

Ransomes know about grass cutting...

15ft. cut Fully-Hydraulic 7-unit Power Gang Mower

The Hydraulic 5/7 has a proven record of a high work output over the last two years and a great record too for rugged reliability under testing conditions.

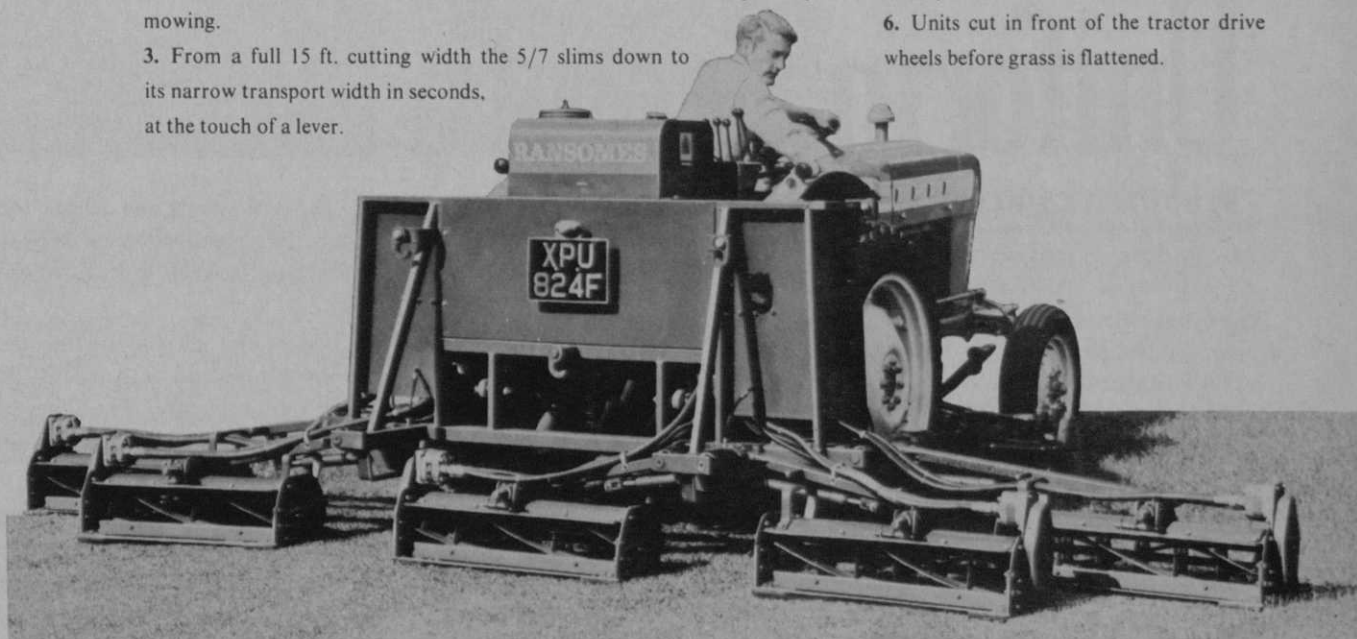
All gang mowing operations on the 5/7 are handled hydraulically, with fingertip control, from the driving seat.

The units are raised and lowered . . . hydraulically. Forward, neutral and reverse reel drive is provided . . . hydraulically. We're proud of the 5/7. It's the biggest step forward in large area grass-cutting for 20 years.

EAST COAST—WEST COAST. To see this revolutionary machine at work contact:—WARRENS TURF NURSERY, MAPLE & BATES ROAD, GOSHEN, NEW YORK.

The 5/7 simplifies the driver's job because—

1. Hydraulic direct transmission gives him power where he needs it most—at the cutting reels. Variable cuts per yard from 20 to 75.
2. Providing the tractor can get a grip he can go gang mowing.
3. From a full 15 ft. cutting width the 5/7 slims down to its narrow transport width in seconds, at the touch of a lever.
4. Reverse drive clears choked reels and allows back lapping.
5. Hydraulic power allows from 1 to 7 units to be used separately or collectively.
6. Units cut in front of the tractor drive wheels before grass is flattened.



NEW GREENS MOWER

Britain's newest, best greens mower for perfect turf grooming. Ten high-speed knives of NEW super-tough, impact-resistant steel, together with an extra-thin bottom blade combine to give the closest possible cut—faster with the 20" cut Auto-Certes.

RANSOMES



To obtain full information of the Ransomes range contact one of these importers:—

Warrens Turf Nursery,
8400 West 111th Street, Palos Park, Illinois, U.S.A.
Telephone 312 974-3000 Importers for the U.S.A.

Duke Lawn Equipment,
1184 Plains Road East, Burlington, Ontario. Telephone 637-5216
Importers for the Province of Ontario.

