



join the crowd

Nine out of ten of the nation's leading golf courses are using Buckner Sprinklers. Why? Because they know about the money, water and labor savings that are possible with a Buckner irrigation system. Buckner systems are designed for heavy duty, long lasting, low cost, low maintenance operation. Our sprinklers are engineered to provide the best effective coverage and penetration of water even in the tightest soil. Whether you use one of our underground or portable systems, you can be sure of eliminating parched areas and water waste. And our new 11 station 611-E automatic controller cuts scheduling to a simple, one-time 5 minute operation. For more facts you should know about the world's leading sprinkler systems, write for free catalog and name of nearest dealer.

Buckner INDUSTRIES, INC.

P. O. BOX 232, FRESNO, CALIFORNIA 93708

For more information circle number 101 on card

IN-DE-STRUC-TI-BLE RANGE BALL

Amazing breakthrough in research allows McDONALD & SON to bring you the NEW Miracle

IN-DE-STRUC-TI-BLE range ball

Never has there been a range ball with all of the rigid requirements of this range ball. McDONALD & SON takes pride in bringing this range ball to you.

**NO COVER TO CUT SOLID COLOR
HIGH COMPRESSION
RESISTS HEAT DAMAGE**

M-20 SOLID DYED BALL—This is solid color clear through the ball: Yellow only with choice of red, green, blue or black stripe color. No name imprinted on ball \$3.25 per doz. We will allow you \$.24 a dozen for cuts, on a dozen for dozen basis, against the purchase of this new ball.

**McDONALD & SON
BATAVIA, ILLINOIS 60510
Phone AREA 312-879-3930**

For more information circle number 213 on card

UNFAIR TAX?

Continued from page 80

more will want to be a part of an organization of action.

You may be a golf course owner, or a club manager, a golf course superintendent or a golf professional, a supplier of golf equipment or an amateur golfer. We all have a stake in Democracy. Let us each tell this story many times as we meet people. Let us work and invest to get good legislation passed in all states.

Am I out of line to suggest both State and National Recreational Associations to preserve and promote the free enterprise system of tax producing outdoor recreation for all Americans? •

LANDSCAPE TOOL FORM

Form 55 covers the complete line of Brillion landscape tools. The booklet includes descriptions and illustrations of the construction and operating features of the 5' 4", 8' and 10' seeders and SRS rollers. For a copy, write to Brillion Iron Works, Inc., Brillion, Wis. 54110.

HUNDREDS OF (PRE-OWNED)

CUSHMAN GOLFSTERS



COMPARE these used CUSHMAN GOLFSTERS
with any new car of any other make.

PRICED LOW

From

\$255

BATTERIES ADDITIONAL
300 AVAILABLE

FOR IMMEDIATE DELIVERY

MODEL	PRICE
1962	\$255
1963	370
1964	544
1965	731

Write — Wire
or Call Collect

CHICAGOLAND CUSHMAN SALES

61 E. 23rd St., Chicago Heights, Ill. Phone: Area 312 WA 8-5555 -- P.O. Box 428

For more information circle number 217 on card

Here's a shot-saver that belongs in every golfer's bag... put it there for top profits!



NEW "SCOTCH"® BRAND GOLF GRIP...

a remarkable product from 3M Company

"GOLF GRIP" comes in a handy spray-top can. (Takes up less space in a bag than three balls.) It can be applied to glove, bare hands, all club grips. "GOLF GRIP" helps keep a golfer's hands firmly in place on the club throughout the swing, improves his touch, inspires confidence! One application lasts for several holes.

Moisture or perspiration will not affect the holding-power of "SCOTCH" GOLF GRIP. After playing, it washes off hands easily with soap and water.

"GOLF GRIP" is packaged 12 cans per display case. Retail at 98¢. You make \$4.68 on each case! This attractive counter card is packed in every case. Display "SCOTCH" GOLF GRIP in your shop... it moves out fast!

