STANDARD distributor in your area for the latest and the finest quality golf course equipment

NEW MEXICO
Albuquerque — Superior Serv. Co., 2406 Silver Av., S.E.

NEW YORK
Albany — Hucksman Lawn & Golf, 426 Third St.
Baldwin, L.I. — Albert E. Wallace, 2725 Harvard Pl.
East Norwich, L.I. — R. P. Squires Co.,
Jamaica, L.I. — J. & L. Adikes, Inc. 182nd Pl. & 93rd Av.
Liberty — Charles E. Lennon & Son, Revonah Park
Mount Kisco — Young & Halstead Co., East Main St.
Mount Kisco — Desert Golf Sup., Co., Inc.
New York — Vaughan's Seed Co., 85 White St.
N. White Plains — Austin & Barrett, 868 N. Broadway
Rochester — Grass Cutting Equipment, 225 Parsells Av.
Rochester — Haverstick Toro Sales, 66 River Blvd.
Syracuse — Golf & Tractor Equip., 4864 W. Seneca Tpk.
Vestal — E. M. Crutenden, 120 N. Main St.
White Plains — Lefkins Golf & Lawn, 1200 Mamaroneck Ave.
White Plains — Toro Power House, 491 Main St.

NORTH CAROLINA
Asheville — Henry Westall Co., 101 Cote Av.
Charlotte — E. J. Smith & Sons, 1100 Elizabeth Av.

NORTH DAKOTA
Fargo — Service Tool & Supply Co., 1430 Main Av.

OHIO
Canton — I. G. Harman & Son, Inc., 1800 19th St. N.E.
Cincinnati — B. K. Cohee Co., 9572 Montgomery Rd.
Cincinnati — Turf Equip., Inc., 7525 Kenwood Rd.
Cleveland — Sidney L. Dryfeet, 3108 Mayfield Rd.
Cleveland — Ohio Toro Co., 4200 Mayfield Rd.
Columbus — Jacobsen Power Mower Co., 833 Grandview Av.
Columbus — Woodin Sales Co., 1060 W. Goodale Blvd.
Dayton — Dayton Lawn Mower Co., 1501 Springfield St.
Dayton — Kunz Lawn & Garden Center, 2625 Kettering Blvd.
Dayton — The Lawton Supply Co., 3300 W. Hillcrest Av.
Mantua — John R. Skinner, R. D. No. 3
Toledo — Barton Equip., Co., 3904 Sycamore Rd.

OKLAHOMA
Oklahoma City — Paul Blakeney Co., 4140 N. Santa Fe
Tulsa — Bob Dunning-Jones, Inc., 1402-12 S. Lewis

ONTARIO (Canada)

OREGON
Portland — E. P. Baltz & Son, 9817 E. Burnside St.
Portland — Western Golf Course Co., 1240 S.E. 12th Av.

PENNSYLVANIA
Lebanon — Pennsylvania Turf Equip., 1501-1503 Quentin Rd.
Philadelphia — Farm & Golf Supply, 7725 Ridge Av.
Philadelphia — Lawn & Golf Supply, 6701 Chew Av.
Pittsburgh — Ryder & Co., Inc., 3025 Babcock Blvd.
Stroudsburg — G. W. Sebring & Son, Inc., N. 5th St.

QUEBEC (Canada)
Jacques-Cartier — Agri-Tech, Inc., 2205 Chemin Chambly

RHODE ISLAND
Providence — Woodworth Bradley, Inc., 131 Dorrance Street

SOUTH DAKOTA
Sioux Falls — Dakota Turf Supply, 418 W. 19th Street

TENNESSEE
Chattanooga — Williams Equipment Co., 1813-15 Market St.
Knoxville — Tennessee Turf & Toro, 311 E. Jackson
Nashville — Ernest Hardison Seed Co., 105 Broadway
Nashville — Tankley's Sales & Service, 900 South Street

TEXAS
 Corpus Christi — Watson Cushman Motors, 310 S. Staples St.
 Dallas — Colonial Motors, 3612 N. Hines St.
 Dallas — Goldthwaite's of Dallas, 4404 Main St.
 El Paso — The Myers Company, 140 N. Cotton
 Fort Worth — Goldthwaite's of Texas, 122 South Main
 Houston — Goldthwaite's of Houston, Inc., 1645 Bissonnet
 Houston — Watson Distributing Co., Inc., 2320 Louisiana
 San Antonio — Catto & Putty, 510 Soladad St.
 San Antonio — Goldthwaite's of Texas, Inc., 1623 Broadway
 San Antonio — Watson Cushman Motors, 845 N. St. Mary's

UTAH
Salt Lake City — Steve Regan Co., 451 S. 3rd St., W.