Morin Equipment Inc.,
2075 Branly (Centre Industriel STE-FOY) Quebec 10.
Telephone 418 681-7741 Importers for the Province of Quebec.

Morin Equipment Inc.,
721 Halpern, Dorval, Montreal, Quebec. Telephone 514 486-7881
Importers for the Province of Quebec and the Maritime Provinces.

For more information circle number 238 on card.

TURFGRASS is a most difficult crop to grow and to maintain because the harvest season is not limited. Because grass goes through a continuous process of growing and harvesting, nutrients must be replaced. For turfgrass to stay healthy, it needs a steady source of nourishment to ensure uniform, slow growth as well as year-round attention to environmental and cultural factors.

The maintenance and feeding program initiated six years ago at Somerset CC has resulted in some of the finest turf being grown today. The uniform growth that has

A Formula for Uniform Growth

By **HOWARD J. MILLER**

Greens Chairman, Somerset CC, Somerset, Pennsylvania

Somerset's turfgrass program is a result of the combined efforts of a university, the superintendent and the greens chairman. The course, once "90 per cent weeds" is now considered one of the best in the Tri-State area

resulted could only have been achieved by the proper balance of new ureaform, water-soluble nitrogen and natural organics.

The satisfaction of the members at Somerset is reflected in their boast about being able "to hit from a good lie to a good lie" any season of the year. And the continued success of this turfgrass program is assured because of the enthusiastic support of veteran golf superintendent Wilbur Yoder, who has spent 41 years in the turf field.

Somerset is built in one of the highest areas, over 2,200 foot elevation, in the Allegheny Mountain range at Somerset, Pa. A private course, the natural rolls and dips have been increased by the settling of exhausted coal mines.

Starting at Somerset when he was 15 years old, superintendent Yoder has grown up with the golf course business. According to him, "Forty-one years ago Somerset was like a lot of golf clubs today,

90 per cent weeds and 10 per cent grass. My challenge has been to learn how to keep it 100 per cent turf."

Today, the greens and the tees are bentgrass and both receive the same intensive care. The fairways are well-groomed bluegrass and fescue.

In the early thirties, Yoder turned to nearby Pennsylvania State University and Dr. Fred Grau for help in understanding turf and in developing a sound maintenance program. At that time the roughs at Somerset were mowed twice a year and the work was given to a local farmer. The fairways contained stumps and rocks in addition to the weeds and grass and were mowed once a month by a team of horses.

Through the years Yoder has kept abreast of the developing turf technology through local turf conferences and the programs from GCSAA. He did it out of necessity,





Superintendent Yoder (center) shows Howard Miller (right), greens chairman and manager, Kapco, and George Osburn (left) sales manager, turf products, Hercules, Inc., how well the ninth green is holding even after three hard frosts.

because there is not much topsoil over these old coal mine areas. With this limited soil depth, he estimates that the turf on greens, fairways and tees never has more than a three-to-five-inch root system. Today's mowing heights are one inch for fairways, one-half inch for tees and three-sixteenth inch for greens.

The real breakaway from "feast-and-famine" fertilization, "hit-and-miss" maintenance and "lean-and-fat" budget hassles came for Somerset about six years ago when Yoder and I convinced the board of governors to let us initiate a complete feeding program based on soil test results from Penn State. The results of the soil tests indicated a complete change in the approach to fertilizer management.

The maintenance and feeding program, as discussed here, starts

with soil tests every three years from the university. Lime is programmed to keep the pH between 6.5 and 7.0. If the pH is not correct, grass will not respond to the rest of the feeding and maintenance program.

The greens are averaging 25 pounds per thousand square feet of lime each spring and fall until soil tests show the pH level is correct. The tees may require as much as 50 pounds per thousand square feet of lime, spring and fall. The fairways received 3,000 or 4,000 pounds per acre in the fall of 1966. After soil tests are taken this summer, the lime requirements can be determined for the next three-year program.

The right kind of fertilizer is important. We use the proper blend of water-soluble nitrogen, natural organics and new ureaforms. This

blend permits us to program the fertilizer for a minimum of applications. The slow steady feeding prevents lush growth that invites disease. The balanced diet for the nine greens specifies annually, 10.5 pounds of nitrogen, 3.0 pounds of phosphate and 4.2 pounds of potash per thousand square feet. The specially formulated product used is a 10-5-7 with 50 per cent of the nitrogen ureaform. This product supplies two units of water-soluble nitrogen, three units of natural organic nitrogen and five units of slow-release ureaform nitrogen, as do the special fertilizers for tees and fairways. The spring, early summer and fall applications are made with this specially formulated fertilizer.