TO ORDER, write Joe Ramey, Dept. 4802, 3M Company, 2501 Hudson Road, St. Paul, Minn. 55119

He'll get you in business quick!



"GOLF GRIP" can and circles representing golf balls shown actual size.

Adhesives, Coatings and Sealers **3M** Division COMPANY

St. Paul, Minnesota 55119

"SCOTCH" AND THE PLAID DESIGN ARE REG. TMS OF 3M COMPANY

For more information circle number 192 on card

HICKORY TO MATCHED

Continued from page 38

continued to improve their golf club products. Much better steel became available for shafts, with the result that they were made lighter and stronger, and it was possible to reduce their diameters in the lower extremities. Hosels were shortened and weight distribution through the clubhead was improved because designers were learning more tricks about locating the "sweet spot" in precisely the place where it should be.

The '50s and, of course, the '60s have been an era of refinement in the manufacture of golf clubs, part of it stemming from the whims and wishes of golfers. For example, the loft of the driver has been increased by 1 to 2 degrees so that players can get away from hitting line drives and get the ball up in the air. Iron lofts have been increased to make each iron one club stronger. The leading edge of iron clubs has been made rounder so that less turf and more ball are contacted. The quest for better

weight distribution and balance has gone on in the reduction of the grip from 13 to 11 inches, and the use of different materials in fabricating grips so that even better balance can be squeezed out between shaft and clubhead. To give the player a better feel of the clubhead and enable him to keep hands and shaft ahead of the blade, there has been a strong trend to offset clubs. Manufacturers have even gone back to restoring fancy inserts in woods in order to reclaim the sexy look of the '20s and sell more clubs.

Where does it all lead? Joe Wolfe says the clubs of the future will be even better than they are today. One reason is that designers are not so dependent on the trial and error method as they were only five years or so ago. Testing machines, developed since 1962, are being rather widely used to detect weaknesses in the design concept and manufacture of clubs. Of late, too, more and more physicists, frustrated perhaps by their inability to play better golf, are becoming interested in the dynamics

Continued on page 86

Clubs Scrubbed Clean in 2 Minutes

1966 IMPROVED CLUBSCRUB

Clubscrub cleans clubs better, faster which saves time, tempers and money.

Clubscrub is rugged, simple, easy to operate and virtually trouble-free.

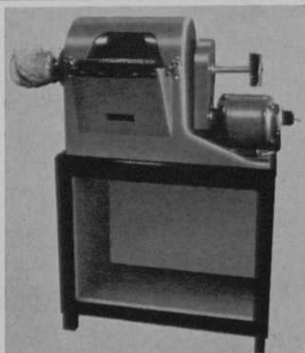
Write for trade-in policy, replacement parts, prices, etc.

IMMEDIATE DELIVERY

ClubScrub, Inc.

Box 300
Schenectady, N. Y.
12301

For more information circle number 219 on card



*You have a lot to say about
how the ball bounces*



COLONIAL GARDENS

builds better golf courses.



W. W. ULLMAN, CONSULTANT

COLONIAL GARDENS, INC.

708 GREENE STREET, — MARIETTA, OHIO

PHONE — AREA CODE 614 373-2188

For more information circle number 146 on card



Club Car

MAY COST A LITTLE MORE BUT IT'S

WORTH SO MUCH MORE!

You may find the price tag on Club Car a bit higher than on some other golf cars . . . but in the long run, Club Car will prove to be your most economical investment. These handsome cars stay on the course earning profits for you from dawn to dark on a single charge. Players like it because Club Car has the looks . . . the comfort . . . the engineering . . . and the smooth, safe performance of the finest car available, regardless of price. Your choice of beautiful new pastel colors. Optional equipment includes stylish "bucket" seats and surrey tops. If you are looking for quality, it's time you moved up to Club Car.

