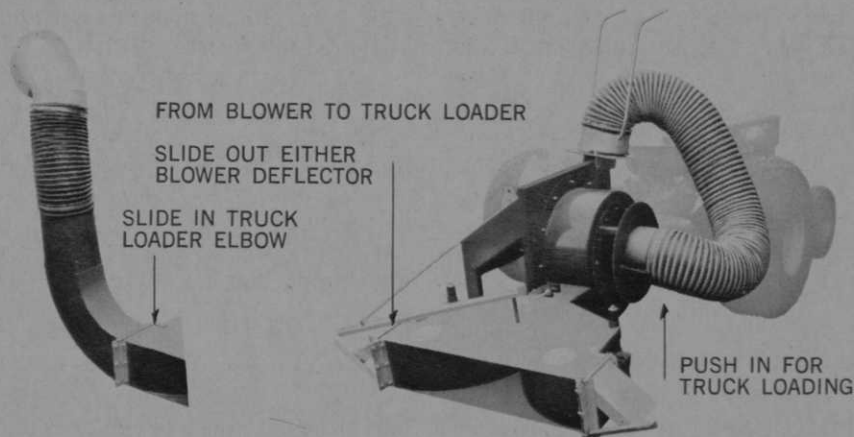


BUY GIANT-VAC GET GIANT ECONOMY

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

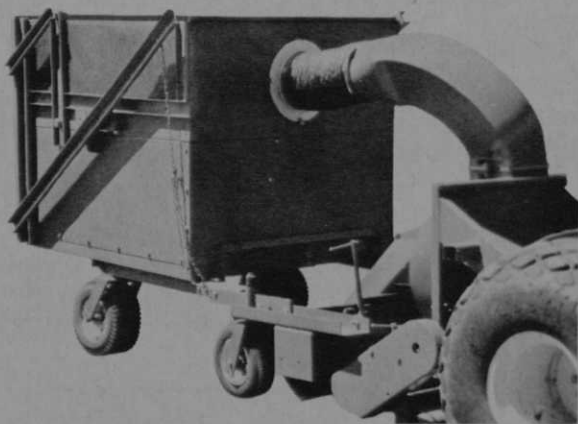
As double headed blower . . . to truck loader in 30 seconds



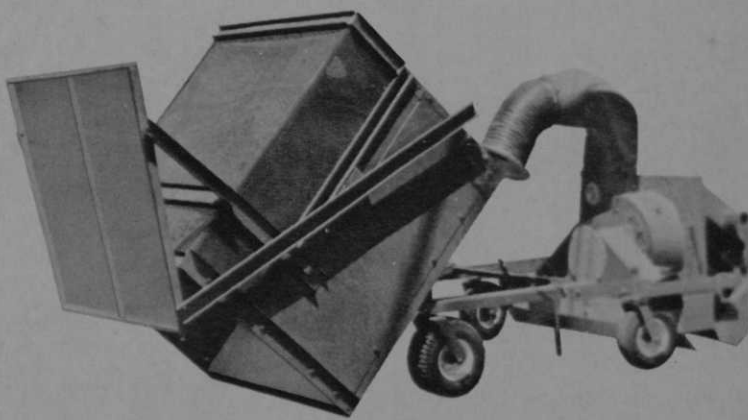
Exhaust velocities exceeding 250 M.P.H. rapidly clean a large turf area. By flipping one tractor operated lever, the air discharge is changed from left to right allowing constant windrowing regardless of tractor direction. Special features allow converting to a Truck Loader in 30 seconds, as shown.

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.



VACUUMING AND THATCHING



SELF-DUMPING

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.