Real proof of the soundness of this greens program is demonstrated during July and August when every two weeks powder ureaform 38-0-0 is sprayed along with a fungicide at the rate of 1.5 pounds per thousand square feet. And on a daily average one to 1 1/2 baskets of clippings are removed from each green, indicating a uniform growth. The tees are high in potash so the special fertilizer formulation used here is 10-5-0 with 50 per cent of the nitrogen from ureaform. The spring and fall rates are 15 pounds per thousand square feet. Applications are made during the May-August period as needed at the rate of 10 pounds per thousand square feet. The turf on these bent tees heals fast and the golfer can concentrate on his stroke and direction instead of the frustration of trying to find a spot to place the tee.

The fairways at Somerset receive annually approximately five pounds of nitrogen and three pounds of phosphate per thousand square feet. A 10-10-10, 80 per cent organic, with 50 per cent from ureaform and 30 per cent from natural organics, is applied spring and fall at the rate of 15 pounds per thousand square feet (650 pounds per acre). One application of the 38-0-0 plant food is made in June

(Continued on page 68)

NEWS OF THE INDUSTRY

Burglary at Dunlop Warehouse

Some 10,000 dozen Maxfli "Red" golf balls, valued at \$100,000, were stolen from **Dunlop's** Chicago warehouse on April 28. Retail price at pro shops is \$16/dozen. Anyone with information about the theft or anyone offered such balls at a cut rate contact the Chicago Police Dept., in confidence, at (312) WA 2-4747, ext. 391 or 374.

Abbott Labs acquire Victor plant

Abbott Laboratories and **Victor Comptometer Corp.** have entered into a contract in which Abbott will acquire the assets of Victor's Newark, Ohio, golf club manufacturing plant.

Abbott first entered the golf business in 1966 through its acquisition of the Faultless Rubber Company, makers of the Faultless golf ball, and now plans to expand its activities in the field by adding several other models to its Lee Trevino golf club line. The new lines are expected to be ready for the 1971 season.

Victor Golf, a subsidiary, makes the PGA line of golf clubs.

Mulligan franchise available

Metbond Corp. announces the **Mulligan Golf Practice Tee** designed primarily as a franchise operation. Both state and local franchises are available. The state franchisee sets up local franchises, sells equipment and maintenance parts, trains local personnel and helps in the placement of the units in high traffic areas. The local franchisee places the Mulligans, services the equipment, collects the revenues, and sells to private clubs, schools and other busy areas. Four hundred plays per week is the minimum to be expected on an 18-hole public course according to Metbond. Based on this as a minimum, a gross income can be realized which will return the cost of a Mulligan in less than one season in northern states. Interested parties should write to: Metbond Corp., Box 441, Brookfield, Wis. 53005. Telephone: (414) 251-6670.

Earnings outlook is disappointing; few exceptions noted

The consolidated net sales of **Wilson Sporting Goods Company** for 1969, according to its annual report, hit a record high, but net earnings were below those of a year ago. Sales in 1969 reached \$104,899,000, compared to \$100,819,000 in 1968. Net earnings were \$3,024,000 for 1969; \$4,379,000 for 1968. Unusually heavy rains, which drastically cut into the spring season forcing some golf courses to close, accounted in part for the decline. Another reason cited by the report was the confusion by consumers about conflicting claims for stainless steel shafts which resulted in a decline in golf club sales.

Acushnet, experiencing similar problems, stated in its annual report that net sales reached a record \$49,217,000 for 1969, an increase of 5.4 per cent over the \$46,658,000 reported for 1968. Earnings, however, amounted to \$1,996,000 for 1969, compared to \$2,994,000 a year ago. The earnings decline was attributed to lower volumes and increased costs in the Rubber Division; higher interest costs for borrowed capital and marketing and manufacturing start-up costs for the new club and bag lines.

Shakespeare Company reported net sales for the six months ended January 31, 1970, to be \$21,109,234 compared to \$20,869,800 for the same period in 1969. Net income was down: \$689,957 compared to \$792,000 for 1969.

Stauffer Chemical Company's first quarter sales for 1970 declined 3 per cent and earnings were 8 per cent less than figures for the same period last year. Sales in the first quarter were \$126,315,000 compared to \$130,060,000 for the first quarter of 1969. Net earnings were \$8,251,000 compared to \$8,967,000 for the same period last year. Roger W. Gunder, president, cited the general business decline, particularly in the automobile and construction fields, as the prime factor for the decreases.

Reviewing the 1969 performances at **Dunlop Tire and Rubber Corp.**, sales vice president, Paul R. MacDonald of the Sports Division, said that just the volume gains for the last two years have exceeded the total annual sales volume which the division had been registering at the beginning of the decade.

