It's hard to beat the selling punch of a fine product linked with a well-known name. Behind the Dunlop line stand the personalities and playing records of Craig Wood and Henry Picard. These men were largely responsible for the development of the Gold Cup and PGA balls for distance and accuracy. They actually designed the new Dunlop Maxfli golf clubs in collaboration with George Aulbach. The world knows they represent good golf—and Dunlop.
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the implements of golf. First, the ball. About 1897 was produced the Vardon "Flyer," which had a tremendous vogue until about 1902 when the Haskell rubber core ball appeared. This was patented April 11, 1899. The core was made of rubber thread or tape wound under tension. In 1905, the Spalding "White" appeared—a ball without paint. In 1907, Spalding produced the famous "Glory Dimple"—with a core of bunched rubber thread, moulded in a dimple mould, which Spaldings controlled under license from Taylor of England.

Introduction of the Sinker

Previous to about 1909 all balls were approximately one size and weight—that is they were all light, floating and large. The first change took place when Spalding introduced the "Baby Dimple." To secure greater distance balls were made heavier and smaller. The "Baby Dimple" was 1.65 inches in size and 1.52 ounces in weight and did not float.

In 1915, the "Red Honor" ball appeared, 1.67 ounces in weight and 1.67 inches in size, at which time golf ball manufacturing was placed on a scientific footing never before approached. At the same period, another small ball, the "Bullet Honor," 1.64 inches in size and 1.72 ounces in weight was introduced.

In 1917, the "30" or Midget ball was perfected, 1.63 inches in size and 1.64 ounces in weight. This became standard size throughout the golf world. In 1918, the famous "50" was perfected, 1.63 inches in size and 1.69 ounces in weight.

The movement to increase specific gravity culminated in 1920, when balls were known to be as small as 1.62 inches and as heavy as 1.75 ounces—very powerful ammunition indeed in the hands of a strong hitter.

Ball Improved Rapidly in the Twenties

On May 1, 1921, the Royal and Ancient in Britain, and the USGA, in an effort to curb this power, limited the ball to not under 1.62 inches in size and not over 1.62 ounces in weight.

In 1921, experts developed a method by which a thin cover could be vulcanized to a low compression core that still would not cut readily, yet retain distance. They called it the Kro-Flite.

The year 1928 brought the multi-dotted
We admit: it’s the coming PENFOLD! as usual... always one jump ahead!

Now in our 6th Pro Only year!

PENFOLD GOLF BALLS, Inc., 11 Park Place, New York
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Ball. On Jan. 1, 1931, the standard ball was changed to 1.68 inches in size and 1.55 ounces in weight—the large, light ball in America. Canada and England remained under the same standardization rulings as in 1921.

On Jan. 1, 1932, the standard ball was again changed to 1.68 inches in size and 1.62 ounces in weight. This was done in the US by the USGA, but in Canada and England the Royal and Ancient retained the same ruling as in 1921, namely, 1.62-1.62. A revival of the paintless ball came in 1932 in the Top-Flight.

There have been all sorts of centers for golf balls, including solid centers, soft bunched rubber thread, semi-liquid, a small hollow sphere, bag tied at neck and filled with semi-liquid substance, dough, glass marbles, and cores of water, liquid ice, honey, dry ice, mercury and innumerable other substances.

Having covered high spots of ball development, let us trace the progress that has taken place in the last 50 years in club building.

Let me conduct you through a factory and note the changes that are taking place. It is 1897. Harry Vardon joined A. G. Spalding to tour America, give exhibitions and promote interest in the game. He brought his clubs from England. Copies were made of them and named “Vardon Flyer” golf clubs.

Vardon’s Clubs Are Copied

Messrs. Curtiss and the Reach boys got together and figured that even these fine clubs could be improved. With that end in view, dogwood was substituted for beech, and a leather face installed. Pig skin was substituted for sheep skin for the grip. This in turn gave way to calf skin. Later persimmon was used for heads, and has been used ever since.

