

Iron — Symbol *Fe* for Latin *Ferrum*. A silver-white metallic element, it is malleable (can be worked) and ductile (can be drawn as into a wire), is strongly attracted by magnets and is readily oxidized (rusted) in moist air. Found almost universally in combination with other elements, it constitutes about 5 per cent of the weight of the earth's crust.

Iron is essential to the manufacture of food in green leaves but is not a part of the chlorophyll molecule. It acts as a catalyst (helper).

Iron deficiency symptoms in green plants are associated with chlorosis (loss of green color). Young leaves are first affected. Deficiencies rarely occur in acid soils; frequently in alkaline soils. Iron is more available in poorly aerated soils.

Iron can be supplied to the plant through roots and through foliar sprays, either as inorganic salts (ferrous sulfate, called copperas) or as chelates (pronounced Kee' - lates). Chelates are more expensive but are more efficient at lower application rates.

Ferrous ammonium sulfate, a good source of iron, often is used in premium mixed fertilizers. It also can be used in sprays with other forms of nitrogen, soluble and insoluble.

Yellowing of turf usually is associated with iron deficiency which may be induced by high pH (lime chlorosis), excess phosphorus (phosphorus chlorosis), by poor weak root systems, or by actual lack of iron in the soil. Some grasses are notoriously susceptible to iron chlorosis (centipede, zoysia, bahia).

areas that are neglected.

We can guide them to authentic sources of information. One problem, however, is that of getting the attention of those who need the help.

Clover Control

Q. My greens were Seaside bent but are being converted to Penncross by overseeding. Several greens have patches of clover the size of a saucer. What do you suggest for control? (Virginia)

A. Send a man out with a rubber glove and some arsenate of lead in a bucket. Have him wear the glove and, with it, rub arsenate of lead into the clover patches. Results will not be immediate nor dramatic but the clover will be discouraged.

Two suggestions: (1) pay closer attention to disease control, especially snowmold. Clover is a common invader in snowmold spots; (2) check the watering schedule. Clover thrives with an excess of water which also favors disease. Anything that thins turf will encourage disease invasion.

Bermuda Thins Out

Q. We are right in our transition period between rye and Bermuda in the fairways. Where we had the heaviest rye and the most beautiful winter turf, we now have virtually no Bermuda. In a few areas where an experimental thatching machine was demonstrated

we have excellent Bermuda. What is your explanation? (North Carolina)

A. Thinning the winter grass let the sun warm the soil which gave the Bermuda a big boost. Bermuda needs heat to get started. The dense mat of cool-season grass, further cooled by frequent light watering, prevents Bermuda from getting life-giving heat. As a result there is little good Bermuda turf until June or July.

Back to Cool-Season Turf

Q. Our club, located in the transition zone, has Bermudagrass in the fairways. Because of heavy winter and spring damage in 1963 the stand is patchy. The members are determined to return to cool-season grasses for the sake of appearances. How can we best revert to cool-season grasses? (Maryland)

A. The most helpful procedure in developing better cool-season turf will be generous fall fertilization to build a good reserve of nutrients. Roots, rhizomes and turf density can most effectively be developed by fall feeding.

Bermuda will tend to be smothered. Avoid spring soil cultivation which would help the soil to become warmer and thus encourage Bermuda. Reserve all aerification for fall at which time additional seed of a mixture of bluegrasses and creeping red fescue may be planted if needed. If patches of Bermuda are heavy be sure to use a thatching machine to remove debris and get seed and fertilizer into the soil. The best time to build residual nutrients in soil is immediately after fall aerifying.



Al Keeping (r), Gulph Mills pro, and his assistant, Ronnie Astle, discuss some of the fine points of a wood clubhead. Keeping never takes clubs out of manufacturers' display boxes (background) when he shows them in his sales room.

How Al Keeping sums up the Pro Operation

You Run Shop for Dough-Rewards Come in Teaching

By JOSEPH W. DRAGONETTI

Like golf, Albert George (Al) Keeping of the Gulph Mills GC, King of Prussia, Pa., one of the Philadelphia area's most popular pros, is an import from Scotland.

We spent the better part of a rainy day recently with Al Keeping talking about his 42 years in the game both in this country and his native land, how he runs his pro shop, how he teaches and other aspects of his long career.

