

Lloyd Mangrum GLASSHAFT *

... in the new silver grey Glasshafts ... in the jet black Glasshafts ... with positive action ... shock absorbing? Of course!

*patent pending



1021 WEST GRANT AVENUE ESCONDIDO, CALIFORNIA

> 7059 WEST ADDISON CHICAGO, ILLINOIS

Now, the Glasshaft is available in various degrees of flexibility to suit every golfer's need:

- GLASSHAFT EXTRA STIFF (in silver grey)—for the top, hard-hitting tournament players;
- GLASSHAFT STIFF (in silver grey)—for the low-handicap golfer;
- GLASSHAFT MEDIUM STIFF (in jet black)—for the harder-hitting average golfer;
- GLASSHAFT MEDIUM (in jet black) for the average swinger;
- GLASSHAFT LADIES (in jet black)—for the better playing feminine corps.

grams and experiences of the largest and most successful operators of fleets of not only electric powered golf cars, but of the largest industrial users of battery powered equipment, we are able to pass on some proved maintenance procedures.

Three Years Service

Why does one pro, who is located in Wisconsin and owns a fleet of electric cars, succeed in getting three years service from one set of batteries in the same make and model of golf car that his neighbor uses who only gets one and one-half seasons wear per set of batteries? It's no secret. He "MANages" his battery charging and maintenance . . . and the word MAN in MANagement is the most important factor. First, he does not over-charge his batteries. He does not undercharge his batteries. He does not overfill his batteries. He fills them just as full as the instruction manual of the car manufacturer tells him and not as full as the instructions embossesd on the top of the battery case. In other words, the most advanced manufacturers of elecrtic cars have discovered that if the batteries are filled to about 1/2 in. above the plate instead of up to the square part of the cell as advised by the battery manufacturers there is less consumption of water and less gassing of the batteries when they are on charge. In other words, don't overfill batteries. If you were to watch this Wisconsin pro you would see him fill and test his batteries with the same care and cleanliness practiced by a laboratory technician rather than with the technique of a garage mechanic.

He tests his batteries with a hydrometer that has a thermometer on it and corrects his specific gravity readings to the temperature of the electrolyte just like the manufacturer's instruction book told him to do. He sets his charger accurately according to the charging chart provided by the manufacturer. When the charging cycle is complete he again checks specific gravity accurately to see if the car is fully charged or if, because of line voltage drop or temperature change, he needs to give the car additional charging. If the car needs a little additional charging he puts it back on charge for the proper time according to his hydrometer reading (corrected for electrolyte temperature of course) and according to the charging chart.

The result of this careful handling is that he achieves three years life on one set of batteries in his rental fleet. He never sends out an undercharged machine. He never overcharges excessively. He never overfills



Ralph Beach (left), pro at Suburban CC, Pikesville, Md., and Frank Sprogell, past secy. of the PGA, play it the easy way at the PGA National course in Dunedin, Fla., by jeeping around in a golf car.

battery cells. He works clean and quickly. Any fleet owner can do it if he will. He finds that care, cleanliness and accuracy pay off in additional operating success, greater profits and a lower battery replacement cost.

Why does a Florida fleet owner in the business for five years, say with pride: "In the last four years, with 163 cars of six different makes in my fleet. I have never had a car fail to bring back the golfers who took it out from the first tee ... no matter how many holes they played ... even if they went as far as 45 holes!"

Learned the Machine

Here's why! He spent a year learning. He learned that some makes of machines can be depended upon to go further than others so he sends out the cars that have the efficient drive mechanisms on the long hauls. He learned that the same appreciation of accuracy and cleanliness with battery care and charging as our Wisconsin pro uses will pay big dividends.

On his belt driven cars he keeps the belts tight. Sometimes he tightens them each day. Other times he can get along a week or more without tightening the belts. The point is, he keeps them really tight just as the manual advises. He keeps the belts dry. He does not let belt-driven cars stand out overnight where dew and moisture can gather on belts and pulleys to cause slippage. He replaces belts at the first sign of wear before they break and leave the golfers stranded in the middle of their game.

He keeps the chains on his chain driven

OVER 27 MILLION WORTHINGTON ADS



ELECTRI-CAR SERVICE RECORD											Serial No				Car No Year		
To Be Posted Daily. Club					Month												
Date	Grav.	Fin. Chg. A. M.	Spec. Grav. P. M.	Nite Chg. Hrs.	Nite Chg. Amps	Holes Used	BRA	Spector and	SPEED.	100 H	BELTS	CLEAN T	HATTS	ALL THE		Remarks and Instructions	
1				12-7			17										
2		-							1999								
3													- 10				
4																12 - 12 - 1	
5				2.5.7													
6																	
7														18			
8																	
9				1													
10							1										
11																	
12								1									
13		14.15								1.21							
14																	
15	-					-											

Here is a handy chart for keeping a record of golf car servicing.

models well lubricated on a weekly schedule. He inspects and replaces sprockets before they wear down to pinpoint teeth and begin to cause the chains to slip or jump. He has learned the lesson of preventative maintenance on chain driven machines.