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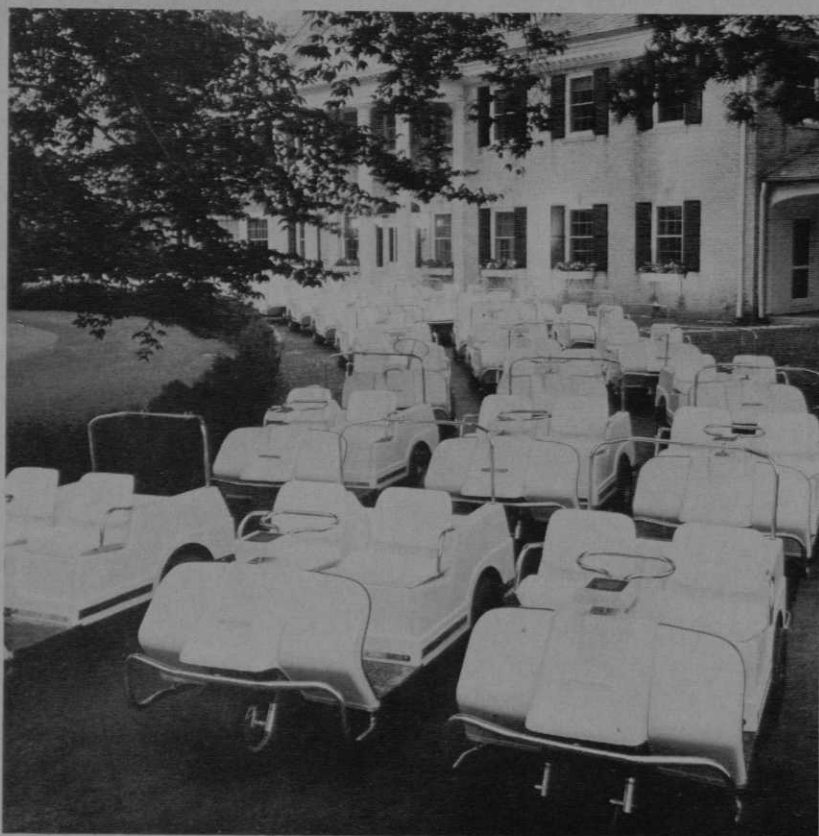
Pioneer of Vacs

NEW PRODUCTS

Fox Valley Marking Supplies announces Easy Marker for marking large areas at high speeds from a golf car. Easy Marker paint is non-toxic to grass and is removed when the grass is mowed.



Circle No. 101 on reader service card



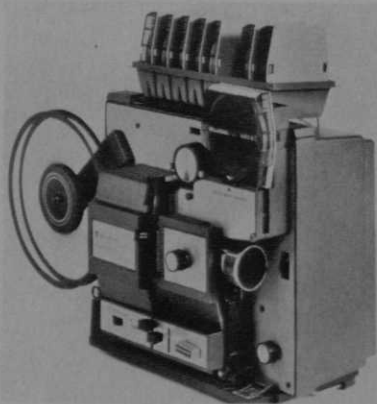
Harley-Davidson Motor Company announces its 1971 line of golf cars. Among the features on all 1971 models are contour bucket seats, cradle-type bag rack, power reduction steering and disk brakes. In addition there is a two-year warranty on all major electrical components.

Circle No. 102 on reader service card



Deere and Company has added the Hughes Hydraulic Backhoe Impactor to their 92, 9250 and 9400 backhoes and to their JD500-A and -B loader backhoes. Available with a frost-breaking spade and tamping head, the impactor delivers 125 foot-pounds of force with more than 1,000 blows per minute when the tractor is operating at a maximum speed of 2,000 rpm. The impactor is mounted on the backhoe bucket linkage using two adapter plates. Their combined weight is 285 pounds.

Circle No. 103 on reader service card



Bell and Howell introduces its Auto 8 movie system in 20, 100, 200 and 400 foot sizes. The cassette can be snapped into position and the film projection cycle is done automatically. Two projector models are offered, the 469z for \$219.95 or the 459z for \$179.95. The new models offer an instant replay feature. The Model 469z also features a Multi Motion capability which also allows the user to view films in slow motion and freeze action.

Circle No. 104 on reader service card

(Continued on page 86)

American Society of Golf Course Architects

JAMES GILMORE HARRISON, *President*
266 Harrison Road
Turtle Creek, Pennsylvania 15145

EDWARD L. PACKARD, *Vice President*
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LaGrange, Illinois



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A member of the American Society of Golf Course Architects is one who by virtue of his knowledge of the game, training, experience, vision and inherent ability, is in all ways qualified to design and prepare specifications for a course of functional and aesthetic perfection.

He is further qualified to execute and oversee the implementation on the ground of his plans and specifications to create an enjoyable layout that challenges golfers of all abilities and exemplifies the highest standards and traditions of golf.