MacDonald added that the percentage of sales increase enjoyed by Dunlop golf and tennis products was considerably in excess of the industry pattern. Although, he did not go into detail, he revealed that percentage increases for specific product lines ranged from 15.4 per cent to as high as 48.6 per cent.

MacDonald feels that the most important reason for the record breaking performance has been the extent to which golf professionals have met the challenge of increased national interest in the game and the increasing leisure time.

Victor Comptometer Corp., parent company of Victor Golf, reported record sales for the first quarter ended March 31. Earnings, however, declined due to increased operating costs and higher interest expense.

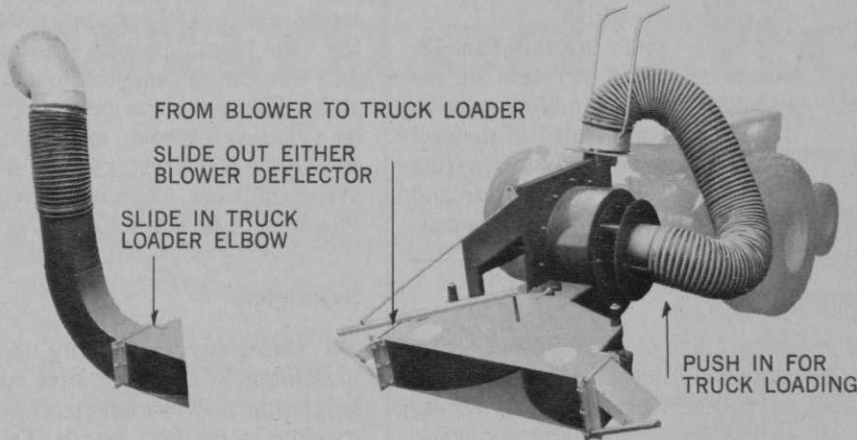
Sales rose 6.3 per cent to \$39,629,907 from the \$37,266,824 reported a year ago. Net income declined to \$1,581,134 from \$2,059,517 in the same quarter last year.

(Continued on page 56)

BUY GIANT-VAC GET GIANT ECONOMY

GIANT-VAC universal P.T.O. unit converts to
blower, vacuum, thatcher, truck loader . . .

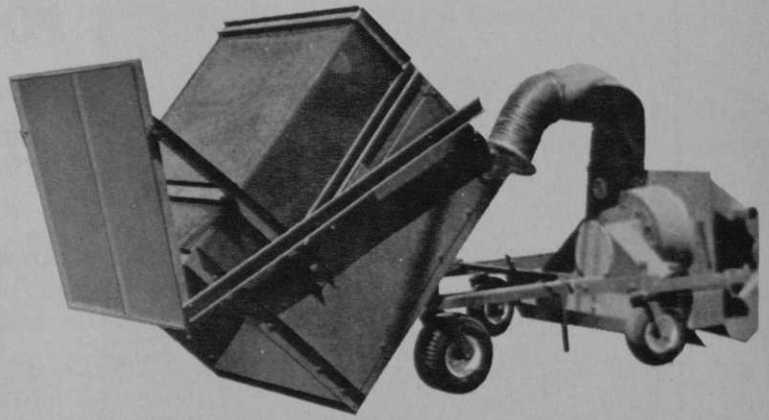
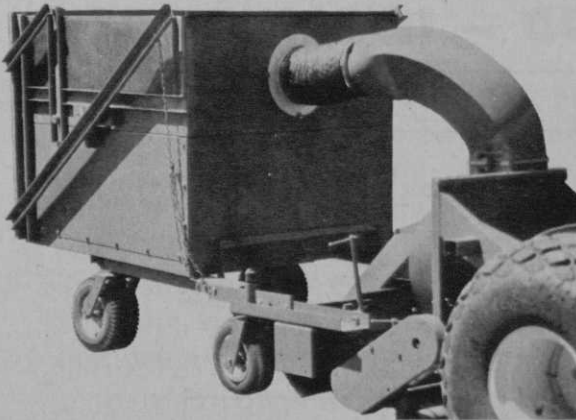
As double headed blower . . . to truck loader in 30 seconds



Exhaust velocities exceeding 250 M.P.H. rapidly clean a large turf area. By flipping one tractor operated lever, the air discharge is changed from left to right allowing constant windrowing regardless of tractor direction. Special features allow converting to a Truck Loader in 30 seconds, as shown.

As vacuum, thatcher and truck loader . . .

Vacuums a 6 foot swath and thatches large acreage at the same time. Truck Loading hose attachments may also be added to this combination. A variety of self-dumping trailers are available.