This Is The Only Car With A 2-Year Warranty On The Drive Unit

CLUB CAR DIV., STEVENS APPLIANCE TRUCK CO., AUGUSTA, GA.

STEVENS
Club Car

**GOES MORE THAN 100 HOLES
WITHOUT A RECHARGE!**

CLUB CAR DIVISION,
STEVENS APPLIANCE TRUCK CO.

Box 897, Augusta, Georgia

- Send complete information on Club Car
 We'd like a Club Car demonstration

NAME _____

CLUB OR FIRM _____

ADDRESS _____

CITY & STATE _____

For more information circle number 180 on card

Coming Events

Michigan Upper Peninsula Turfgrass Conference, Michigan State U., June 17.

Golf & Fine Turf Field Day, Rutgers U., June 21.

Penn State Turfgrass Field Day, Aug. 17-18.

Second Annual Turfgrass Management Conference for the State of Hawaii, U. of Hawaii, August 25 and 26.

Turfgrass Sprinkler Irrigation Conference, U. of California Conference Center, Lake Arrowhead, Calif., Aug. 26-28.

Northern Michigan Turfgrass Conference, Traverse City Country Club, Traverse City, Michigan, September 13.

Northeast Turf Conference, Concord Hotel, N. Y., September 19-21.

Pan American Hotel & Restaurant Exposition, Miami Beach Auditorium and Convention Hall, Miami Beach, Florida, October 29 through November 5.

HICKORY TO MATCHED

Continued from page 84

of the swing and the equipment. Something revolutionary in club construction may come out of their cerebrations.

There are limitations, however, as to what can be done with clubs, according to Wolfe. The diminishing return factor is an exorable one in club construction. For example, it was thought a few years ago that by lengthening shafts, especially those in the woods, more leverage might be realized. But weight and balance again asserted itself. Clubheads had to be made heavier to compensate for the increased length and weight of the shafts or swing weights were thrown off. Manufacturers came to the wise conclusion that pros might be able to effectively swing longer shafted clubs, but the average golfer can't.

When there is a temptation to tamper with the basic measurements or standards of clubs, designers first ask themselves how will it affect balance, and



TROUBLE FREE! RENTAL CART SERVICE

We furnish you all you need on rental share basis. No investment for you! We deliver and service carts regularly and keep them in good repair — FREE. Clubs not held responsible for damages, theft or breakage.

CADDY-ROLL RENTAL SERVICE Three Rivers, Michigan

For more information circle number 135 on card

Specialists in Golf Course Construction Since 1924!

GOLF COURSE CONSTRUCTION BY CONTRACT

For further information, write or call

MADDOX

CONSTRUCTION COMPANY
GOLF COURSE BUILDERS

Mailing address P.O. Box 66, St. Charles, Ill. • 584-0315 & 584-6641

BATAVIA, ILL. • 879-3843

DANVILLE, ILL. • 442-2411

For more information circle number 174 on card

what will it do to the average player's swing. It's all because of that diminishing return factor.

A club that is made lighter so that it can be swung faster, doesn't necessarily put more power in the hands of the golfer because critical weight may be removed from the clubhead. A shaft that is shortened on the supposition that it will enhance clubhead feel may decrease the arc of the swing to the extent that needed leverage is lost. Scientific design has become so much a part of club construction that tolerances in weight and length of the various components of a club have been reduced to near zero.

Joe Wolfe's close association with playing professionals in the last 20 years has been enlightening, frustrating and amusing. The temperaments of the great players, he observes, are pretty well mirrored in their reactions to the clubs that have been made especially for them, or the ones they have been asked to test.

Gene Sarazen, for example, has always been the most methodical test pilot on the Wilson staff. He works diligently with the clubs Wolfe sends down to him at Belleaire, makes notes on their good and weak points and generally is a very severe critic of overall construction. But his criticism always has been constructive and has been made not so much with himself in mind as the poor fellow who has to use the clubs to beat a ball around a course.