A portrait emerges of a big, modest, warm-hearted man, one whom the Philadelphia Section of the Professional Golfers Association named Pro-of-the Year in 1963.

What roads did Al follow to achieve such recognition?

Al has been the pro at Gulph Mills for 20 years. That is the longest tenure of any person in that post in the history of the exclusive club, which has a membership of about 200.

Starting at the beginning, we talked about Keeping's early years. Al was born on July 5, 1908, in Edinburgh, Scotland, the son of an officer in the British Army. Being a Scot he naturally took to the game, but there were other influences. Two of his uncles, John and Jim Edmundson, were top pros of their time. Jim played at Royal Port Rush, one of Ireland's finest courses.

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"Most women," says Al Keeping, "have a tremendous desire to play good golf." That's why they are a little easier to teach, according to the Philly pro. He is shown giving a lesson to Elfriede Schaefer. Terry Erhard, in background, absorbs a few tips.

Uncle Jim won the Irish Open Championship three years in a row, 1908, 1909 and 1910. He came to this country after the First World War to become the pro at the North Hills GC. While there he won the Philadelphia and Pennsylvania Opens.

Uncle John was a noted pro at Huntingdon GC and at Llanerch CC. He was at the latter club for 27 years.

Best of Influences

Two other great golfers who had a strong influence on Keeping were George Duncan, who was the pro at Wentworth in Surrey, England, and his brother Alexander (Alec) Duncan, long-time pro at the Philadelphia Cricket Club.

Al went to work for George Duncan when he was 14. One of his first tasks was to make golf clubs under the supervision of some of the top specialists in the field. Even today Keeping can make clubs, but he says: "Manufacturers do a great job in making clubs, so I spend my time selling them or teaching." He does, however, maintain a repair section in his pro shop.

"George Duncan," Al says "was one of the greatest golfers Scotland ever produced. He taught me the fundamentals



of the game. We did not have practice areas at Wentworth. You went out and played a game with your teacher. Another special technique he used was to call in all his pro shop assistants after he won or lost a tournament and give us an analysis of what he did that was right or wrong.

Strict But Patient

"In some ways he was a stern taskmaster. He was strict about the appearance of his shop, just as he was strict, but patient, in teaching us how to improve our games. Even today it seems to me that the greatest asset a teaching pro can have is patience.

"Later, I watched George Duncan play exhibitions in the United States and was always grateful for what he taught me, including a fast-paced game. I copied him in that respect."

Duncan must have seen a lot of potential in the eager young man from Edinburgh because, in 1926, he recommended him for the position of assistant to

(Continued on page 92)



A clubmaker for 42 years, Al shows his assistants a few things about filing a clubface. Keeping has been at Gulph Mills for 20 years, serving his apprenticeship under several famous shopma-

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The Teenage Market

Pro Shop Can Bid for Sportswear Business That Goes Elsewhere

Ten-billion dollars will be spent this year by the nation's teenagers. More than \$14-billion will pass through their hands in 1965, according to leading market research organizations. It's small wonder that department stores and specialty shops have increased their efforts to attract this lucrative market.

How many of these teenage dollars can be added to pro shop sales? Probably quite a few for the pro who goes after them. Your teenage market depends on the number of teenagers who use your course and club facilities. Smart buying and skillful promotion on the part of the pro are necessary for success with teenagers.

As with all your customers, sales will depend on the amount of service you are willing to give teenagers, and the degree to which you are willing to cater to their tastes. If you approach teenagers as potential customers with money to spend rather than as kids cluttering up the course, chances are you can capture a fair share of this market.

Several pros are already involved in teenage selling. Graham Ross, at Dallas Athletic Club CC, says: "Some parents use the club as a place to park the kids. Most of the youngsters are aware of the pro shop and will buy the things they need and want if you've got something to sell them. It's a matter of stocking merchandise that will appeal to them."

Clinics Create Customers

An active Junior golf program, as Gene Root at Lakewood (Colo.) CC points out, is a great source of teenage sales. "As the Juniors develop as golfers, many buy \$1.25 balls and \$4.75 gloves," Root states. "Many times, parents buy the youngsters topline pro clubs as presents when they graduate from high school."

