him in directing his purchases and advertising and sales work.

All the cards, alphabetically filed, will give the pro a clear idea of the condition of his market and indicate members who may need special sales attention because of their need of equipment or their purchasing having been done elsewhere than in the pro shop.

The duplicates of the inventory should be kept at the pro's home — anyway, not in the pro shop — as the data may be of value in case of insurance claims or players' claims of loss.

Suggestions regarding these record sheets are requested from all pros as the sheets are to be printed and made available to all professionals by June 1.

Professionals who want a supply of these sheets may secure same by writing GOLFDOM, 407 S. Dearborn St., Chicago 5, Ill., and advising how many they need to make their survey and supply one copy to the member and keep the duplicate for themselves. Sheets are of letter size that can be filed in a correspondence folder or in an inexpensive ring binder such as may be bought at a stationery store or a "5 and 10."

Cost to the pro will be very low as it will involve only handling and mailing. Production expense will be borne by National Golf Foundation which asks that pros in return for the sheets give a summary of the ages and condition of equipment in their members' possession so status of the entire golf field's playing equipment at present may be determined.

"CHECKS" FOR CLUB'S WINNERS

Harold L. Clasen, pro, Northland CC, Duluth, Minn., issues this check style certificate to winners in weekly sweepstakes and as gift certificates. In the lower lefthand corner Clasen writes "Happy Birthday from ......." in case of gift certificate or details of the winning by the sweeps contestant. Checks are mailed out the day following the competitive event and as a rule are "cashed" within a week. Members get a pleasant thrill out of receiving the checks. The checks are printed and bound in books of 100 with stubs perforated on each sheet and kept in the book as a record.
Proper Diagnosis of Trouble Helps Prevent Turf Failures

By THOMAS C. LONGNECKER
Senior Soil Scientist, Texas Research Foundation

There are a large number of factors which may cause turf failure. From his many years of experience the greenkeeper knows that the time to correct them is before they happen. He follows a maintenance program which is designed to provide, as nearly as possible, optimum conditions for grass growth. If he finds the turf turning brown and dying on his No. 8 green he first attempts to determine the reason for the failure. He knows that before he can take any steps to correct the trouble he must first find the cause. In doing this he makes use of all his specialized knowledge of soils, grass growth, diseases, insects, chemistry, etc.

Diagnosing the trouble is usually not too difficult but sometimes even the greenkeeper may be stumped and not able to pin the trouble down so that he can say, "This is it." By process of elimination even on these occasions he generally can rule out many of the factors causing turf failure and narrow the trouble down to two or three probable causes. It may be that further study and observation, or perhaps laboratory analysis is necessary to arrive at the cause of the turf failure.

Alertness on the greenkeeper’s part enables him to recognize the signs of approaching trouble before it makes too much headway, and by proper diagnosis he is able to apply corrective measures immediately. The following list, which is by no means complete, may be useful in helping to prevent turf failures or the proper diagnosis of their cause after they occur.

**DISEASE** — Almost all turf diseases produce characteristic symptoms which are usually easily recognized in the early stages. Bill Jones has learned to recognize the characteristic smoky ring at the outer edges of an area affected by large brown patch organisms. He is equally familiar with the small straw colored damaged areas resulting from small brown patch. To confirm large or small brown patch or find the organism responsible if another disease is suspected a small piece of sod from the damaged area can be submitted to the Plant Pathology Department of your state experiment station. In doing this, however, one should be careful to obtain the sod sample while the disease organism is still active. Samples obtained a day or two after the damage occurs are usually worthless.

Cultural practices may influence disease outbreaks. Any practice or condition which tends to produce a weak, unhealthy plant will make the grass an easier prey for disease organisms and reduce its ability to renew growth after disease outbreaks.

**INSECTS** — Insect damage is usually specific and characteristic. Space does not permit detailed descriptions of these characteristics here but as our friend Bill Jones has done, every golf course superintendent should become familiar with the life cycle, stage of life cycle in which insect may damage turf, how damage is done, and control measures for all the insects which may damage turf.

The mere presence of insects does not indicate insect damage as many insects live in turf which are not harmful. If insects are present in injured areas, collect some and have them identified if you cannot make a positive identification.

**CHEMICAL BURNS** — Fertilizers, insecticides, fungicides, and weed killers are chemicals and will cause severe turf damage unless applied uniformly at proper rates. Never apply more of these materials than is actually required. Even though an excess of these materials might not burn the turf it would result in poor growth and appearance of the grass. With more of these strong chemicals being used on golf courses, great care must be exercised in preventing workmen from getting the wrong material. Sprayers used to apply more than one kind of material should be thoroughly cleaned after each use to prevent damage when used with other materials later. Spreaders and sprayers should be filled
The Big News is the new Wilson Isotropic

Golfers in every club everywhere are reading and talking about Wilson Isotropic constructed Top Notch balls ... their dynamic balance ... their high compression distance performance ... their record of wins* in tournament after tournament.

