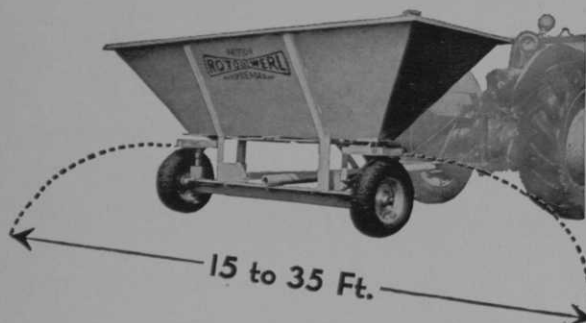


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they have four children: William, a methods engineer who lives in New York City; Dorothy, a teacher; Mary Lou, a medical technologist; and Joyce, a registered nurse. The three girls live in Kansas City.

His duties with the regional and national GCSA in recent years have caused Red to cut back on his golf playing. This, and the fact that he says age has caused his game to deteriorate, have left him in the slightly unhappy position of being satisfied when he breaks 100.

No. Calif. GCSA Officers

Northern Calif. GCSA has elected Ellis Van Gorder, Stanford U. CC supt., pres. for the coming year. Other officers are: vp. W. R. Boysen, Sequoyah CC, Oakland; and sec.-treas., Clifford A. Wagoner, Del Rio CC, Modesto. Directors are Ted DeTata, Roy King, Paul Paulsen, Charles Whitaker and R. L. Vieregger.

Iowa GCSA Conference

Annual turf conference of the Iowa GCSA will be held Mar. 14-16 at the Memorial Union, Iowa State University in Ames.

Toronto Convention

(Continued from Page 50)

on more water;

It is only necessary to moisten the top six ins. of soil. Rate of application can be determined from this;

Water is most effective in lime soils. Most courses have acid soils which should be counteracted for best results from watering.

Fifth Session

15 Speakers Appear on This Program

Art Twombly of James Baird State Park, Pleasant Valley, N. Y., headed a panel of supts., who told how attention to details can make the difference between an ordinary course and an exceptional one. His co-panelists were Andy Bertoni, Meadowbrook CC, Northville, Mich., George L. Lanphear, Ojai (Calif.) CC and Andrew Salerno of Grossinger CC, Ferndale, N. Y. Then came Robert F. Moote, Oakdale CC,

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 Twombly's panel touched on everything from ideas for speeding up play to creating a restful environment for the players. Twombly 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 Lanphear, the emphasis is on good housekeeping because he feels that if anything causes a course to deteriorate quickly it

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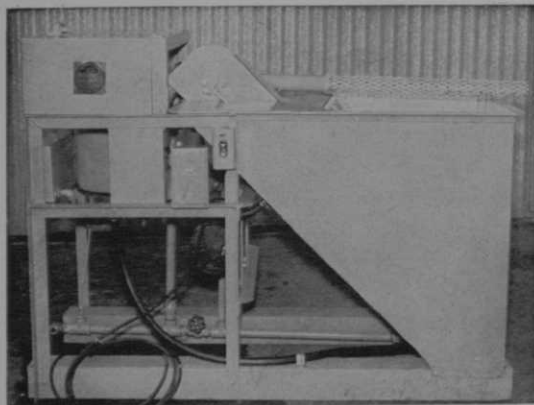
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is neglect of this detail. Once a week the Ojai maintenance staff is divided into two teams that make a thorough inspection of the course, repairing anything that is damaged.

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 noontime 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

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argument with the theory behind aerating, but most supts. he has 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.