Next the socket was used instead of the spliced head. From this point on, two things were considered vital to the firm—improvement and production. Ways and means to bring this about were started. The Reach brothers were put in control of the factory: The Gold Medal brand was brought out in 1900—and what fine clubs they were! But W. F. Reach was not satisfied. In the back of his head was an idea—to bring about a matching of size and shape, and to have consecutive pitches in exact gradation whereby there was a club for every shot. The clubs were matched in swinging weights, with a dis-
tinctive face marking. This marking was suggested by the fact that a majority of players had the habit of addressing the ball with the top line of the blade set for direction, a hooked ball resulting. It was two-colored, the lower half of the blade being blackened and in a line paralleling the sole. This blackened half blade so captured the eye that the club was automatically properly lined up, setting the direction as the crow flies, and suggesting the name Kro-Flite.

The next thing was to have these clubs registered. Blades, shafts and grips were all weighed and then fabricated so as to have them all feel the same, and when finished they were put in a testing machine to prove that principle. Then a number was given to each club so that if one was broken or lost an exact duplicate could be furnished. Of course this applied to the matched sets of irons as well as the woods.

A standard grip was built into each club so that one could take any club in his hands and feel that the only place that he could grip it comfortably was the correct place.

Now let us look at the steel shaft.

The Knight patent on steel shafts was issued November 22, 1910 but it did not come into any real popularity until about 1922. This was marketed by the Horton Mfg. Co. of Bristol, Conn. It was known as the Bristol Gold Medal Shaft. It was first legalized by the Western GA, later by the USGA.

The Bristol company, under the leadership of Herbert Lagerblade, a professional golfer, continued a long list of experiments that helped to bring the splendid shaft we have today. Others entered the field and are making fine shafts. To Herbert Lagerblade must go credit for the earliest research work. The steel shaft was inevitable and helpful in golf because it is uniform; everyone starts equal, whereas in the case of hickory only a few got the cream of those shafts.

Tommy Duncan, Pine Lake Manager, Rates Fashion Show As Ace Feature

MANAGERS of first class country clubs who are making a smart play for women's business and want to score can take the tip of Thomas E. Duncan, manager of the swanky Pine Lake CC (Detroit district), and put on a woman's fashion show.

Duncan considers the Pine Lake fashion show one of the most popular and successful entertainment features ever put on at the club; successful because of the business it brought to the club and the pleasure it gave the women members and their guests. The crowd packed all available space.

Show was put on through arrangements Duncan made with one of the leading women's shops in Detroit. The shop cooperated willingly, for a fashion show at a class club is a display opportunity a live shop doesn't want to miss. Apparel was selected to suit every sports and social occasion at Pine Lake. The array was enough to make any husband's wallet punch-drunk. There were displayed costumes for golf, tennis, riding, beach, bathing and boating. Next in order of display was spectator costumes. The show closed with displays of summer formal gowns.

Tommy figures the bang of the show came from displaying the costumes in their proper setting at the club. Models parading through Pine Lake's glass-enclosed dining room which faces the lake, and along the terrace, made the show aces with women who have been ringsiders at fashion from the Rue de la Paix, Paree, to Lac du Pine, Mich. Orchestral music went with the march of the mannequins.

Manager of the store cooperating has advised Duncan the Pine Lake show was the most successful display the store ever put on, in sales and in accounts opened. Storeman attributes the way the show clicked to the gowns being worn in the absolutely correct stage setting and atmosphere and to the fact that spectators of the show were lunching leisurely and in the right mood for buying reaction.

Do You Talk Yourself Out of Ball Sales?
By J. C. BRYDON, V.-P., The Worthington Ball Co.

SOME pros sell more golf balls than other pros with a comparable opportunity. With the same number of members and about the same type and financial status, there is a wide difference in volume and in profit. Let us see why, for greater sales is the goal we are all seeking.