He will counsel in all phases of the work to protect the best interests of his client. Each member of the American Society of Golf Course Architects is engaged full-time in Golf Course Architecture, and his qualifications have satisfied the Board of Governors in all respects.

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New Products

(Continued from page 82)



Walter Hagen Golf Equipment Company has available the Hagen 1970 Christmas Pak, which includes a dozen Haig Ultra golf balls and a micro, solid-state transistor radio. Also available in a leatherette case with a half dozen golf balls.

Circle No. 105 on reader service card

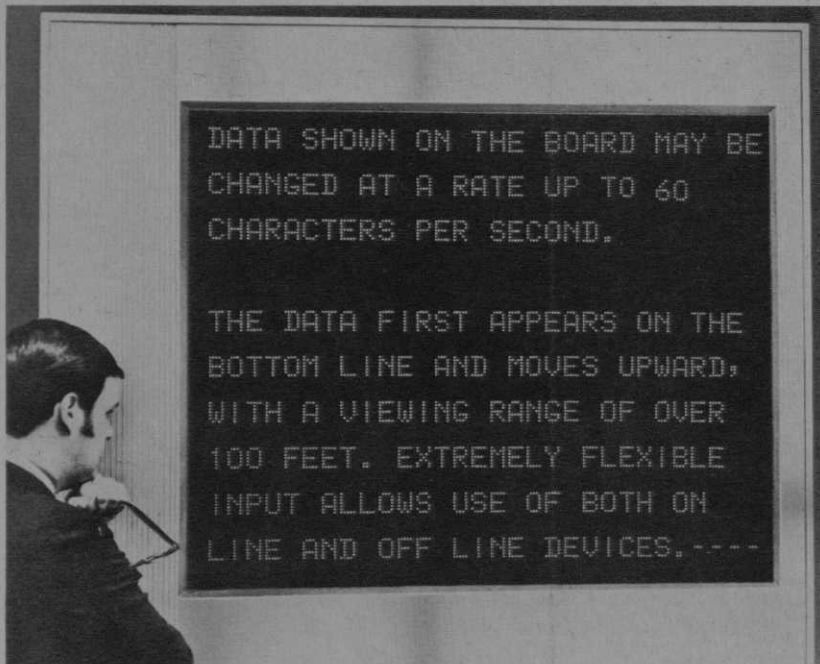


Head-to-Toe Products introduces the Mini-Valet, a compact grooming kit. Each kit contains 14 grooming aids, among them a comb, hand and face soap, mirror, razor, shoe shine, toothpaste and toothbrush and cologne. The Mini-Valet sells for \$3.89 plus 50 cents postage.

Circle No. 106 on reader service card

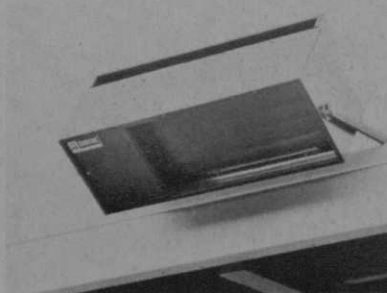
Columbia Car Corp. announces improvements on its line of Pargo golf cars for 1971. All 1971 Pargo seat brakes will be equipped with an automatic electric cut-out switch which eliminates the possibility of operating the car from a position other than the driver's seat. In addition a shield enclosure has been installed which prevents golfers from using the previously open space for trash.

Circle No. 107 on reader service card



Science Associates, Inc., introduces a low-cost dynamic display media called MSG/COM. Using a magnetic light valve, the display covers 18 square feet of viewing area and displays 384 characters at one time. A voice grade telephone or teletype supplies input data. It can be automatically activated or de-activated with a command code. The display system which can be seen from 100 feet can be used as a scoreboard in tournaments or outdoor events. It sells for \$7,775 or can be rented for \$200 per month.

