

cnough time, the batteries are undercharged. If the batteries are over charged, the charger, of course, is feeding current at a rate that is too high. In undercharged batteries the sulphate is not converted in the plates; if the batteries are overcharged the parts deteriorate very readily and the lead peroxide of the positive plate quickly becomes very soft. The grid wire of the positive plate corrodes very rapidly, ruining the batteries in a short period of time.

Controlling The Charge

The method of controlling the charge is the most important step in determining the length of life expectancy.

There are two types of controls. One of the most popular and most inexpensive is an ordinary time clock. The time clock can be set for eight or twelve hours, and the charge made accordingly. This is a very crude method of control. If this type of charge is used, some person who is skilled in the knowledge of batteries and charging should be given the responsibility of maintaining the batteries.

The only satisfactory way to determine if a set of batteries is charged via the time clock charger is by taking a hydrometer reading. This merely weighs the amount of sulphur in the electrolyte. At the end of the charge, if there is no change for three consecutive hourly hydrometer readings, the batteries are considered as charged. This has been confirmed by W. K. Pinkerton of Holderfield & Pinkerton who has had many years of experience in golf car batteries. It would be a simple matter if an exact standard could be stated in determining if batteries are completely charged at a certain hydrometer reading. But car batteries increase in gravity as they get older and gravity readings vary with different battery ages and thus are difficult to determine.

Should Know Cars

Due to the difficulty of determining the exact length of charging necessary when the ordinary clock is used, it is important that the person maintaining the car fleet should know his cars, chargers, batteries and players. After having used the hydrometers several times, he should be able to determine the proper length of charge for each car. The check to determine this calculation is through the three consecutive hourly hydrometer readings. If no rise in gravity is noted, the battery is determined as being charged. Likewise, it should not be overcharged by staying on the charger for too long a period of time. Some cars have a scale showing the length of time of charge, according to gravity readings. This is only a guide but is much better than if there, were no guide.

Second Type of Charger

The second type of charger is more expensive (costing approximately \$50.00, more) and is equipped with a TVR relay. TVR stands for Temperature Voltage Relay. This is a fancy name for a device that cuts back the charging output amperage as the voltage rises. It is practically perfect for checking batteries.

With TVR equipment you eliminate the possibility of sending a car out on rainydays only to have it come back in 15 or 20 minutes to be put back on the charger for an additional eight or ten hour charge. The TVR brings the batteries back up to voltage and cuts back to a small trickle rate without damaging them⁵ in any way.

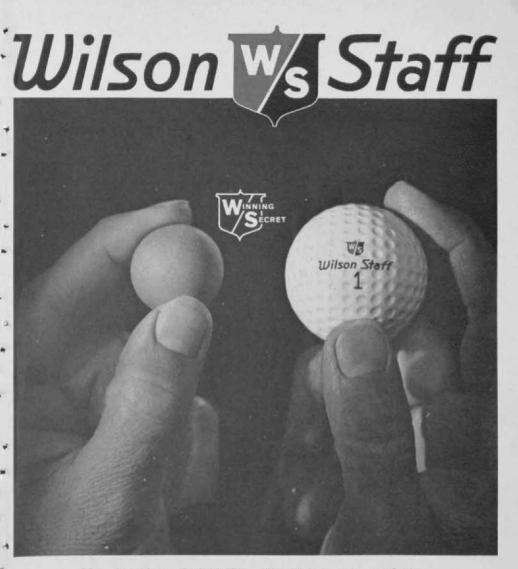
Don't Mix Old and New

In using a TVR charger, make sure that all batteries used in the circuit are good. When one battery in a set of TVR batteries fails, the entire set should be replaced. If a combination of new and old batteries are used in the same series and one or more of the older units fails, the new batteries can be ruined by overcharge.

When cars are used in fleets, all old batteries should be used in the same sets. This applies, too, to new batteries. It is strongly recommended that a TVR charger should be used to eliminate the use of the hydrometer and take the human factor out of the charging operation.

It should be remembered that the starting rate of most chargers is 20 to 25⁺ amperes. The rate drops back as the charge is completed. There is approximately a 20 per cent loss in the efficiency of the battery in accepting the current.

The life expectancy of car batteries, varies considerably, as has been mentioned previously. The length of the playing season is very important. In the North battery life is greatly extended if the units are properly maintained in the winter. They should be kept charged at all times and stored in a cool or cold place. Keep in mind that batteries will freeze if disc charged during severe winter months. If they are set up in a discharged condition, in the winter they must be replaced at the outset of the following season.



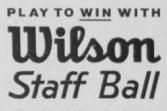
No dead weight! The <u>liquid</u> center of the Wilson Staff ball is 100% "live" for distance!