The answer goes to the roots of successful selling—the finding and appealing to the most effective sales incentive for that particular product. Not necessarily the most obvious or the most spectacular or the most talked of; in fact, the most effective buying appeal is often one little considered and exploited.

The correct answer is to be found only in studying the psychology of the buyer.
Better Clubs—Better Sales

Sales of the new Bristol "Equi-Tuned" Clubs keep stepping right along. And no wonder!

These perfectly matched sets are quite different from anything offered before—and players are quick to recognize the advantages of scientific shaft "tuning."

* * *

Don't overlook this chance for extra profits. Get the whole remarkable story of these better, different clubs.

* * *

Here's what you'll find: Every Bristol "Equi-Tuned" Club has just the right balance of stiffness and whip—the rating that experts say it should have. Every Bristol "Equi-Tuned" Shaft is scientifically graded in flexibility to the next shaft in line.

In a set of Woods—the Driver is approximately 5 per cent more flexible than the Brassie, and 7½ per cent more flexible than the Spoon. In a set of Irons—the Niblick is approximately 30 per cent stiffer than the No. 2 Iron.

Try these new "Equi-Tuned" Clubs. Then—feature them. You'll like the way they sell and you'll like the way they play.

New Bristol Balls

The new Bristol Balls are made by the new, slow-heat vulcanizing process which ensures longer life and better distance. Feature them. Players buy them—play them—like them—and keep coming back for more.

Two types: Bristol Championship (thin cover) and Bristol Tough Cover (thick cover). Both retailing for 75 cents each.

WRITE for latest Bristol Golf Catalog, which shows the new "Equi-Tuned" Clubs and all the Clubs, Balls, Bags and Sundries offered by Bristol.

THE HORTON MANUFACTURING COMPANY
388 HORTON STREET

Bristol "EQUI-TUNED"
GOLF SHAFTS AND CLUBS

(Illustrated) Section of shaft of a Bristol "Equi-Tuned" Club. Note the Control Point. This marks the line of demarcation between the Control Section (stiff part) and the Whip Section (flexible part) of the shaft. Variations in flexibility are obtained by raising or lowering this Control Point.
The manufacturer may be right in his advertising—and he may be wrong. The conventional method may not be, usually is not the most effective. Frequently, analysis will disclose a better method, a more action-compelling appeal, and the result is a break away from the traditional path and a spectacular success.

The technical man is prone to think in technical terms and to sell on technical arguments. The average non-technical player is not interested in “how” but in “what.” He does not buy products, but the service those products render him. He is not interested in the manufacture, the seller or the product. He is interested only in what is self and how things affect him. So if you are to sell more golf balls and better golf balls, or clubs, or bags, you must realize just what will appeal most strongly to the golfer and concentrate on that.

Applying it to golf, the first thing which impresses one is that cost has been overemphasized. Golf is a sport to the club member, and the cost of golf balls is a negligible percentage of his total expenditure for the sport. Normally, he would not have given it a tenth of the consideration it now receives due to over-emphasis on that angle.

He plays for sport; and he expects to pay for his pleasure. He is interested in anything which will help him to get more enjoyment from his game.

He has been taught that nothing renders a ball unfit for play except a cut. As a result, nine out of ten bags carry an assortment of old balls that no one could play decent golf with, and the player buys new balls only from necessity; and then, in far too many cases, buys “bargains” at the store instead of a dependable brand from his pro.

In this lies the key to greatly increased golf ball sales. Talk better scores instead of dwelling entirely on mechanical construction; impress on your members that they can get out of a ball only what is built into it. Quality is never cheap, but only quality can bring good golf. Show them how hanging onto an old ball which has lost its distance and life is cheating themselves out of much of the pleasure which could be theirs. You will sell them better golf balls and more golf balls.

The golfer wants lower scores; he wants distance and true flight and roll. Talk these, and he will buy oftener and to your greater profit.

Political Parties Bringing Big Revenue to Golf Clubs

PRIVATE CLUBS that accept non-member parties and fee courses with facilities to handle large numbers of guests are having a great year with political parties.