A smashing double-page spread in colors in the May 14 issue of the Saturday Evening Post broke the Wilson Isotropic story to

*Most major tournaments played this year to date have been won with Isotropic constructed Top Notch balls.

These members of the famous Wilson Advisory Staff are helping you to sell Wilson Isotropic constructed Top Notch balls by playing these great balls exclusively:


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(A subsidiary of Wilson & Co., Inc.) • Branch offices in New York, San Francisco and other principal cities
method of golf ball construction
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Top Notch balls

America's golfers. Dominant, colorful, large space ads in the
Saturday Evening Post, Life, Collier's and scores of other
publications are telling and will continue to tell golfers—your club
members—throughout the season about the advantages of playing
Top Notch balls... about their wins record... and send more and
more golfers to your shop to buy Top Notch balls.
where anything spilled will not cause injury.

MALNUTRITION — Unless the mineral nutrients such as nitrogen, phosphorus, potassium, manganese, magnesium, iron, calcium, boron, and other trace elements are supplied as required, the turf will have a poor color and appearance and make very little growth. Turf color and rate of growth are the best indicators of starvation. Fertilizer materials should be added as required to keep the grass growing at a reasonable rate and a healthy green color. Starved turf is thin, giving poor ground cover and poor playing surface and will not stand up under heavy play. Injuries heal very slowly and bare spots result. As a general rule, a complete fertilizer should be applied each spring and fall and straight nitrogen fertilizers during the growing season to keep the grass in a healthy vigorous state of growth. Nitrogen fertilization during the growing season has been found to reduce the severity of small brown patch damage.

OVER FERTILIZATION — Too much fertilizer may be as harmful as not enough. Overfeeding with nitrogen will usually produce a weak, watery growth which is easily damaged by play and attack by disease. Light, frequent applications of fertilizer are much better than less frequent, heavy applications. A good rule to follow on greens and trees is to never apply more than one pound of nitrogen per 1000 square feet in any one application. Thus 5 pounds of 20% sulfate of ammonia or 20 pounds of 5-10-5 would be the most to apply at one time. During July and August it is a good idea to reduce each fertilizer application to not more than 1 pound per 1000 square feet of sulfate of ammonia or its equivalent. Such application should be made as often as required to keep the grass in a healthy state of growth.

DROUGHT INJURY — Even where modern watering systems are used the turf may die from lack of moisture. Soil conditions, watering practices, weather conditions, or a combination of these factors may result in an extremely shallow root system in greens. The grass roots may not go lower than the surface inch of soil. When the temperature is high and water loss from the soil and grass is very rapid, the moisture in this shallow root zone is soon lost. As a result the grass suffers from lack of moisture and turns an unnatural bluish-green color. Footprints will remain much longer since the grass is unable to return to its original position. Whenever these signs appear water immediately.

Greens and fairways also may have localized areas where because of soil or turf cover, water is unable to penetrate. After normal watering the soil in these areas is dry. Unless corrected by spiking or forking so that water can penetrate the turf will die.

OVER-WATERING — On many golf courses, because of soil conditions or location, all the greens will not require the same amount of water. Drainage, both surface and underground, and the soil texture will affect the ability of the soil to take up water. The rate at which the green dries will be affected by surrounding objects which may shade the green or reduce air circulation. Under such conditions it is very easy to overwater. A green which continues to receive too much water will soon have a compact puddled soil. When this happens, the air supply in the soil is reduced with the result that the grass roots are unable to obtain their required air below the surface inch or two of sod. A shallow root system with all the associated troubles is the result.

ACID SOIL — Physically, chemically, and biologically a strongly acid soil is unfavorable for grass growth. Water penetrates very slowly, it is easily puddled when wet, bacterial action is very slow, applied fertilizers are not efficiently used, and toxic elements may be released. Test your soil annually and apply sufficient lime to bring the soil to a pH of not less than 6.0.

MOWING TOO CLOSELY — Turf grasses differ greatly in their ability to withstand close mowing. Under optimum growth conditions most grasses can withstand closer mowing but mowing too closely will produce a shallow-rooted weak plant which is unable to compete with weeds or survive diseases and insect attacks.

MATTED TURF — Creeping bent grasses produce many above-ground stolons and unless these are kept in check by raking and mowing, a heavy, thick mat of turf will develop. This mat is harmful to grass growth and makes ideal conditions for disease and insect attacks. This mat usually develops on the approaches and collars of the greens where bent grass is used

(Continued on page 94)