Here's a gift that goes a long way!

The great new Spalding DOT—the incomparable distance ball—is now packaged in fast-selling “Famous Golf Hole” gift boxes.

These striking boxes, in simulated leather, are richly lined, with a spring-hinged cover featuring a full-color reproduction of an Erwin Barrie “original” in a handsome, gold-embossed frame.

Here, without a doubt, is the most saleable way to offer America’s finest golf ball. Available in boxes of one doz. and half doz., through you, the golf professional only! Free name imprinting for quantities of one dozen or more completes this attractive sales package.
PRO shop sales of sportswear and related items to women is becoming such potentially big business that the smart professional is entrusting this phase of his operation to the person who knows and can sell women best—a woman.

There are very few men who are capable of doing a good job of selling to women. How many men do you see working in dress shops where fitting, styles, color matching, etc. are of what you might call critical importance? A man may be able to sell wrist watches, handbags and even shoes to women but when it comes to sportswear and the like, he is pretty much a failure.

I suppose the main reason for this is that the average man doesn't have the patience, and probably if he'll admit it, much interest in selling to women. Ninety-nine out of 100 golf pros are accustomed to selling to quick-buying males who take an average of about two minutes in deciding what they want. A female who is inclined to be deliberate in making some kind of a choice (and all of them are) baffles men salesmen. Many of the latter in the process of attempting to make the sale are frowning and ill at ease, probably muttering to themselves, "Why can't this gal make up her mind?" The female usually detects and resents this and, in most cases, instantly gets out of the mood for buying.

So, she is accused of not knowing what she wants, or of coming in and taking the pro's time without any intention of buying, or of being capricious. If you were to say to the pro that he treated that last customer rather shabbily, he'd swear that you didn't know what you were talking about.

Sizes A Mystery

The subject of women's sizes, from what I have seen, always will remain a mystery to most men. Because of this, they don't have any idea of how to stock, with the result that at the end of the year they have a lot of unsalable merchandise on hand. Men also are weak on stocking popular colors and styles because, I suppose, they don't make any attempt to keep up with the feminine fashions.

Whether or not the pro realizes it, if his shop is poorly stocked, his women members may end up buying most of their sportswear and even clubs and balls at other shops when they go to play as guests at other clubs. I have seen numerous cases where women from outside clubs have come into our shop and made rather large purchases, remarking that many items we have displayed aren't available at their courses.

Pros, too, should get out of the notion that women are extremely price conscious. As far as I can see, this is the prize misconception of the golf business. It's true that a woman can make a dollar go farther than a man, probably because he has made her the custodian of the household funds and periodically asks for an accounting. This has tended to put her somewhat on guard and made her more dollar wise than her husband. Conse-

(Continued on page 65)
There is no finer game than golf...

And no finer equipment in the game

The finest equipment in golf bears my name and is sold only through the grandest gentlemen in the game, the golf professionals.

Walter Hagen

Haig Ultra

Walter Hagen Golf Division
Grand Rapids, Michigan
Protection for Drivers, Markers That Stay Put, Convenience in Tee Boxes

Drivers on all tractors at the Montreal, Que., municipal course are protected by a homemade wire cab. This is a very heavily played course.

O. J. Noer's Turf Tips

Here are effective tee markers used on the municipal course in Montreal, Que. The markers are cast by a local foundry and are sufficiently heavy to discourage vandalism.

Front view of the boxes placed beside each tee at Baltusrol. The number of the hole, its par and yardage are painted on one side. There is a receptacle for litter and one for the ball washer.

The tee box at Baltusrol viewed from the rear to show the tee towels, and with the opened box for score cards. Latter are available at first tee.
"This is the most logical period for renovation. Growing conditions are favorable. Weed competition is much less severe. It permits a better distribution of labor." That's what professor H. B. Musser of Pennsylvania State University says — and we're sure you agree.

Because of the widespread interest in Fall Renovation, West Point has prepared a 62-page Bulletin "Fall Renovation of Greens and Fairways." We feel sure that you will enjoy getting this Bulletin and will want to keep it handy. Don't fail to get your copy.