GIANT-VAC offers a P.T.O. driven power unit which performs many functions. Propelled by a standard tractor, this unit with available accessories is versatile and efficient. It can be operated as a double headed blower, cleaning many acres per hour. Attachments are available which convert the Blower to a Truck Loader in less than a minute. This P.T.O. unit is readily changed to a 6 foot vacuum machine. A Thatcher can be added to the vacuum head. Thus, large areas may be thatched and efficiently vacuumed at one time. Other attachments are also available, as well as, an assortment of debris collection trailers. Other Giant-Vac products include . . . Truck Loaders from 12 to 65 H.P. . . . Giant-Blos from 5 to 65 H.P. . . . Giant-Vacs from 5 to 10 H.P. . . . Thatchers . . . plus many standard accessories to custom-fit your needs.

GIANT-VAC MFG. INCORPORATED

AFFILIATE OF H. L. DIEHL COMPANY, INC.

SOUTH WINDHAM, CONN. 06266

Pioneer of Vacs

(Continued from page 54)

Leisure time market ever growing

The American leisure time market, according to Merrill, Lynch, Pierce, Fenner & Smith, Inc., a major brokerage house, is "rapidly approaching the \$150 billion mark. Americans are pursuing pleasure or ways to use their leisure at an almost furious pace."

This market is the subject of a position paper, "AMF and the Business of Leisure Time," recently issued by the **American Machine & Foundry Company**.

Another estimate of the extent of

the market was made by U.S. News & World Report in the September 15, 1969, issue: "Taken in all its aspects, which include fields well outside the scope of any manufacturer such as vacation travel or summer homes or tickets to sporting events, leisure time expenditures in the United States reached the staggering sum of approximately \$83 billion in 1969 with the end not in sight."

AMF's stake in this market comprised 42.8 per cent of the company's \$603.2 million sales in 1969. It is represented in the golf industry by products such as the Harley-Davidson golf car line and Ben Hogan line of golf equipment.

New distribution center for Wells Lamont

Wells Lamont Corp., makers of the Promark line of sports gloves, broke ground for a 100,000-square-foot distribution center in Memphis. The facility is scheduled for occupancy in June. According to Carrol G. Wells, vice president: "This new center will accelerate shipments of our work gloves through the Southern states and consolidate most of the warehousing for our sports, casual and dress gloves."

The warehouse facilities in Brownsville, Tenn., and Philadelphia, Miss., will be consolidated into the Memphis facility. Those warehouses will be converted into manufacturing facilities, according to Wells.

Party Planner guide available

Copies of the **Party Planner** which won First Place at the Club Managers Assn. of America Idea Fair are available. Included in the handsome booklet are a party checklist, party prospectus, party suggestions, checklist of invited guests, menu suggestions, special party notes, expense breakdown and floor plan, and party rules. The last two items apply to Hillcrest CC, but can be adapted to other clubs. The guide was put together by Charles Bjernold, manager of Hillcrest. There is a fee of \$2. Write: Hillcrest CC, 10,000 West Pico Blvd., Los Angeles, Calif.

News briefs

3M Company, according to a spokesman, will market a tee surfacing material this fall . . . Country clubs in the Fort Worth, Tex., area are in a financial bind due to mushrooming wages and other expenses. Of the six country clubs in Fort Worth, only Colonial is not

(Continued on page 58)

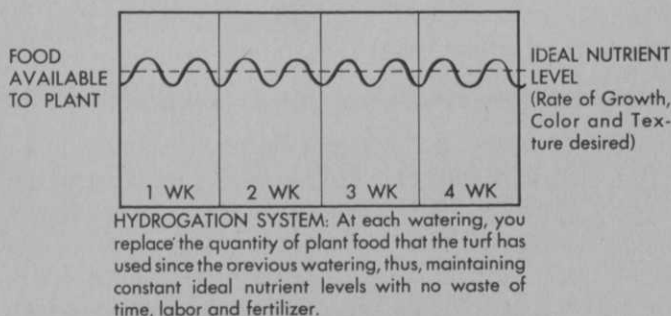
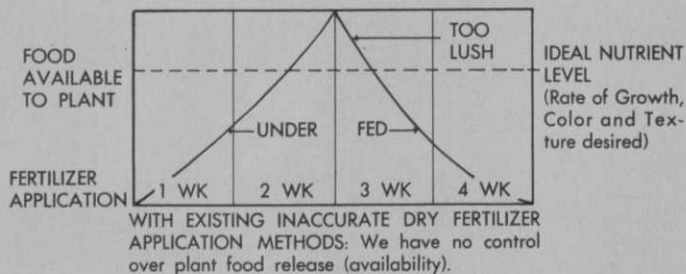
TURF DOESN'T CHEW IT'S FOOD — IT DRINKS IT!

The HYDRO-MATIC System represents a major development in the turf grass industry. For the first time, the golf course superintendent has complete and accurate control over the rate of growth, color and texture of the turf that he desires. Now it is possible to produce turf which meets the demands of the golfing industry and at the same time, save money, time and labor.