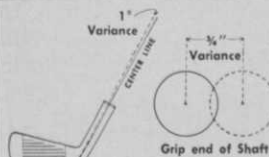
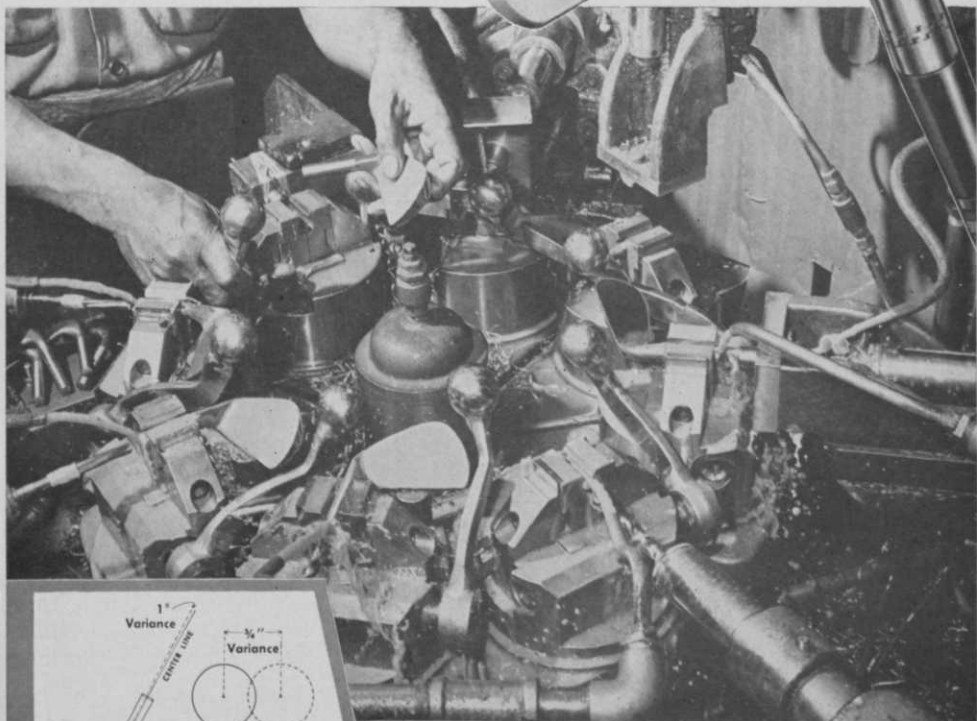
Root's observation of the value of Junior clinics to pro shop sales is a sound starting point. From golf equipment displays, it is only another step to a well-stocked teenage sportswear department. With 40 to 50 teenagers involved in the average Junior clinic, plus many more who use the pool and tennis courts, the pro has an excellent opportunity to establish his shop as a headquarters for this group.

Precision Drilling

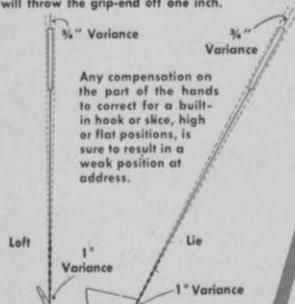
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If hosel is drilled with an error of one degree—of hook or slice, upright or flat—in a standard length No. 2 iron . . . the grip end of the shaft will be $\frac{3}{4}$ " off line. A one degree variance in the drilling of a driver will throw the grip-end off one inch.



Any compensation on the part of the hands to correct for a built-in hook or slice, high or flat positions, is sure to result in a weak position at address.

Any variance can affect either or both loft and lie.

One of the critical steps in the manufacture of a truly fine iron is the drilling and reaming, because absolute precision is necessary if the shaft is to fit properly.

No amount of "doctoring" can fully correct a "bored-off" head — it's a built-in error.

Precision workmanship on the finest equipment, like that shown in the illustration, is just one of the steps which guarantee that engineered Power-Bilts are your best buy because they will consistently perform better for your members!

HILLERICH & BRADSBY CO., Louisville, Ky.

Master-Matched
Power-Bilt
Golf Clubs

Teenage sportswear may well be one of the pro shop's greatest untapped resources. It is likely that teenagers' wardrobes include a greater percentage of casual clothing than those of their parents.

Selling teenagers requires buying smart teenage fashions. Your best source of supply and helpful merchandising tips are the sportswear salesmen who service your shop. Consult them on promotion ideas. The major manufacturers are well aware of the teenage market and have carefully studied teen fashion trends. They produce good quality and style for Junior customers. Manufacturers and their reps undoubtedly are anxious to help you increase your teenage sales.