There's no paste or pellet in the center of the Wilson Staff golf ball! Wilson's exclusive center is a lively liquid, encased in a thin rubber sphere and compressed under a ton of pressure by electronically wound pure rubber thread.

No other substance can deliver quite the same powerful reaction as the liquid center that reacts on impact to transmit instant power through the electronically wound thread.

This liquid center is the inner secret of the Wilson Staff—the "winning secret" that has helped the Wilson Staff win more U.S. Open and Masters championships than any other ball since it was first introduced in 1954.

Play the Wilson Staff, the famous "long ball" that "leaps" off the tee for the extra distance that helps lower your score. The Wilson Staff ball is available only through golf professional shops.



Wilson Sporting Goods Co., Chicago (A subsidiary of Wilson & Co., Inc.)

Court Says Competing for A Prize Isn't Gambling

BY WILLIAM JABINE

Taking a leaf out of the book of the television golf shows, the proprietors of a golf course in a Western state offered a prize of \$5,000 to any golfer making a hole-in-one on their course under certain conditions. A golfer named Gibson came along, complied with the conditions, which included payment of a 50 cent fee, and made a hole-in-one. When he asked for the \$5,000, payment was refused. He finally went to court to get his money. The principal defense to the suit was that a gambling debt was unenforceable in the courts. This doctrine, which prevails in most jurisdictions, is based on the premise that gambling is against public policy.

But where did this stout reliance upon the deleterious effects of gambling on the public welfare take place? In Las Vegas, Nev., which in the public mind is usually accounted the gambling capital of the United States.

Not A Matter of Skill

The men who had offered the handsome prize and then were reluctant to make their offer good, contended that making a hole-in-one is a mere matter of chance and not a matter of skill, and so should be classified as gambling. The trial court did not go along with this theory and ruled that the golfer should be paid. The golf course owners appealed to the Nevada supreme court and before that bench reasserted their argument that making a hole-in-one is so dependent on pure luck that it comes under the definition of gambling.

Beginning with a brief comment on the seemingly extraordinary fact that although gambling is legal in Nevada, collecting a gambling debt in the courts is still barred, the supreme court affirmed the ruling of the trial court which directed payment of the \$5,000 to Gibson. In support of this ruling the court said: "Inasmuch as the contention for a prize offered by another, which the one offering must lose in the event of compliance with the terms and conditions of his offer, is not gambling, it was not error to hold that the contract was valid and enforceable."

Although the court said it was not necessary to decide whether or not making a hole-in-one can be defined as a "feat of skill", it included a brief quotation from the testimony of a golf professional who said "a skilled player will get it (the ball) in the area where luck will take over more often than an unskilled player." After quoting this sage remark the court concluded its discussion of this point by saying: "The test of the character of a game is not whether it contains an element of chance or an element of skill, but which of these is the dominating element." (Las Vegas Hacienda V. Gibson, 359 P

Rules Golfers Exempt from Signing Liability Waiver

The Passaic County park commission has no right to demand that golfers sign a waiver of liability claims before playing the course in Preakness Valley park in Wayne, N.J., according to a recent ruling made by Harold Kolovsky, a superior court judge.

The court overruled the waiver, which the commission circulated earlier this year, on motions for summary judgment by Louis Schwartz, a Paterson lawyer and golfer, and Herman C. Klein, park commission counsel.

The waiver would have released the park commission from liability for any injury suffered by a player on the course or its ancillary facilities.

Judge Kolovsky said a waiver of this kind is against public policy and an attempt to impose it on the public is arbitrary and beyond the power of a park commission.

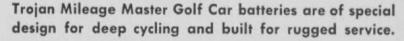
A good deal of the argument over the waiver had to do with the distinction between "proprietary" and "governmental" functions and operations of public agencies. Judge Kolovsky said the distinction is hazy and that its elements go back to the Roman laws as they applied to the public baths.

The commission justified its attempt to require the waiver by pointing out its adoption would result in lower insurance rates and hence a saving for the taxpayer.

New Jersey Scholarships

Six winners of New Jersey State GA caddie scholarships were announced in May by Rutgers University. The awards, made for the 17th consecutive year, go to caddies at member clubs of the association. The four-year scholarships are worth \$2,000.

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Pro Sales Still Key to Condition of Playing Equipment Market

BY HERB GRAFFIS

Figures that tell what the score is in golf business have been studied with special care lately. Golf businessmen are trying their best to determine the weak spots in the current boom. There also is some concern about the producing capacity of playing equipment being enlarged to the danger point. This fear is not unique in golf business. It happens in many booming industries and temporarily disturbs markets and manufacturing companies. The golf business is trying to maintain sound growth. The effort isn't aided by government policy which has businessmen in every field afraid of cooperation in market stabilization.