The HYDRO-MATIC System consists of a water sensing device, that precisely measures each gallon of water pumped from the main well pump. This measurement is carried electronically to the "Translator" which directs the feed control pump to automatically inject a pre-set ratio of fertilizer solution into the irrigation system in direct proportion to the water flow.

**INVESTIGATE THIS MODERN,
ACCURATE TURF MAINTENANCE
METHOD . . . THE NEW
HYDRO-MATIC
System**

Send for descriptive literature



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Lewis Line... our choice because we wanted the best!



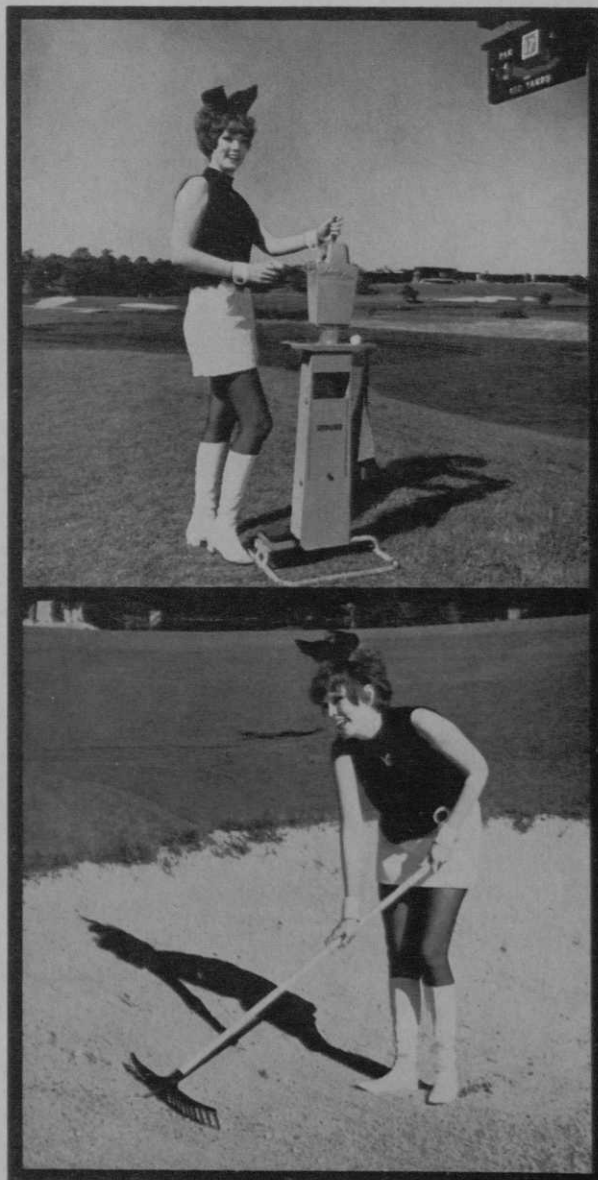
No expense has been spared to make the new Playboy Club-Hotel Golf Courses at Lake Geneva, Wisconsin, one of the great golfing centers of the country.

Tom Burrows, Superintendent, applauds the dependable performance, attractive appearance and low maintenance of the Lewis Line Equipment used exclusively.

The beautiful southern Wisconsin terrain and favorable climate create the ideal setting for the two expertly designed 18-hole courses (one by Jack Nicklaus and Pete Dye; the other by Robert Bruce Harris).

To assure the ultimate in playing pleasure for the foursomes flowing across their broad tees, rolling fairways and lush greens, Lewis Tee and Green equipment has been chosen. Lewis Deluxe Tee Stations on every tee with smooth-spinning, no-splash ball washing. Lewis lightweight rakes for effortless tending of traps. High visibility, always-straight Lewis Flagpoles with chamfered ferrules.

Your course will look better, play better with Lewis Line Equipment. Write today for the Lewis Line Golf Equipment Catalog.



Bunny Costume, Playboy and Playboy Club-Hotel are registered service marks of HMM Publishing Co. Inc.

Lewis Line Equipment adds golfing pleasure to new Playboy Club-Hotel Course, Lake Geneva, Wis.