VIRGINIA
Norfolk — Turf & Garden Suppliers, 1201-19 E. Liberty
Richmond — Richmond Power Equip., 1408 Rosemeadth
WASHINGTON
Seattle — Bentley Company, 4126 Airport Way
Seattle — Washington Turf & Toro Co., 1260 Stewart St.
WISCONSIN
Chilton — Horst Engineering, 221 E. Main St.
Elm Grove — Golf & Garden Co., 13000 W. Blue Mound Rd.

EXPORTERS for Standard Manufacturing Company
Barclay & Co., Inc. — 444 Fifth Av., New York, N. Y.
Kent Trading, Inc. — 24 California St., San Francisco, Calif.
Pan Pacific Company — 112 Market St., San Francisco, Calif.
Universal Sports Corp. — 4 E. 39th St., New York, N. Y.

FOREIGN DISTRIBUTORS
FRANCE
Paris, XVI — Madaule Et Cie, 19, Rue Fantin-Latour

GERMANY
Frankfurt/in — W. W. Morrison, 56-60 Taunusstrasse
Hamburg — Erik Sellischell, Aumuehle bei (Hamburg)

MEXICO 18, D. F.
M. G. Sands y Cia, S.A., Neb. 8, Esq. Av. Insurgentes

PANAMA
Panama, R. P. — Productos Superiores, S.A., Apartado 655

SWITZERLAND
Berna — Landmaschinen, A. G., Bumpiiz-Sud
Caslano — Donald Harradine, Apartado No. Xla 4945
Geneve — Pondel S.A., Rue De La Tour De L'ile 1

VENEZUELA
Maracaibo — Gleason & Compania, S.A., Apart. 634
Downsview, Ont.; Tom Mascaro, pres. of West Point Products Corp.; Ted Roberts, Jr., Louviers CC, Newark, Del.; Elmer Border, Fersolin Corp.; James O. Reid, Suburban Club of Baltimore; and L. E. Lambert, the GCSA's new pres., who brought the supts. up to date on the work of the organization's specifications committee. The Wednesday afternoon's talkathon, possibly the longest in GCSA conference history, was concluded with a roundup of turf tips and observations from five agronomists — Charles G. Wilson, Milwaukee Sewerage; James R. Watson, Jr., Toro Mfg. Corp.; Fred V. Grau, Hercules Powder Co.; Marvin H. Ferguson, research coordinator of the USGA green section; and O. J. Noer, now of the Dick Wilson organization.

Art Twombley's panel touched on everything from ideas for speeding up play to creating a restful environment for the players. Twombley said that in 1954 his course, a public 18-hole layout, became so overcrowded that the order of playing the two nines was reversed, with the easier one becoming the front side. The plan has worked out quite well, because even though play has steadily increased in the last six years, the James Baird course no longer seems to be plagued with the traffic jams it once experienced.

Well Equipped Tractormen
Andy Bertoni said that new ideas constantly are being introduced at Meadowbrook, most with the intent of adding to the course's eye appeal or making things more congenial for the players. For instance, the front entrance and clubhouse grounds are groomed as carefully as any of the greens; flowers and fruit trees surround several tees; the practice range with five target greens, traps, etc., enables the player to bone up on every shot in the book; and the tractors that pull the fairway mowers are provisioned with scorecards and pencils to supply the forgetful golfer who becomes stranded without these necessities. They are so foresighted at Meadowbrook, in fact, that the tractormen carry extra golf balls as replacements just in case a ball lying on a fairway gets chewed up by a mower.