Alert club managers are successfully contacting political organizations for golf outings and even going to the extent of showing the organizations how they can run these affairs (which include golf, cards, other games, refreshments, dancing, dinner, floor show and prizes) in a way to make some money for the campaign funds.

The boys of the “Julius Z. Goof for Re-election as Dogcatcher Booster Club,” put the slug on the usual prey of political bandits and sell many tickets as a mild shakedown to people who don’t attend. Club collects only for actual attendance and if smart, insists on the dough on the line, as the statesmen are not strangers to the practice of larceny.

Games, other than golf and cards, played at these affairs are softball, keno, tennis, horseshoes and croquet.

SLAMMING SAM SNEAD, popular hillbilly pro at Greenbrier, White Sulphur Springs, made mountain music in winning the West Virginia state pro tournament with a 70-61—131 on the 6,317-yard Greenbrier championship course. Figure is said to be a competitive record for 36 holes. In his 61-round Sam three-putted the sixth and the ninth after smacking tee shots of 293 and 286 yards, respectively.

Sammy’s 61 settled all the feuding in them thar parts for a time. Fued firing will resume this autumn when Billy Burke, guest pro at Greenbrier, comes down to be on the staff with Snead and to resume the Snead-Burke golfing version of the feud of the Hatfields and the Coys.

BOB KING, amazing exhibition golfer who is compelled to play supported by crutches, has been averaging 288 people an exhibition this summer. He has paid off the $800 stock issue to which golf bugs subscribed to give him a start. The young fellow is a great worker and asks no odds because of the infantile paralysis affliction that put him off his legs. He puts on a swell show and at a 50-cent gate.

In addition to playing clubs, he has been working at driving ranges, stores and night clubs.

Plan Model Clubhouse—Cascade Hills CC officials (Grand Rapids, Mich.) are busy planning what they say will be America’s model clubhouse, A. W. Honeker, secy., reports. Cascade Hills’ $100,000 clubhouse, fully covered by insurance, burned down recently; but plans are immediately going forward on a clubhouse that will be the last word in comfort and architectural beauty.
TOUGH—and your players Know it!

—know that with its VULCANIZED cover, any PGA ball will take the huskiest beating a duffer can give it and emerge with cover unscathed.

—know that the interior construction of PGA balls has been carefully planned to give m-a-x-i-m-u-m distance for every type of golfer—from the rank beginner to the pro himself.

—know that PGA balls are accurately balanced—that they will fly true and putt true—because they are built to the rigid specifications of the Association.

And 1,500 P.G.A. Pros know—

—that energetic pushing of PGA ball sales means more satisfied golfers and more sales for the pro. PGA balls may be sold ONLY by P. G. A. members.

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THE PROFESSIONAL GOLFERS ASSOCIATION OF AMERICA
HOT OR COLD WATER?

By JOHN MONTEITH, Jr.

EVERY summer the Green Section receives requests for information concerning the harmful effects of hot water from open pools or reservoirs and of cold water from deep artesian wells or springs which is used in watering the turf, especially the putting greens. In some cases the greens show injury from some obscure cause. Vague suggestions have come from some indefinite source that perhaps the very cold well water or the water from a pool exposed to the sun, whichever is used on the golf course, has something to do with the injury of the grass. These suggestions grow in importance, cultivated and encouraged by locker-room conversations. They sometimes even get the apparently considered approval of the greenkeeper or manager. At times the water temperature theories have been further stimulated by more elaborated dissertations.

These theories should of course be entirely harmless and could be easily set aside among the large collection of amusing alibis of golfiana. However, they take on importance when it is realized that some may go to great expense, using money urgently needed elsewhere on the course in order to obtain a different supply of water which will be what they believe to be a more desirable temperature. These theories also work some hardship on the greenkeeper whose water supply happens to be of average temperature, neither too cold nor hot, for he is deprived of a very convenient alibi for many of his turf disorders.