20-64

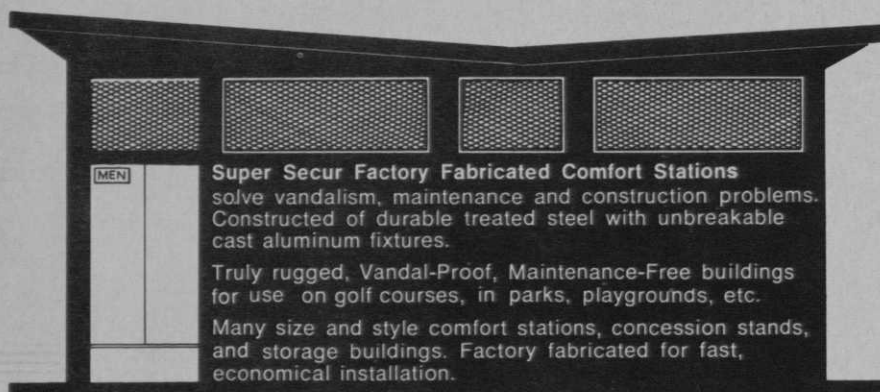
**Lewis Line /
GOLF EQUIPMENT**

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Cup Cutter • Cups • Flags • Flagpoles
Tee Markers • Tee Stations • Ball Washers
Practice Markers • Cup Setters & Pullers • Rakes

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Super Secur Factory Fabricated Comfort Stations solve vandalism, maintenance and construction problems. Constructed of durable treated steel with unbreakable cast aluminum fixtures.

Truly rugged, Vandal-Proof, Maintenance-Free buildings for use on golf courses, in parks, playgrounds, etc.

Many size and style comfort stations, concession stands, and storage buildings. Factory fabricated for fast, economical installation.

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TEE MARKERS
14" x 7" Steel
Just \$4.89 ea.

\$1.60 each 10" x 7"



80¢ each 10" x 3"



Write for new catalog

Custom made tee markers! Your choice of size, beautiful colors and wordings. Die embossed in 24-gauge steel or .025 aluminum. Baked enamel finish will last for years. Signs shown have white letters on grass green background. Just send your score card with purchase order, delivery within three weeks.

Grimco Signs

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St. Louis, Missouri 63144

NEWS

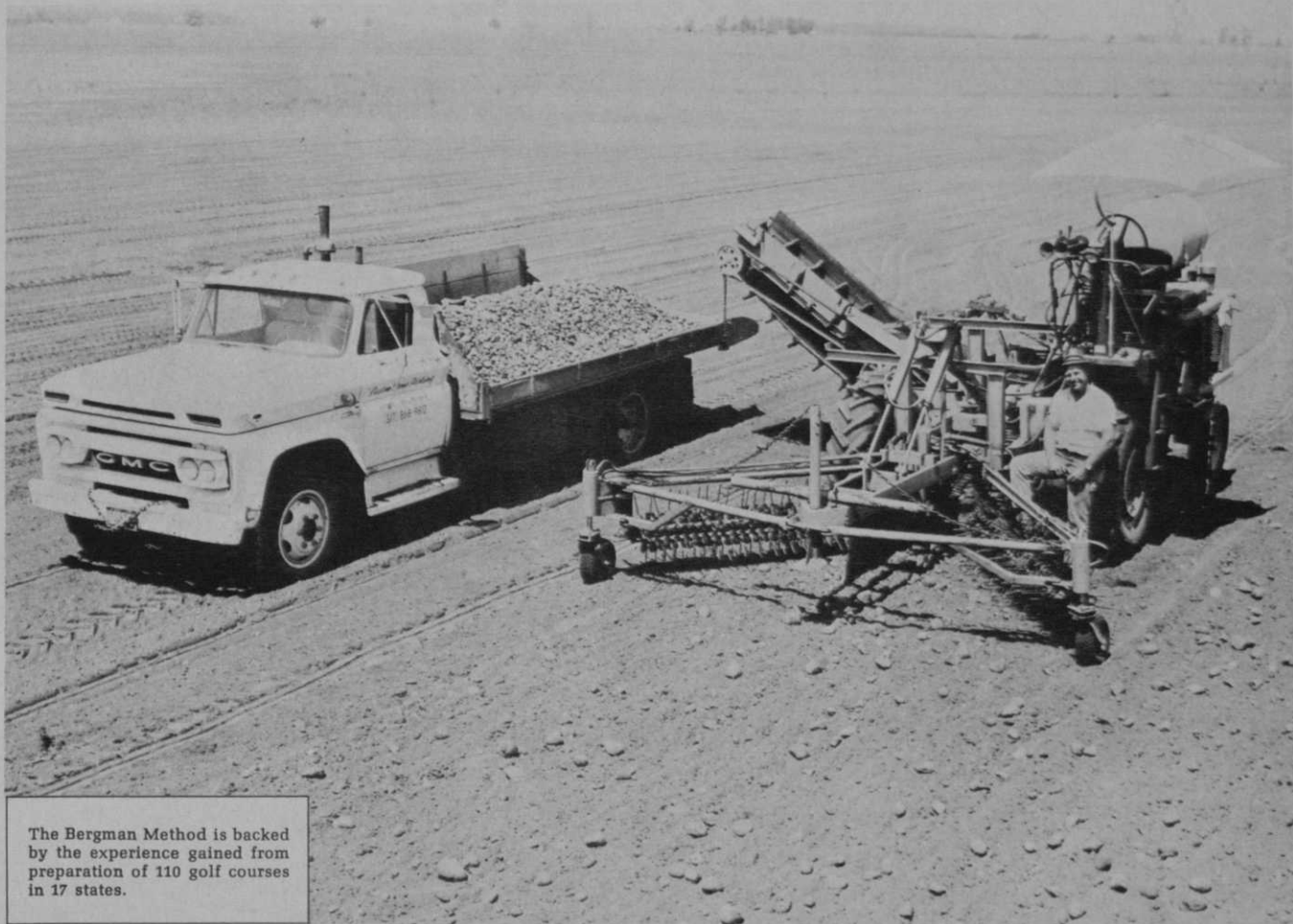
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raising dues. The National Invitational sustains it. The municipal courses are expected to raise green fees and pros will further feel a financial pinch if the city tightens its grip on golf car and concessions revenue . . . **Puerto Rico** may become part of the Florida Professional Golfers' Assn. It has professionals in the Bahamas, Bermuda and in other Caribbean courses talking about whether or how they might join . . . Even before the confusion over stainless steel shafts has settled, talk of **beryllium** is quietly circulating. However, nothing has gone beyond the experimental stages yet, and the likelihood of a beryllium-bearing shaft appearing on the market within the near future is extremely slight. According to one metallurgist, a major problem in developing such a shaft would be the toxic character of beryllium, requiring that it be stabilized within another metal—copper being the likeliest candidate. Aside from this, the characteristics of beryllium match favorably with conventional carbon steel. Functionally, beryllium would impart tensile strength to a shaft and aesthetically a beryllium-copper combination would give the shaft a rich, deep brown color . . . Twenty-one states and the District of Columbia will be affected this spring by one of nature's strangest insects—the **17-year locust**. A regular chemical control program should be established to avoid damage to trees. As soon as adults appear, apply carbaryl; each spray provides protection for up to three weeks. After the locust have disappeared, prune back to healthy wood all twigs that are too badly damaged to be saved. Burn these to destroy any eggs still present.