Postwar improvements in club design and manufacture, Sarazen freely concedes, enabled him to play competitively as long as he did.

Sam Snead is the best substitute for a testing machine that Wolfe or anyone else ever has run across. Snead adjusts quickly to anything that is handed to him and is particularly valuable in testing women's clubs. But the Slammer has dour moments when anything he swings isn't right. Wolfe explains that Sam isn't necessarily being cantankerous when this happens. It's just that he isn't given the right clubs to work with. "And, that," Joe says with a smile, "is what we are trying to find out."

The late Ed Oliver was the reluctant dragon of the Wilson staff when it came

Continued on next page

TORONTO C-15 BENT SOD & STOLONS

"PURE TO STRAIN"
GROWN ON STERILIZED SOIL TO INSURE FREEDOM FROM POA ANNUA AND OTHER FOREIGN GRASSES.

PENNCROSS BENT SOD



H & E Sod Nursery, Inc.
4301 W. Flossmoor Rd.
Tinley Park, Illinois
312 798-2210

For more information circle number 137 on card

Light Weight - One Hand

RAKE-Ezee SAND TRAP RAKE

Short handle, light weight. Golfer can rake trap while holding club in other hand.

Sturdy, attractive, won't rust, yet low in cost. Rake-Ezee stands erect on point, reminds golfer to rake trap. Fully guaranteed with tough plastic head. See your distributor, or write:

MFD. BY NORTH CENTRAL
Plastics INCORPORATED
ELLEDALE, MINN.

For more information circle number 133 on card

Use CLARO Non-Slip
for a **BETTER GRIP**
...**BETTER GOLF!**



CLARO Non-Slip — assures a better grip in any weather. Gives you greater accuracy — more distance when

you need it. One application lasts all day. Take a stroke or more off your score with CLARO Non-Slip. Fifty cents at your pro shop.

CLARO NON-SLIP for golfers



CLARO LABS., 419 W. Ewing Ave., South Bend 14, Ind.

For more information circle number 144 on card

Pro-Grip
®
Wrist-O-Mitt
PAT. APPLIED FOR T.M.
FOR GOLFERS

DISTINCTIVELY
DIFFERENT

SLIP IT ON...
FEEL THE DIFFERENCE

LEAVES FINGERS FREE FOR
MAXIMUM FEEL

\$150



A MITT THAT IS

- THIN . . . WASHABLE
Keeps Its Shape
- FLEXIBLE . . . Quickly
Adjusts To The Hand
- TOUGH Enough to Stand
Heavy Use and Abuse
- LIGHTWEIGHT for Comfort
and a Firm Grip

A Quality Pro-Grip Product

Order from your Golf Supplier

Manufacturers Specialty Co. Inc.

2736 Sidney St., St. Louis, Mo. 63104

For more information circle number 115 on card

HICKORY TO MATCHED

Continued from preceding page

to switching to new clubs. "Some of the equipment he used," says Wolfe, "was disreputable, but the only way we could get it away from him was to steal it." Ed didn't care how a club looked as long as it felt comfortable.

Bill Casper of the present staff is, as you might expect, a great deal like Oliver when it comes to selecting equipment. Casper knows what he wants, carefully details it when he confers with the design staff, and usually is quite well pleased with the finished product. Arnold Palmer, a staff member until he turned capitalist a few years ago and started his own company, was somewhat indecisive in his years with Wilson.

"Arnie changed his mind a lot about clubs in the early years," Wolfe recalls. "He did a lot of experimenting, sometimes to the point of confusing himself. There were times when I delivered a dozen drivers to him and he used each one in a single practice round. Palmer probably had more trouble than the average pro in getting adjusted to equipment, but his experience proved what I have long contended—it takes a man from four to six years to become a super or near-super golfer because it takes that long for him to find or become fully adjusted to his equipment."