Good Housekeeping—Daily Inspection
At Ojai CC, according to George Lanphere, the emphasis is on good housekeeping because he feels that if anything causes a course to deteriorate quickly it...
AUTOMATIC FOLDING ACTION

Lift Handle
- It Opens
Drop Handle
- It Closes

OFFERS EVERY PRO

One of the best Pro Shop deals in representing America's top quality Karts. Models that never reach the public except through the Pro.

MADE BY WORLD'S OLDEST GOLF CART MANUFACTURER
NEW MODEL
"HERCULES"

TUFFI-TUBES
Plastic or Fibre
Plastic 49c list
Fibre 30c list
Special Discount To Pros

The Finest of the "Prestige" Carts $39.95

CHAMBERLIN METAL PRODUCTS
2226 Wabansia, Chicago 47, III.

SEND FOR FREE CATALOGUES

CHAMBERLIN METAL PRODUCTS
For Resale □ Personal □
Please send full information about the following products: Kaddie Kart Rental Karts □ Kolapsi Kart automatic closing golf carts for resale □ Send Catalogues □ Prices
We Now Use

Remarks and requests

MAIL-COUUPON NOW
Name
Address
City Zone State

March, 1961

113
NOW! FULLY AUTOMATIC!!
“MASTER” — DRIVING RANGE BALL WASHER.

“ONE OPERATION”
Dump dirty balls in hopper, press button — That’s all.

Use with or without detergents. Continuous fresh-water rinse.

“Compact Size”
24 inches wide — 54 inches long — 40 inches high.

Hand-fed models also available.

Write for complete literature and prices.

MASTER MACHINE CORPORATION of San Diego
P. O. Box U — 900 W. 13th St. National City, Calif.

is neglect of this detail. Once a week the Ojai maintenance staff is divided into two teams that make a thorough inspection of the course, repairing anything that is damaged.

Andy Salerno is another who advocates constant inspection in order to keep up with repair work. He pointed out that the supt. should make a daily circuit of the course, preferably around noon time after the heavy maintenance for the day has been completed, in order to make sure that not only routine work has been done as it should be, but that the workmen haven’t overlooked anything in need of immediate repair.

Cites Thompson’s Ideas
In discussing the construction of greens, Bob Moote said that many of the ideas of Stanley Thompson, one of Canada’s leading architects, could be profitably copied. These include such things as compounding a more open soil structure to withstand heavy traffic, and building large area putting surfaces that give a wider choice of cup placement and thereby hold down compaction. The sub-grade, according to Moote, should conform almost exactly to the topography or contour of the finished green but, in the case of terraces, be somewhat exaggerated, to insure a solid foundation. He said that the trend in Ontario has been to increase the sand content and cut down on humus in the top-soil mixture to minimize compaction. “But regardless of what the trend may be in this respect in your section of the country,” Moote added, “there is nothing as reliable as a lab analysis to determine what kind of a soil mixture should be used in the greens on your course.”

Discuss Aerating Principles
Both Tom Mascaro and Ted Roberts, Jr., dwelled on the principles behind aerating in their talks. Mascaro said that one of the main reasons for puncturing the soil layer is to admit oxygen, and exhaust carbon dioxide and other harmful gases. Another is to cut down on thatch that becomes mat and thence a part of the soil profile, forming an incubator for diseases. However, Mascaro pointed out that if through frequent aerating mat is mixed thoroughly with the soil, the latter’s structure is greatly improved. What it adds up to, he concluded, is that an undisturbed mat layer shuts off needed circulation of air and nutrients, starving the grass roots and ultimately the turf.

Roberts stated that he didn’t have any
More profit on golf cars

New Exide Golfer 48 Battery boosts your profits, cuts your operating costs

More income per day. Get at least 36 holes per charge year after year on courses of average terrain. Boost your rental income and make more money. Reduce risk of cars being stranded on the fairway.

Longer battery life. Guaranteed 48-month service life.* Outlasts four ordinary batteries in golf car service. Means less manpower needed for procuring and installing new batteries.

Less upkeep. Exide-developed hold-charge negative plate reduces need for charging during non-use. Will go safely through a winter with one charge.