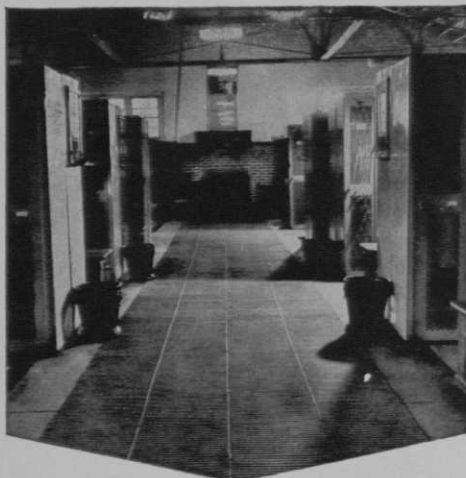
Value of Wetting Agents

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 supts. apply them on a hit-or-miss rather than a regular scheduled basis. Reid, who spoke last year at Hous-

ton 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 explana-



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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 $\frac{1}{4}$ 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?

tory notes, were covered in the report which repeatedly alluded to permanency of construction and ease of maintenance. (A digest of the report will appear in April GOLFDOM.)

In addition to dwelling on the physical aspects of course building, the GCSA report recommended that in order to protect the club, complete architectural specifications should be on hand at all times during the construction period. It also suggested that soil be thoroughly tested before any site is purchased by a group interested in building a course; emphasized that the financial and construction capability of the contractor be thoroughly investigated before a contract is let; and strongly recommended that a supt., who is to stay on after the job is completed, be brought in during the early construction stage to make sure that the architect's design is followed.

Tips from Agronomists

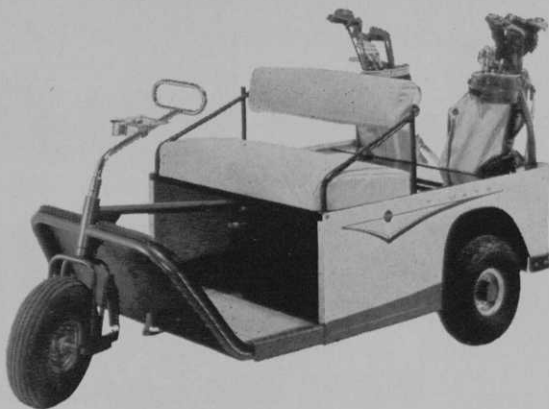
Lyman Strong, supt. emeritus of Saucun Valley, introduced the agronomists, who passed on the following tips and observations at the conclusion of the long afternoon's program:

Charles G. Wilson: Winter overseeding of Tifgreen in Atlanta shows that rye gets

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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 Pennecross 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,



Mrs. George Bard, Mrs. Edward F. Swift, John Ames, former USGA pres., and Mrs. Irving Seaman are members of the committees planning the first Children's Memorial Hospital pro-am that will be played at Onwentsia Club, Lake Forest, Ill. immediately after the PGA Championship. A total of 50 pros and 150 amateurs will take part in the event which is scheduled for July 31.

cash value of the annuity purchased by such contributions. Also, if the professional dies before 120 monthly payments are made to him following retirement, his beneficiary will receive the balance of the 120 payments.

The professional also will have the option of choosing annuities that pay larger or lesser amounts than those shown in the annuity schedule. In such cases, the annuity will continue for shorter or longer periods than those shown in the schedule.

Increase Seniors Prize to \$25,000

The 1962 PGA Seniors' Championship will be a \$25,000 tournament. A \$10,000 increase is being made in the prize money for the 23rd tournament, which will be played Feb. 13-18 in Dunedin. Wm. Teacher & Sons, Ltd., Glasgow, Scotland will again co-sponsor the event with the PGA. In 1954, when Teacher & Sons first came in as a co-sponsor, the Seniors' Championship offered prize money of only \$5,000. By 1958 it had been increased to \$10,000 and for the last two years it has been a \$15,000 event.

Answers to Questions on P. 118

1. 20%. 2. 0. 3. 4 yds. 4. 2,800 lbs.
5. 730 yds. 6. 10 times 7. cu. ft. (7½ gals.).
8. 2 club lengths.
9. White. 10. 5 paces.

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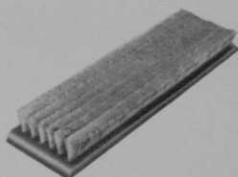
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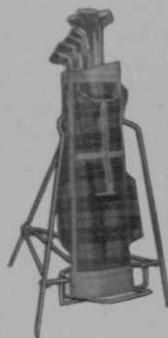
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