This successful Florida operator knows that certain makes of his machines require replacement brushes in the motors about every nine months. He knows that machines that require replacement brushes also require cleaning and polishing of the commutators every eight or nine months. Thus every set of motor brushes and every commutator is inspected at regular intervals. Cleaning and replacement is taken care of before the motors lose efficiency. The carbon dust from the brushes is blown out of the motor and away from the motor bearings by compressed air at the same time that commutators are polished and brushes are replaced. Thus he forestalls motor inefficient operation.

He has his men trained to check the condition of brakes and to ascertain by "feel" as they garage the car each night whether or not it is running, under a load, in all two, three or four speeds both forward and reverse to verify that switches are in working order and brakes are well adjusted. This simple, routine test takes but 30 seconds of the cart attendant's time once he is trained in the procedure and is familiar with the machine, Should a brake or switch require service, such service is performed immediately. Thus garaging of cars is also a functional test on an automatic basis.

On belt driven models the check is made each night for slipping belts. He says the belt slipping test is best made as soon as the car comes off the course because when belts and pulleys are hot from service, belts have a tendency to slip more readily than when they have cooled off. He should know because he has proved that simple daily, weekly and semi-annual check routines, consistently followed, will pay off in satisfied riders and larger profits with no refunded rentals because of car failures.

Test Rides on Turf

Our Florida correspondent also coursetest-rides each machine once a week after having learned, by experience, that occasionally a car will function fine on the apron of the garage but will reveal breakdown symptoms on the turf and under a load. A log book is kept on each machine wherein is recorded every service item per-(Continued on page 88)

IN JACK BURKE's HANDS... OR YOURS

MacGregor Tourney Woods and Irons

are (Winners

JACK BURKE, winner of Masters, PGA

Jack Burke, winner of the Masters, PGA and many national championships during his golfing career, is a MacGregor man *all the way*. Jack has played MacGregor golf equipment since the time he shot a 69 at the age of 12.

Like his fellow golf champions-Ted Kroll, Mike Souchak, George Bayer, Louise Suggs and many others-Jack says MacGregor Tourney woods and irons give him a *winning edge* in all the close ones.

You, too, can be playing the same model clubs Jack and more of today's titleholders use. Ask your professional to select the right MacGregor Tourney model-MT, Tommy Armour or Louise Suggs-to fit your swing. MacGregor is the choice of champions. Make it your choice, too.

Players mentioned are MacGregor Advisory Staff members

This dramatic ad is one of a MacGregor series scheduled for TIME. SPORTS ILLUSTRATED and many others to help you sell more MacGregor Golf Equipment . . . easier.



The MacGregor Co., Cincinnati 32, Ohio Golf • Tennis • Baseball • Football • Basketball

Chicago Leads Drive to Adopt Stroke Control

66 HOW do I adjust my handicap?" is a question echoing around clubs and sections now adopting the Equitable Stroke Control plan developed by Thomas G. McMahon and perfected in the Southern California Golf Association.

Leading the campaign for national adoption of ESC is the Chicago District Golf Assn. where 22,000 members began adjusting scores in April. The plan operates simply and will curb extraordinary scores on any one hole whether created by misfortune, temper or carelessness. Stroke control also will equalize competition among clubs with many out-of-bounds holes as opposed to courses with few or no outof-bounds holes.

The plan predicated on a "limits" basis follows:

Limit Handicap Plus or Scratch Limit of one over par on any one hole. 1 to 18 incl. Limit of 2 over par on no, of holes equal to handicap. Limit of one over par on balance of holes. 19 to 36 incl. Limit of 3 over par on as many holes as the handicap is increased over 18. Limit 2 over par on balance.

Tom McMahon, former pres. of the CDGA, originated his handicap system in 1938 after years of study and the application of various mathematical processes to 100,000 scores. This system was adopted by the USGA in 1953 and is the nationally recognized current ability system now in use throughout the U.S. and many foreign countries.

Boom Creates Need

McMahon recently stated: "With increased golf play in the year-around areas, a lengthening of the season in other parts of the country, and a travel boom send-



Figure filberts behind Equitable Stroke Control, Charles N. Eckstein (1) and Thomas G. McMahon, originator of the system, check handicap cards of 22,000 members of Chicago District Golf Assn.

ing golfers from one course to another, a need for further control to equalize handicaps for more and more players is evident. After more research involving thousands of scores, the over-par limit on a sliding scale determined by the player's handicap proved most equitable."

Here is an example of how ESC works:

A 12-handicap player is allowed two over par on 12 holes and one over par on 6 holes. **He may never have a triple bogey**. When his score is more than two over par on any one hole, he adjusts the score for that hole deducting the actual number of strokes that exceed his limit. If, for example, he has a 7 on a par 4, he subtracts 1 stroke for handicapping purposes. However, he must use the 7, his actual score, in any match or event of the day.

It is unlikely that a 12 player would ever score the maximum allowed him as this would produce a score around 103. Therefore, stroke control will affect the majority only when they occasionally encounter trouble and exceed the one, two or three over par limit permitted.