Promotion Makes Sales

Take your cues from stores that specialize in sales to kids in promoting casual Junior clothing. Teenage purchases are often made for reasons of identity. The status of the seller in most teenagers' eyes is an important factor. Often, a teenager will save for weeks to buy a sweater from a particularly popular shop, rather than buy a cheaper version at a local department store. This gives your pro shop a unique advantage. The connotations of country club and golf are important in attracting teenage buyers to your shop.

A pro shop label with the club crest is a useful decoration on the sportswear you sell. It probably carries even more prestige with youngsters than with adults. It might even be possible to have the customer's name sewn on to the label if the cost doesn't run too high. This, too carries a lot of weight with youngsters. Flyers addressed to your teenage customers will acquaint them with your sportswear and equipment department. Pro shop operators at semi-private and public courses, too, can capitalize on the prestige of golf as a selling tool through ads in local papers.

Style Shows and Consultants

Style shows of teen fashions are a selling tool for many local merchants. It may be no problem to outfit these shows with sportswear you have in stock. And, for models, choose from the club's teenage girls — they'll jump at the opportunity to

What Is the Risk with Teenage Credit?

Our shop has never lost a dime on teenage credit

*Mac Hunter, Riviera CC,
Pacific Palisades, Calif.*

We've extended credit to kids of from \$1 to \$500, based on our judgment of their character We've had almost no bad accounts over the years.

*Dick Farley, Montauk Down GC
Montauk Point, L.I.*

Probably you should set a \$60 limit payable at \$20 a month with no service charge If the account isn't paid promptly, add a 1½ per cent charge and close it after payment.

*Joseph A. White, International
Consumer Credit Association*

take part in a style show. Plenty of spots around the clubhouse or in the pro shop are ideal for a show of this kind. Held sometime in August, you should be able to attract a lot of back-to-school business. Suggest that your members invite guests to the show.

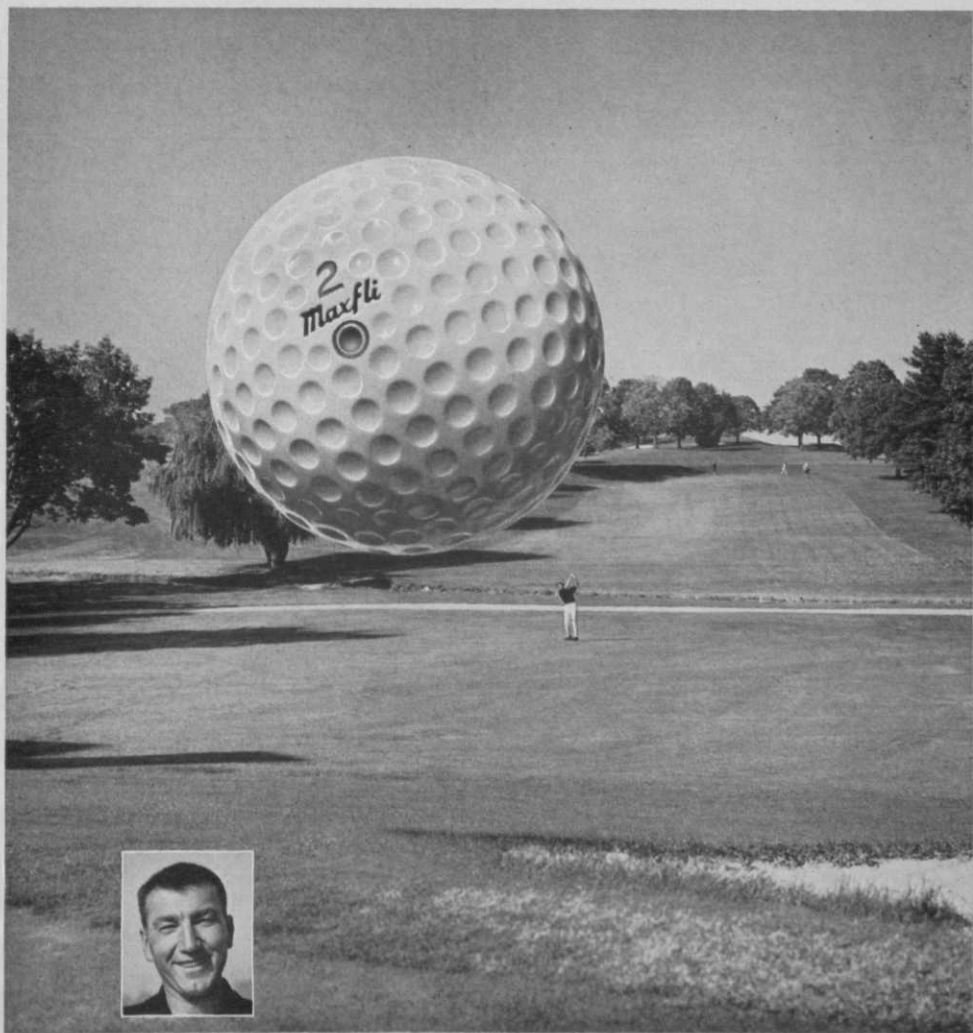
Young girls are often employed by department stores to serve as fashion consultants to teenage customers. Possibly, one of your salesgirls is just the type for this service. Or you might choose a well-dressed, popular college girl home for the summer for this job. In either case, a consultant can give specialized help to teenage customers.