CORRECTION

Later developments in the National Golf Foundation elections necessitate the following corrections in our earlier report (GOLFDOM, May, page 72). Board director E.R. Woolley was elected vice president, replacing William Bommer, who resigned. Mark Cox was elected to the NGF board.

Developing a Golf Course?



The Bergman Method is backed by the experience gained from preparation of 110 golf courses in 17 states.



Before future golf course shows mass of stones to be removed.



After Bergman stone removal equipment practically picks it clean.

"No field too stoney"

The **Bergman Method** of golf course preparation was developed through the efforts of 2 generations of the Bergman family.

The **Bergman Method** includes soil preparation, pulverizing, aerating, stone and trash removal, and seeding; resulting in the finest fairways and tees available through mechanical means.

The **Bergman Method** can shorten your construction period by several weeks saving you valuable time and money.

Other Bergman Method Services include:

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NEW PRODUCTS



Gilison Knitwear Company, Inc., announces the Space Sweater, fashioned in triple tones of blue or gold or red or lilac, knitted in 75 per cent mohair and 25 per cent wool. Available in pro shops throughout the country.

Circle No. 101 on reader service card



Conwed Corp. announces the Conwed Golf Net made of polypropylene mesh. The net is a seven by eight foot rectangle with a chain weight for variable tension. The net and its zinc and brass-plated components resists rust, corrosion and mildew. It retails for under \$10.

Circle No. 102 on reader service card

Medic Alert Foundation announces the Medic Alert Bracelet. The bracelet bears a brief engraving that identifies the weakness of its wearer or indicates that he is a registered organ donor, the Medic Alert telephone number and a serial number. A telephone call to Medic Alert's computerized file provides the authorized caller with essential data. Lifetime membership for men, women and children is \$7.

Circle No. 103 on reader service card



JI Case Company has the new 4-In-1 Buckets for their Uni-Loaders. The bucket can clam, load, doze and scrape. It can be attached or detached from the loader arms with two pins and two couplers. It has a capacity of 13.5 cubic feet and will lift a load of 1,500 pounds to a dump height of 9 1/2 feet. Three models of the Uni-Loader.

Circle No. 104 on reader service card



Calgon Corp., Consumer Products Div., introduces Thermotabs. The salts contained in Thermotabs replace salts lost from body fluids through perspiration. They are available in a strip pack of 25 for \$.59. Also in bottles of 100 for \$.69; 500 for \$2.85; and 1,000 for \$3.45.



Circle No. 105 on reader service card