Joe Wolfe's days of migraine and vexation possibly were multiplied more by Cary Middlecoff than any man he ever dealt with. The good Memphis dentist was the most meticulous kind of a person about his golf clubs. He had paired micrometers where his eyes should have been and Wolfe often suspected that Cary swallowed a swing weight scale in his youth. The only thing that kept their friendship from erupting into a thing of violence was that away from a golf course and work bench, Cary was, and still is, a most affable kind of a person.

In his peak years, Middlecoff, like so many other circuit professionals, was most sensitive to the grips of his clubs. If they were off by the diameter of a thread he detected it. He was almost as fastidious about loft and club weight. If it had been only one club, the Wilson designers would have been happy to

suffer silently, but like everyone else, Cary was carrying 14. You can imagine the complications.

"Once," says Wolfe, "I delivered a set of clubs that Cary used to shoot a 64 and break a course record. I thought that I had designed the ultimate. But Cary decided he couldn't use the clubs. 'Joe,' he drawled, taking great pains to be apologetic, 'those clubs aren't quite right. On every shot I hit out there today I noticed the ball wasn't hanging the way I wanted it to!'" •

Dick Daley dead at 64

Colonel Dick Daley, 1957 president of the Club Managers Association, died recently of a heart attack at age 64.

Daley's impact on CMAA and clubdom will long be felt. It was he who first appeared before Congress in 1955 to plead for reduction of excise tax on dues, which has finally come to pass.

Dick is survived by his wife, Fay, his son, Richard, and eight brothers and sisters.

National Golf Camp open to girls and boys

Jack Redmond and Jimmy Nichols will head the National Golf Camp located in Windham Center, Connecticut, off the Connecticut Turnpike near Williamantic and the University of Connecticut.

The golf camp is open to boys and girls 8-20 years of age and will be conducted from June 25-August 6. They may register for one to five weeks of intensive instruction in fundamentals, course play and strategy.

Redmond and Nichols are having Ray Klein and Don Zabit to serve as guest instructors. Upon request, they will send you on loan a 16 mm film describing the camp activities. For further information or registration materials contact: Jack Redmond, 18 Hampton Avenue, Yonkers, New York 10710.

INCREASE EARNINGS, SERVICE & SPACE WITH NEW VERTICAL BAG RACKS

Your members will like the extra convenience and care. Your pro shop profits from 40% more space these racks make available. Double unit shown holds 16 bags, size 2' x 4' x 6'-3" high, gives 12" x 12" space for bags. Single unit holds 8, size 1' x 4' x 6'-3" high. Sturdy steel. Bags set solid on tapered shelves.

- Wear and tear of golf bags is completely eliminated
- Damp bags dry faster—no mildew
- Provides a neat appearance
- Faster, easier storage
- Easy to install and add more as needed

Patented • SEND FOR FOLDER

THE A. G. STAFFORD CO.

For more information circle number 142 on card

2000 Allen Ave. S. E.
Box 287 • Canton, Ohio
A. C. 216 - 453-8431



GOLFMASER

DESIGNED for TODAY'S GOLF CAR
Extra Electrolyte Capacity
Combination Terminals
Ask about our *Recase Program*

EAST PENN MANUFACTURING CO., Inc.
Lyons Station, Pa. 19536



For more information circle number 157 on card

Panogen Turf Fungicide is on the job

We can't promise you lazy days in a hammock—but we can promise you'll stop knockin' yourself out fighting turf diseases with Panogen Turf Fungicide on the job.

Panogen Turf Fungicide is a liquid fungicide you simply mix with water and spray on your greens and fairways to prevent disease—or—control outbreaks during early stages—so good turf is maintained all season.

For disease-free greens and fairways the sure-economical way—spray with Panogen Turf Fungicide (it will make your job easier too)!



Another Peace-of-Mind Product from . . .

MORTON CHEMICAL COMPANY

DIVISION OF MORTON INTERNATIONAL, INC.

110 N. WACKER DRIVE • CHICAGO, ILLINOIS 60606