Hot Water Never the Cause of Brown-Patch

Even brown-patch has been attributed to the use of a cold or hot water supply. Since brown-patch attacks are usually coincident with hot weather the obvious conclusion is that the hot water must heat the grass and thereby make it more susceptible to the disease. On the opposite side are those whose water supply is very cold. Yet they too arrive, in a very roundabout manner, at the same conclusion. In some mysterious way the fungus is encouraged, especially in hot weather, because, according to this distorted theory, it is supposed that the cold water lowers the temperature of the grass and thereby stimulates the development of the disease. Unfortunately, there are those who will go to such lengths that they will appropriate funds to make costly changes without working out any of the practical possibilities of these ideas. Needless to say those who indulge in such theories never take the trouble to check up on the actual facts of the matter.

Make Water Temperature Tests At Arlington Plot

Some time ago, at the Arlington turf garden, the Green Section made some tests concerning the effect of water temperatures as related to the growth of grass in midsummer. Tests were conducted to find out the actual number of degrees the temperature of the turf was lowered when ice water, to give the extreme, was used. Water at 32°F. was applied from a sprinkling can held close to the turf and the temperature was recorded before and after the application. The decrease in the temperature in tests made both during the early morning and in the afternoon heat varied from 5 to 12°. Using ordinary water the temperature of the turf was reduced 2°. In one test the water was pumped from a power sprayer through a ¾″ hose 100 ft. in length. The temperature of the water in the tank was 32°, at the end of the hose, 46°, even after running long enough to cool off the hose. When thrown through the air by means of an ordinary rotary sprinkler and caught in a pan, the water registered 76°. The turf, after applying this ice water by means of the sprinkler at an amount equal to 2½ inches of rainfall, was 76°. The air
Where these two factors meet, there's business

Look to your location if you want to boost your business with the golf professionals of the middle west. Select a location where you know you will be in constant contact with the natural flow of golf pro trade. In the middle west, this location is The LYTTON BUILDING. Years of coming to the LYTTON BUILDING first and finding what they want has made it the center of pro shopping. "14 East Jackson Blvd." is smart business for any golf manufacturer. If this is not your address, then a lot of business you should have is passing you by.

In the heart of downtown Chicago with all transportation at its door. There's not a better maintained building in Chicago. Let us show you through.

THE LYTTON BUILDING
14 E. JACKSON BLVD., CHICAGO
LEE C. EATON
Manager
It is apparent that when water is sprayed through the air it rapidly takes on so much heat from the air that the effect on the temperature of the turf is approximately the same as that of normal temperature water or, in other words, practically negligible.

Furthermore, even when the turf was sprinkled with ice water from a sprinkling can with the minimum exposure of the water to the air resulting in the maximum reduction of temperature, the turf very rapidly returned to its original temperature.

If the water supply of a golf course is obtained from a reservoir exposed to the sun, it is often assumed that the water must be rather hot. This assumption is made in spite of the well known fact that large bodies of water have a cooling effect on surrounding territory. The exposure of a body of water to the sun’s rays tends to increase surface evaporation. The temperature of the water below the surface is more slowly affected by the heat of the sun. Surface evaporation is the working principle of iceless refrigeration. As army men and campers know, if a material to be cooled is covered with some kind of cloth which is kept moist, such as a canteen or a desert water bag hung on the outside of the car, the evaporation of the water from the cloth will tend to lower the temperature of the contents inside the container. Thus, although the reservoir is exposed to the sun, there is a constant check on the rise of the temperature of the water due to the cooling effect of evaporation.

Tests have been made at the Arlington turf garden to determine the effect of hot water on grass with a view to determining how much of the so-called scald might reasonably be attributed to the high temperature of the water used.

To determine the possible increase in temperature due to exposure to sun on stagnant water a metal 10-qt. bucket of water and a 25-gal. wooden keg were filled with water and exposed to direct sunlight in a place protected from wind. It is well known that small bodies of water heat up