Pro shop retailing is the key to the condition of golf playing equipment business. The 1962 figures on club and ball sales by manufacturers show that top quality clubs and balls, which are sold almost entirely through pro shops, accounted for 61 per cent of the total dollar volume of sales reported.

Pros Get 54 Per Cent

Of the golf ball sales of 5,232,145 dozen reported, about 54 per cent were of the top pro grade. That percentage hasn't changed much for ten years. In 1962, the report shows that woods of the pro top grade accounted for 36 per cent of the 8,686,960 woods sold by reporting manufacturers. In 1952, pro quality accounted for 31 per cent of the total woods reported sold. Maybe the five per cent increase indicates that the pro quality woods generally are sold in sets of four while the lower priced woods usually are sold singly or in sets of two or three clubs.

There is one big difference in percentages of the top quality clubs sold in 1952 and 1962 and that is in the irons. In 1952, pro quality irons accounted for 42 per cent of the total sales. Last year the first quality irons accounted for only 30 per cent of the total. What that change means is something for manufacturers and professionals to determine. It may be highly significant.

A ten year comparison of bag sales is not possible. In 1952 there were three price classifications reported and the 1962 figure of 882,180 bags are divided into four price brackets with the top class accounting for 90,922 bags.

Golf goods accounted for 39 per cent of sales reported by Athletic Goods Manufacturers' Assn. in 1952 and 41 per cent in 1962.

Ten-Year Course Increase

GOLFDOM's list of U.S. golf courses shows an increase of 1,495 from the 1952 overall figure to the 1962 total of conventional courses (Par-3s not included) of 6,521.

The ten year increase of private 18-hole or larger clubs was 474 to a 1962 total of 1,704. There is a decrease of 204 private 9-hole clubs in the figures for that period. The decrease does not show true marketing picture as some of the 18-hole increase represent the building of additional 9s at private 9-hole courses.

Other facts noted in the 1952-1962 growth:

Semi-private courses grew by 1,004 to 2,250 (1,512 9-hole and 738 18-hole or larger.)

Public courses increased by 121 to 872 (410 9-hole and 462 18-hole or larger.)

Population increase in the ten years was about 19 per cent so golf course growth was about 15 per cent ahead of the increase in population.

When you look at the 10-year picture of golf playing equipment sales, as compiled by Ernst and Ernst, accountants, for the Athletic Goods Manufacturers' Assn., you may get the impression that everybody is buying golf clubs, balls, bags and other items and the easy way to get rich is to jump into golf.



You probably are—or will! Because week after week PGA advertising is asking a lot of leading questions about golf equipment—and telling golfers to see you, their golf professional, for the answers.

We know it's sound advice. First you may spot a faulty swing that, with a few lessons, may save your golfer the price of new clubs. And if he needs new clubs to correct his problems, we know you're the only man qualified to specify clubs that suit his game.

Yes, if you're getting more questions, blame PGA advertising. It's your advertising. Just like PGA equipment—the only line of golf equipment built to the exacting specifications of the PGA itself. Sell it with pride—and profits!

PGA 🖻

PGA GOLF EQUIPMENT CO., SUBSIDIARY OF VICTOR COMPTOMETER CORPORATION



	Golf and Other	Sports Goods	Sales	-
Golf Equipment	1952 \$ 39,511,870	1957 \$ 60,711,924	1961 \$ 99,474,644	1962 \$110,361,324
Baseball-softball equipm		33,074,046	35,338,280	36,664,472
Athletic shoes	9,007,185	22,073,466	27,192,344	30,290,359
Inflated goods	11,216,394	15,127,632	22,514,092	22,721,347
Tennis, badminton & related equipment (Boxing gloves, helmets and pads, athletic clot ing and miscellaneous items added to make Total Sales (Factory selling price including excise tax)		8,359,231 \$163,279,859	8,480,103 \$219,379,246	9,692,932 \$241,563,826
	Golf Co	urse Growth		
9-hole courses	$ \begin{array}{r} 1952 \\ 2974 \end{array} $	$\begin{array}{c} 1957\\ 3232 \end{array}$	1961 3439	$ \begin{array}{r} 1962 \\ 3618 \end{array} $
18-hole or larger	2052	2321	2746	2903
Total	5026	5553	6185	6521

Figures as shown in the tabulation that accompanies this article do not include all the major items of playing equipment produced and sold. Estimates are that possibly 95 per cent of the clubs and 90 per cent of the balls are made and sold by the reporting manufacturers.