If a 12 handicap player has two triple bogies, 1 double bogey, 4 bogies and 11 pars, he would have an adjustment of two strokes, one for each triple bogey, and his card might read as follows:



HOGAN...science and engineering give you a ball which costs more to produce because of quality materials and construction, but costs no more to play, than any mass-produced ball.

To appreciate them Play them.



:Our Entire Production Sold Thru Pro Shops: COMPANY Fort Worth, Texas

Superintendents everywh disease control with [



GERALD DEARIE, Chicago,

a superintendent for over 30 years, has been an enthusiastic user of "Tersan" for seven years, and now at Medinah Country Club he uses "Tersan" and "Semesan" Turf Fungicide in combination.

OSCAR BOWMAN, Old Warson Road C.C., Ladue, Missouri,

a booster of "Tersan" says, "The lowest-cost way to control brown patch is to use 'Tersan' as a preventive. 'Tersan' is the best turf fungicide on the market, and it won't burn or discolor the grass."





HERMAN BORSHARDT, Dallas,

superintendent of the Northwood Country Club, a user of "Tersan" since 1941, wouldn't try to maintain his course without Du Pont Turf Fungicides. They give superior disease control, economically, and with maximum safety to turf.

TERSAN[®] 75 Turf Fungicide · SEMESAN[®] Turf Fungicide

nere report superior Du Pont Turf Fungicides



E. R. STEINIGER, Clementon, N. J.,

superintendent of the Pine Valley Golf Club, has been using Du Pont "Tersan" for over 14 years on a regular preventive schedule to keep greens free of disease. He finds "Tersan" economical, easy and safer to use.

THE DAWSONS, Jr. and Sr., N.Y. to Florida,

combine over 50 years of turf know-how: Tom, Jr., at the Country Club of Virginia; Tom, Sr., Palm Beach Country Club, Florida, and Fenway Golf Club, N. Y. They agree on Du Pont Turf Fungicides for effective disease control under widely different conditions.



Protect greens with Du Pont Turf Fungicides

Superintendents all over the country get outstanding control of turf diseases with Du Pont "Tersan" 75 and "Semesan" Turf Fungicide in combination. This is a most effective way to guard greens against common fungus diseases —brown patch, dollar spot and snow mold with maximum safety to turf. Both "Semesan" Turf Fungicide and "Tersan" are packaged separately for tank mixing and are easy to apply with regular spray equipment.

DU PONT VPM SOIL FUMIGANT... use Du Pont VPM before seeding new greens, tees and nurseries to kill germinating weed seeds and nematodes. VPM is convenient and easy to use, no tarpaulin needed.

On all chemicals follow label instructions and warnings carefully.

VPM Soil Fumigant



Foss Enlarges Classroom By Selling Group Lesson Program



Chet Foss, pro at Kern County Public GC, Bakersfield, Calif., who is described by brother pros as an up and coming enterpriser, regularly conducts some of the largest group lessons seen in his section. It isn't unusual at all for Chet to have as many as 100 golfers, such as he has here, out sharpening up their games by going through the various swing routines that Foss prescribes. The Bakersfield pro's success hasn't been of the overnight variety since it has taken him three or four years to sell local golfers on the idea of turning out in large numbers to attend group instruction sessions.

PAR	SCORE		
4	7Tb*	4	4
4	7Tb*	5	5
4	4	3	3
3 5	3	5	7db
5	6b	4	5b
3	3	4	5b
4	4	4	4
4	5b	3	3
5	5	4	4
36	44	36	40

84 Actual Score

* 2 Excess Strokes (Adjustments) 82 Adjusted Score

The scorer can keep track of the excess strokes either by marking a small dot in each square where an adjustment must be and then totalling the dots at the end of the round and subtracting them from the actual score, or by using a special score card with a column for excess strokes.

A 23-handicap player follows the same procedure as the 12-player. He is allowed five triple bogies, one each for as many holes as the handicap is increased over 18, and 13 double bogies. If he has an 8 on a par 4, he subtracts 1 stroke for handicapping purposes. However, he must use the 8, his actual score, in any match or event of the day.

Plan Explained

The ESC plan was described to handicap chmn. of member clubs by Charles N. Eckstein, vp of Chicago District at three meetings in January. Eckstein stated: "Handicapping utopia will be reached when four players from four different parts of the world can meet and play with equitable handicaps on any golf course. Handicap committees of all international golf associations are striving toward this end in the same way they have been seeking unification of the golf rules. We believe stroke control is a big step toward unification of golf handicap systems."

All member clubs have expressed approval of the stroke control modification in the CDGA system.

To help clubs and associations adopt ESC, Sidney T. Jessop and Jim Miller also of Chicago District and Eckstein have designed special score sheets and score cards which accommodate stroke control. Copies and brochures explaining it are available free of charge at CDGA. Room 241, LaSalle Hotel, Chicago 2.

Members of the Chicago District have received their 1957 handicap cards in a black and gold plastic, weather proof, bag tag. It is possible that golfers throughout the country soon will carry their handicap cards, currently validated and up to date, attached to their golf bags. By doing so a player's handicap will always be visible with his golf clubs and the first tee con men will be out of business.

Ordering Merchandise?

Check Your Needs Against

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