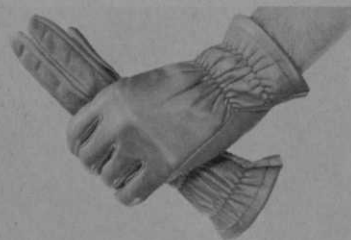
Circle No. 108 on reader service card



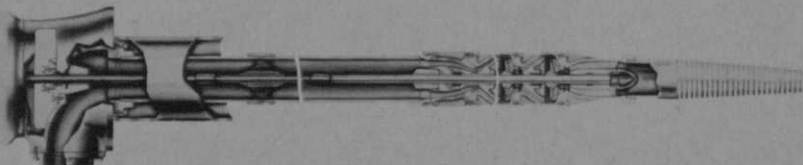
Infrared Dynamics introduces the Sunpak gas-fired infrared heater that operates in wind and rain. Permanent or portable units are available for indoor or outdoor use to provide instant warmth. The Sunpak is operated with a remote control wall switch.

Circle No. 109 on reader service card

Par-Mate introduces cold weather golf gloves. Two styles are available: S-82, a black or pecan Cape-skin glove which retails for \$10, and S-84, a black stretch glove with a wool tweed back, Capeskin palm and stretch sidewalls which retails for \$6.50. Both styles are available for men and women.



Circle No. 110 on reader service card



Tait Mfg. Company offers a high capacity line shaft vertical turbine pump for large volume. The Tait AC line shaft turbine has a capacity of up to 3,500 gallons per minute. It is available in oil-lubricated or water-lubricated models.

Circle No. 111 on reader service card

For more information circle number 223 on card

(Continued on page 90)

Reduce your total irrigation costs with push-together J-M Ring-Tite® pipes.

Savings on a J-M pipe system begin the moment installation crews push together the first two lengths of pipe. Due largely to the Ring-Tite joints, they go together quickly and easily: ends are wiped clean, rubber ring inserted in groove, end of next pipe length lubricated and pushed "home." So, small crews can install more pipe . . . in less time . . . at lower cost.

Then, once the pipe system is underground, maintenance savings begin. Because of their built-in flexibility, these

pipelines provide proven safe-guards against earth subsidence, line stress . . . even earth tremors. And, because their Ring-Tite joints are made without guess-work . . . and are tight when installed . . . they'll stay tight for the life of the system. This means built-in protection against leaks that could cause expensive repair work, waste water and interrupt play.

So whether you use TRANSITE® or PVC plastic Ring-Tite pipes alone or in combination, you get a proven pipe sys-

tem designed to keep installation and maintenance costs to an absolute minimum. A system that over the years will resist corrosion and return maximum value for each dollar invested. Little wonder J-M Ring-Tite pipes are the most widely used pipes in turf irrigation today.

For more information on how J-M pipe systems keep down the cost of irrigation, ask for booklet 359A. Write Johns-Manville, Box 290-PG, New York, N. Y. 10016. Available in Canada and overseas. Cable: Johnmanvil. **JM**

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TRANSITE* asbestos-cement pipe with factory-mounted Ring-Tite tapped coupling for sprinkler riser. Rubber ring in precision-machined coupling speeds installation, provides tight flexible joint, reduces maintenance costs.



The bell is an integral part of the PVC plastic Ring-Tite pipe. Here rubber ring is being inserted into groove in bell. Ring helps speed assembly, absorbs pipe expansion and contraction, triple seals joint against leaks.

For more information circle number 224 on card

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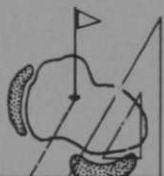
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For more information circle number 243 on card

New Products

(Continued from page 86)



Korex Industries introduces Datetron desk calendar-clock. Its sensing device automatically moves down the appointment page synchronized with the clock and sets off an electronic tone as a reminder when it reaches each appointment. The tone continues for three minutes or can be immediately shut off. The Datetron is available in black or wood grain with gold trim and retails for \$40.