The bigger your fleet, the more extra profit you can make when you install Exide Golfer 48 Batteries. Send for detailed bulletin. Exide Industrial Marketing Division, The Electric Storage Battery Company, Philadelphia 20, Pa.

*48-month pro-rata guarantee, dependent on proper use of the battery and use of approved charging equipment. One-year warranty against defects in materials and workmanship.
argument with the theory behind aerating, but most supt.s have talked to maintain it is almost impossible to carry it on on a continuing basis in the height of the playing season. To circumvent protests of players, who have no idea of why it is necessary to aerate, and think the operation is carried on only to interfere with their golf, the Louviers greenmaster said that probably lighter and faster machines are needed. He added that his father grew grass successfully 30 years ago and that it might be worth while to go back and study his methods and machines he used. The supt.'s only hope to keep up with the thatch problem is to plan on extensive fall renovation, Roberts observed, but once again many turfmen are being hamstrung in carrying this on because the playing season in their areas is being pushed back more and more each year.

Value of Wetting Agents

Both James Reid and Elmer Border, who spoke on the value of using wetting agents, said that these soil penetrants probably haven't yet received a fair trial because many supt.s apply them on a hit-or-miss rather than a regular scheduled basis. Reid, who spoke last year at Houston on the same subject and seems to have become the champion of the non-ionic materials, explained that he is convinced that soil needs an underwater storage tank that can release moisture during dry spells and that wetting agents help to supply at least part of this need. In 1960, he gave his greens a heavy application of Aqua-Gro in May and followed with light applications each week thereafter and had exceptional results. Reid conceded that rainfall was above normal last year, undoubtedly accounting for some of his success maintaining greens at the Suburban Club of Baltimore, but added that he is convinced that the wetting agents played an important role in keeping the putting surfaces in excellent condition throughout the entire season.

Reviews Construction Suggestions

Recommendations of the GCSA study to set up standardized course construction specifications were reviewed by L. E. (Red) Lambert, who had an important part in adopting them. The report covered every facet of the course layout with special emphasis being put on correct watering and drainage systems and construction of greens. Thirteen different specifications, clarified by more than 60 explanations.
CHAMPIONSHIP TURFGRASSES

In just five years T-328 Bermuda has changed the face of golf greens in the Southland. Our firm, leader in Hybrid Bermudas for 15 years, has probably furnished more T-328 for golf courses than all other nurseries combined. The show courses of the South are those we planted throughout with Hybrid Bermudas.

A service tailored for every need

• Fast Express Shipment of Bagged Sprigs
• Truck Fleet for Overnight Delivery of Large Orders
• Loan Service of Specialized Planting Equipment
• Experienced Foremen to Superintend Your Planting
• Contract Sterilization and Conversion of Old Greens
• COMPLETE CONTRACT GRASSING OF NEW COURSES

THE SOUTH’S LARGEST AND FINEST NURSERIES

T-328... T-419... T-57... U-3
Ormond and other Bermudas

PATTEN SEED & TURFGRASS CO.
Lakeland, Georgia

March, 1961
A LARGE PERCENTAGE OF ALL ACCIDENTS Result from Slipping

Prevent them with spike-resistant Nyra-cord Runner Matting. Eliminates the hazards of slippery floors. Affords unequaled resistance to scoring, denting and puncturing. Long-ribbed or cross-ribbed for good scrapeage and dirt removal when used at entrances. Easy to clean. Side edges beveled.

Ideal for locker rooms, washrooms, lobbies, back of counters, at drinking fountains, and for carpet protection.

Available in a variety of colors and widths.

Send for catalog sheets and prices.

Can You Answer These Spell-Down Questions?

Here are some of the questions that were asked of the East and West teams of supts. in the Spell-down at the GCSA convention. How many can you answer correctly?

Answers are on page 143
1. What is the percentage of nitrogen in ammonium sulphate?
2. What is the percentage of potash in super phosphate?
3. How many yards of topdressing are required to apply a ¼ in. layer to a 5,000 sq. ft. green?
4. How many lbs in a yard of dry sand?
5. Your spray boom is 20 ft. wide. How many yards would you have to travel to cover one square acre?
6. How much more does plastic pipe expand than steel pipe?
7. Which holds more water — a 5 gal. can or a cubic ft.?
8. How far behind a tee marker can you tee up?
9. What color stakes designate out-of-bounds?
10. What's the recommended distance a cup should be placed from the edge of a green?