Sales Triple in 10 Years

But the figures are close enough to show that nearly three times the dollar volume (at factory selling price, including excise tax) of golf goods was sold in 1962 as compared to 1952. But where the mystery comes in is that there certainly are not three times as many golfers now as there were in 1952 and, unfortunately for some, clubs, balls and bags are quite durable and don't change style often or radically enough to boost sales out of sight.

In ten years the number of rounds of golf didn't triple the 1952 figure in reaching an estimated 102,600,000 rounds. The 1962 rounds were up 29 per cent over 1957 and the 1952-1957 jump was about 25 per cent.

It also is a sure thing that the number of golf courses didn't triple in the past ten years.

Why The Big Increase?

So what is the explanation for the big increase in golf equipment sales? A possible explanation is that tremendous amounts of clubs and balls are sold to people who play only a few times a year in some years. GOLFDOM, after years of checking with manufacturers, pros at various types of courses, and with some store buyers, figures that a man or woman who plays 15 or more times a year is a "golfer" in money that adds up to much in the equipment market. There are about 5,000,... 000 men, women and children who play 15 rounds or more a year. Your guess is about as good as that of anybody else in figuring those who play fewer than 15 rounds a year, but just for easy figuring make the total of all golfers 6,000,000. r

Interests Are Mutual

Ball sales reported for 1962 were 5,232,-145 dozen. The unreported volume of new balls and repaints probably brought the total ball sales for 1962 well over 6,000,-000 dozen. Very few who have been around the golf business for long would estimate that ball sales average a dozen per year per golfer. The balls are too, tough, don't cut easily, stay white and don't get lost now that short, weedfree rough (if any at all) lines the fairways. Don't forget that women play about a third of all rounds and they don't go wild buying golf balls.

Market figures plainly show the mutuality of interest of manufacturers of playing equipment and the professionals who sell it. When the pros are doing NOW, A Gas Powered Car with a Totally New Concept in Design & Engineering

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Jimmy Thomson, Tony Manero, Claude Harmon, Harry Cooper, J. Bud Geoghegan and Charlie Biori, Metropolitan and New Jersey section PGA pros, recently staged a clinic for members of the New York Downtown A. C. and their guests. Several hundrd people attended. This was the 16th year the clinic was put on. Claude Harmon, Winged Foot shopmaster, was the mc.

okay the manufacturers make money.

A close look at pro shop business is being taken by the smart and successful professionals as well as by manufacturers. The pro credit situation has some weak spots which undoubtedly are due to unwise buying.

The professional at an 18-hole club may carry 6 to 12 different brands of clubs and 8 to 10 brands of balls. A store seldom will carry more than three brands of clubs or balls. Manufacturers' advertising has to be sharply directed to move merchandise out of pro shops. "Close-out" clubs are affecting the top price lines. In some sections consignment deals on clubs are making pros careless or are confusing them. There are professionals who are not sure whether they actually bought clubs they have on display but eventually they get educated by falling into the middle between a salesman and a credit manager.

PGA to Have 168 in Championship Field at Dallas AC CC

There will be 168 players in the field when the 45th PGA Championship is played at the Dallas Athletic Club CC, July 18-21. A total of 79 professionals. are exempt from qualifying and it is estimated that 925 others will vie for the 89 remaining spots in qualifying rounds.

The minimum purse for the 1963 Championship is \$30,000. Last year, Gary Player, who received \$13,000 for winning the PGA title, and the next four finishers collected approximately this much, with total prizes exceeding \$75,000. Current champions of 27 of the PGA's 34 sections are among those exempt from qualifying. More than 40 PGA circuit regulars also are on the exempt list.

Texas, which normally would be allotted six qualifying places, earns three additional ones because it is the host section. Thirty-five sectional preliminary rounds are being played at this time to determine which players will get the remaining qualifying spots.

The 7,046 yard, par 71 Dallas ACcourse was designed and constructed by Ralph Plummer, Ft. Worth architect. Itis a little less than 10 years old. A creek that meanders through the course has to be contended with on nine of the 18 holes. The greens average 7,000 square feet and, according to Graham Ross, Dallas AC pro, No. 16, which slopes in all directions, is probably the toughest to negotiate. There are 70 bunkers on the course, +

Very few changes have been made in the course since the PGA assigned the Championship to Dallas AC two years ago. However, 300 trees have been transplanted to step up the demand on straegy and tactics. The longest hole is No.** 4 — 573 yards; the shortest holes are Nos. 5 and 13 — both 206 yards.

N. J. Caddie Scholarships

New Jersey State GA has awarded six caddie scholarships for 1963-64 to youngsters who are employed at member clubs." They are made in conjunction with Rutgers University and are worth \$2,000, or \$500 a year. This is the seventeenth consecutive year that the caddie awards have