FALL RENOVATION BULLETIN OFFER

West Point Products Corporation
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Please rush your new 62-page Bulletin "Fall Renovation of Greens and Fairways."

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Name ........................................... Title ...........................................
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September, 1958
Greens stay green with

FAST DRAINAGE ALLOWS GREENS TO BE PLAYED AFTER RAIN

Zorball's ability to drain excess water nearly four times faster than sand results in greens that are playable—not soggy—even after repeated hard showers. Yet five seasons of field-testing on greens prove that this rapid drainage does not lead to "burn-out," because Zorball absorbs about its weight in water, keeps soil moist below the surface. (Heavier than vermiculite, Zorball stays put in the wind.)

ROOT-AREA MOISTURE RETENTION
KEEPS TURF GREEN IN DRY WEATHER

Zorball, a calcined mineral aggregate, structurally stable, promotes aeration, minimizes soil compaction, allows moisture to penetrate to roots more rapidly. And because Zorball retains 29% more moisture than sand, treated greens show improved root growth, stand up through pro-

longed dry spells. (One club reports that Zorball top-dressing has cut extra-personnel expense for moonlight watering by two-thirds, dry-season water bill by one-third.) Zorball is ideal for building greens, too—conditions subsoil, yet does not affect regular fertilizer.

HERE'S PROOF THAT ZORBALL BRINGS LONG-LASTING RESULTS!

This plug, taken from a green top-dressed with Zorball for five seasons, shows aggregate still loose and granular. (Standard twice-a-year treatment: Ten 50-lb. bags of Zorball for 5000-square-foot green.) Note how light character of treated soil permits 8" root growth.
ZORBALL Top-Dressing!

Wyandotte CHEMICALS
J. B. FORD DIVISION
Wyandotte, Michigan. Also Los Nertos, California. Offices in principal cities.

SEND COUPON TODAY FOR FULL DETAILS
Wyandotte Chemicals Corporation
Dept. 3090, Wyandotte, Michigan

Yes! I'd like to know more about Wyandotte ZORBALL top-dressing.
Please furnish full details.

Name ____________________________
Course or Club ______________________
Street ____________________________
City and Zone ______________________ State ____________

September, 1958
Golf Course Irrigation

Properties of Pipe, Trenching and Backfilling and Water Supply Sources Are Discussed in Second of Three Articles

The major cost in almost every irrigation system is the pipe, which for an 18 hole golf course, approximates 23,000 ft. in sizes ranging from 8 in. to 1¼ in. Pipe is, as you know, available in cast-iron, steel, copper, cement-asbestos and plastic. All require special care in installation.

Since an irrigation system in the mid-west is not used during the winter, it is rarely necessary to bury the pipe below the frost line. A 24 in. soil cover over the top of the pipe is sufficient. Shallow bury, however, sets up certain problems, the chief of which is temperature range the pipe becomes subjected to during winter and summer. It may vary from zero to 70 deg. F.

Expansion Properties

This range sets up considerable expansion and contraction in pipe materials; much more in some than in others. The lineal co-efficient of thermal expansion in cast-iron, steel, copper and cement-asbestos pipe is about the same but is much higher in plastic pipe. To cite one example: If we run a pipe down the middle of a 400 yard fairway and if it goes through a 70 deg. F. temperature change it will be approximately six ins. shorter in the winter time if it is made of cast-iron, steel, copper or cement-asbestos. But it will be 57 inches shorter if it is made of plastic material. To overcome this large contraction effect and keep the pipe from pulling apart, plastic pipe manufacturers suggest that the pipe, when installed, should be "snaked" in the trench, I personally feel that the best precaution is to bury it below the frost line where the temperature is fairly constant.