Tips from Agronomists

Lyman Strong, supt. emeritus of Saucon Valley, introduced the agronomists, who passed on the following tips and observations at the conclusion of the long afternoon's program:

Charles G. Wilson: Winter overseeding of Tifgreen in Atlanta shows that rye gets
Con-Voy rental carts are built extra rugged to give you the kind of maintenance-free service that puts extra profits in your rental business. Exclusive features like the stroke counter, cigarette and tee holder and easy bag hookup bring rental customers back again and again...and Con-Voy's easy-pay installment plan makes it a cinch to get your fleet started!

EXCLUSIVE FEATURES
- Quick Detachable Slotted Handle
- Stroke Counter, Cigarette-Tee Holder are standard equipment.
- New Carryall Bracket eliminates straps and springs, nothing to wear out or lose!
- Registered to prevent theft.
- Easy installment payment plan.

Get the Facts! Send for complete literature and prices today!

PRODUCT ENGINEERING CO., Dept. GM
4707 S. E. 17th Ave., PORTLAND 2, OREGON

YES! Send facts and figures on your Con-Voy rental carts, rental plan and your special installment program.

NAME
NAME OF CLUB
ADDRESS
CITY ZONE STATE

PRODUCT ENGINEERING CO.
4707 S. E. 17th Ave., Portland 2, Ore.
INTRODUCING...

THE 1961 T-MATE

With exclusive new Body Styling and Suspension.

Exciting new body styling designed for comfort and durability. Three point suspension features coil springs with hydraulic shock absorbers plus adjustable anti-roll torsion bar. Direct gear drive, insures highest obtainable efficiency. Up to 54-Holes or more on one battery charge. Bag compartment holds clubs in upright position. Ideal for the private owner—perfect for the rental operator. Only 10% down on Sears Easy Terms—Satisfaction guaranteed or your money back.

FREE!

Illustrated circular on T-Mate Golf Cars write today:

SEARS, ROEBUCK AND CO.

Attention: Mr. A. J. Steier
Dept. 608
Chicago 7, Illinois

an early start but probably fades too quickly; bents are slow in getting started but come strong at the end of the Southern playing season; poa trivialis is proving to be a fine grass in overseeding mixtures.

Fred V. Grau: If you are planning to go to Penncross greens, you’ll get best results from seeding; if you are renovating fairways, don’t sell Merion short and also don’t overlook tall fescue; for reviving turf, probably nothing beats nitrogen application — but don’t make the mistake of over-feeding in an attempt to speed up the revival.

James R. Watson, Jr. — using film, Watson described how, with the use of plywood covering, the digging of drainage ditches and the backfilling operation on greens can be made a very neat, if not a completely artistic job.

Marvin H. Ferguson — film also was used by Ferguson in showing what can happen when soil sterilant residue is left in a tank used for spraying 2,4-D — the prettiest burned out areas you ever saw. Another film, shown by the USGA green dir., also brought a few gasps — greens at a New Mexico club that were in the path of a sandstorm. Stable brooms had to be used to sweep away the heavy inundation.

O. J. Noer: The University of Wisconsin, carrying on work with funds supplied by the Foundation established in Noer’s honor, has been carrying on experiments in withholding several different elements from various strains of turf and noting the growth reaction. Some conclusions: Lack of iron and calcium may be more detrimental to growth than that of three or four other elements, nitrogen included.

Sixth Session

Dormancy, Budgets, Poa Are Examined

The second part of the Milwaukee Sewerage Commission film, “Progress in Maintenance,” was the first item on the Thursday morning program. Then came James R. Watson, Jr., Toro Manufacturing Corp., who discussed dormant Northern grasses, and Marvin H. Ferguson, USGA green section research dir., who spoke on dormant Southern grasses. A trio of Cincinnati area supts., Taylor Boyd of Camargo, Donald E. Likes of Hyde Park,