Teenage girls probably will be more interested in a sportswear department than teenage boys. But don't forget the masculine fashions. Boys usually are more sportswear conscious than their more practical fathers. Mothers, too, enjoy buying smart looking sportshirts, sweaters and slacks for their sons.

Once a merchandiser decides to compete for teen dollars, the controversial question of teenage credit comes up.

The general practice of tacking teen-

(Continued on page 90)



Big Ed* hits it *a Maxfli mile*

Ed can swing an easy 4 iron or hit with a 5 instead...a Super Maxfli makes that much difference in midiron play. Chances are it will give your players their longest drives. This we promise...no other ball can out-drive a Super Maxfli. (Continuing tests prove it.) None other holds a better putting line. The finish stays bright round after round. Your best players will like it most. Super Maxfli.

**Ed Furgol, Dunlop Golf Advisory Staff member.*



SPORTS DIVISION 500 Fifth Avenue, New York, N.Y. 10036



On the Professional Side



Al Robbins, the well known Midwest golfwear salesman, who is always thinking of new ways to make shoetop catches of the player's dollar, suggests a rack such as the one shown here for displaying golf shoes.

Since it need be only about five feet high and 36-inches wide it won't take up much space and can fill in very nicely in that part of the shop that may have a rather bare look. The important thing is, though, that the display will sell shoes.

The tilted shelves should be covered with monk's cloth or heavy, decorative paper, or you may want to paint them. The top shelf might be occupied by HIS shoes (possibly black) and the middle shelf by HERS (possibly brown). Six shoes (not pairs) fit comfortably and artistically on a 36-inch shelf. The lower shelf can be devoted to displaying socks, shoe trees, shoe horns, etc. There are, of course, several combinations for showing shoes and shoe accessories.

Holder on the left upright can be used for displaying photos or catalogs of shoes that aren't carried in stock.

When displaying shoes be sure they are laced. They should be stuffed with tissue paper if you don't have enough shoe trees to go around. Show small size shoes in your displays, preferably size sixes. If you display socks, say, on the lower shelf, be sure to include a pair of red ones. As Al Robbins points out, nothing catches the customer's eye like red.

You may want to put your name or some kind of a legend in that French-curved piece above the top shelf. How about something like this: "Your professional, John Par, is proud to present the World's Finest Golf Shoes."

★

Two 8½ x 11-inch paperback books that may be of use to professionals in club reconditioning and in teaching golf classes are just off the press.

"Golf Club Reconditioning" published by Lakeside Golf Center, Whalom Park, Lunenburg, Mass., can be purchased for \$2.25. "Tested Ways of Teaching Classes" by Maurine Bowling of the Physical Ed department of the University of Oklahoma is also available for \$2.25. The publisher is Wm. C. Brown Co. Publishers, 135 S. Locust st., Dubuque, Ia.

The reconditioning book runs to 32 pages. It is broken down into 32 sections. Some of the aspects of re-working clubs that are covered are: Tools and Materials, Sample Price List, Preparing the Work Shop, Refinishing and Adding Weight to Woods, Reshafting Irons, Re-Gripping and Material Suppliers. A Short Cuts and