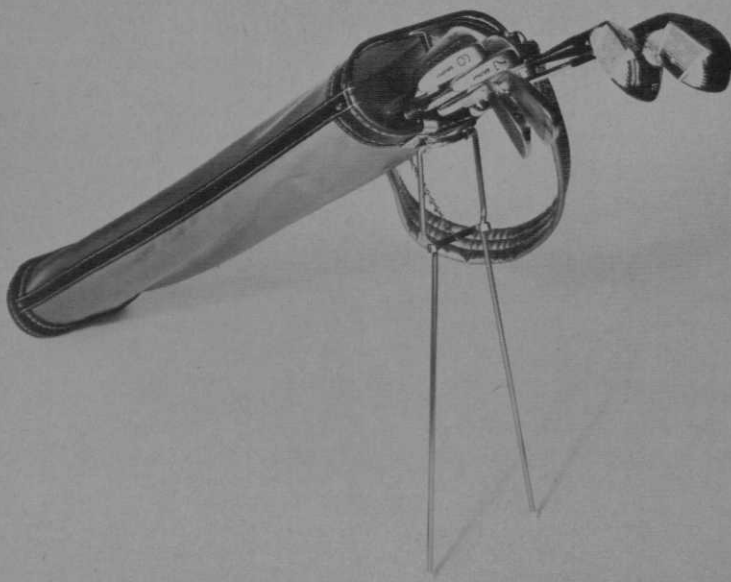
Circle No. 112 on reader service card

York Division of Borg-Warner Corp. has developed SD-25, a small counter-top dispenser which eliminates the necessity of scooping ice by dropping three ounces of ice bits into a glass when the glass is touched to a tripping mechanism. The SD-25 unit is fed through a tube from an ice-making machine which can be located up to 40 feet from the counter unit (or 30 feet up). The ice-making machine turns out 500 to 700 pounds a day. The counter unit has a 25-pound storage bin. The dispenser is 15 1/4 inches wide, 16 inches deep and 28 inches high.

Circle No. 113 on reader service card

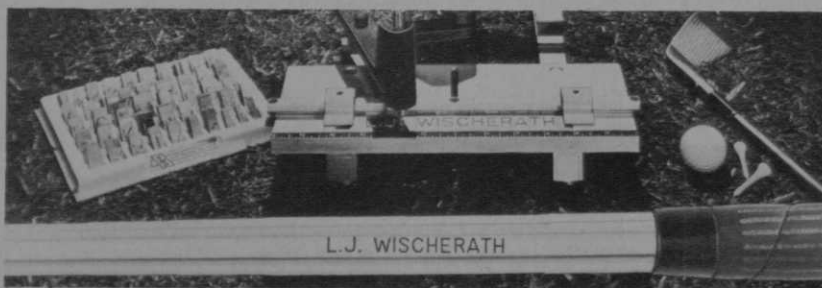
JI Case announces the Case 350 Dozer-Loader Backhoe tractor for excavation-trenching jobs. It features a 44 hp engine, power shuttle, torque converter and sealed tracks. Dozer options include a choice of angling models. The hydra-leveling loader features a three-fourth cubic yard bucket and single lever control of rollback, lift and dump. Case 350s measure 12 1/2 and 14 1/2 feet and are available with nine different sizes and types of drenching buckets.

Circle No. 114 on reader service card



Butchart-Nicholls, Inc., has designed the Clip-On Caddy to keep lightweight golf bags upright for easy access to clubs. Made of nickel-plated steel, the Clip-On Caddy weighs less than a pound and comes on a sturdy display card which includes instructions. Suggested retail price is \$3.95.

Circle No. 115 on reader service card



Scott Machine Development Corp. introduces the SM-104 Golf Club Engraver for personalizing golf clubs. Dealers can engrave customers' names with a stylus that writes precisely on both aluminum and chrome plated shafts.

Circle No. 116 on reader service card

Nutting Industries, Ltd., announces a coin-operated golf game which can net \$200 a month or more, according to the company. Called Test Your Golf I.Q., the game quizzes golfers on questions covering etiquette, rules, strategy, terms and general information. A dime entitles a player to four questions. Installation is free.

Circle No. 117 on reader service card

Swift Golf Ball Company offers a free personalized golf ball counter kit. The green and white display is 8 1/2 inches by 11 inches and comes complete with instructions.

Circle No. 118 on reader service card

Flooring Accessories Div. of Johnson Rubber Company offers a rubber corner guard to prevent damage and scuffing caused by traffic or maintenance. The corner guard is 48 inches long and can be installed with rubber waterproof cement or contact bond. Available in black, brown, sandalwood or gray.

Circle No. 119 on reader service card

Gallo Industries, Inc., has issued a 32-page catalog of newly-styled dining room and bistro sets of wrought iron or cast aluminum. In full color, the catalog displays the new metal finishes and colored fabrics available in Gallo furniture.

Circle No. 120 on reader service card