Cement-asbestos pipe has been used on a few golf courses in the middle-west and as far as I can determine is suitable. However it might be well for you to bear in mind that the walls of cement-asbestos pipe absorb some water. According to the circular C450 issued by the U.S. Dept. of Commerce, water absorption of asbestos-cement pipe, after 14 days immersion in water, went up as high as 10 per cent expressed as a gain in weight. This indicates that although in draining this pipe, we might be able to get all of the free water out of it there still might be a percentage of water retained in the wall of the pipe which could form into ice during freezing weather. Water, as you know, when in the form of ice is approximately 8 per cent greater in volume. This condition could in time cause flaking and weakening of the pipe wall.

So if you plan on using this pipe it might be well to bury it deeper so it will not be subjected to freezing temperatures.

Temperature changes seem to have little effect on cast iron pipe because bell and spigot joints permit a slight movement at each joint.

In steel pipe, which is usually threaded and coupled together, movement set up by temperature changes is usually taken care of by inserting expansion joints at approximately 250 ft. intervals.

Some of you whose courses border electric railroads or street car lines may encounter some trouble with electrolysis where stray electric currents leak from the rails along the pipe and then back to the rails. This condition pits the pipe and eventually a hole appears. There are several ways to overcome this problem but probably the best is to use a non-metallic pipe at critical points.

Trenching and Backfilling

If damage to turf, either by the settling of the backfill or scalping by mowers is to continue over the years owing to a poor backfilling and turf relaying job, it greatly detracts from the value obtained
LLOYD MANGRUM, one of the world’s finest golfers, says: “Torsion-Control GLASSHAFT provides ‘sweet spot’ hitting that assures straighter and longer shots. Tell your members about GLASSHAFT today!”

Golcraft Inc.
1021 W. GRANT AVE.
ESCONDIDO, CALIF.

EASTERN BRANCH: 7059 W. Addison, Chicago, Ill. • IN CANADA: Pro-Made Golf Co., Vancouver
Mr. and Mrs. Waco Turner of Burneyville, Okla., are completing an elaborate recreation center in that community that includes an 18-hole course, the lodge, shown above, and six other buildings. The course winds around five lakes, one of which covers 3½ acres and is located on the 10th hole. The Opie Turner Open for women was recently played in Burneyville.

from a new irrigation system.

One method of trenching which works out quite well is to first remove the turf to a width 4 ins. wider than the trench width. This permits a 2 in. shoulder on either side of the trench which eliminates much damage to the turf during pipe-laying operations and later provides a grade for relaying of turf. The trenching machine which seems best suited for the work is the type which deposits all excavated material on one side of the trench, thereby leaving the other side clear for pipe laying operations.

When the pipe has been properly laid a 6-in. layer of backfill should be thoroughly tamped under, around and over the pipe. When the turf is laid and rolled or tramped it should go back to original grade.

Disadvantage of Crowning

Years ago we used to crown the backfill and the turf on the trench lines with the thought that it would eventually settle. Unfortunately, although some of it did settle, a lot of it did not, the result being that for a number of years after the irrigation system was installed the crowned turf on the trench lines got scalped each time the fairway was mowed.

The method employed by Don Strand at Westmoreland CC, Skokie, Ill., in backfilling trenches in his greens after he had installed the center system of green watering is, in my opinion, most effective and certainly bears description. After removing turf on the green and excavating the trench Don layed in a 4-in. line through which he pushed the 1½ in. water line to the center of the green. A few cubic feet of crushed stone was then deposited at each end of the outer pipe. This made an ideal drain for the removal of any excess water that might accumulate around the green sprinkler. In backfilling he had a man walk in the trench and shovel in the back fill in 3 or 4 inch layers. This enabled him to get correct soil compaction. Roy Nelson employed the same method a year or so ago at the Golden Valley C.C. in Minneapolis and obtained equally satisfactory results.

Water Supply Sources

One of the chief problems encountered when a new irrigation system is considered is an adequate water supply. Courses which can obtain adequate water from nearby rivers or lakes are certainly much more fortunate than those which have to depend on a city water supply, wells, or man-made lakes.

Courses which obtain water from the city main and then boost pressure by means of a pump often find that the rapid growth of a city forces the city water