Market Place and Buyers' Guide-Continued

Power Mowers
Cooper Mfg. Company
Toro Mfg. Company
Jacobsen Mfg. Company
Worthington Mower Company
Roseman Tractor Mower Co.

Power Mowers—Roller Type Ideal Power Lawn Mower Co.

Power Mowers—Wheel Type Ideal Power Lawn Mower Co.

Putting Green Mowers Toro Mfg. Company
Pennsylvania Lawn Mower Works
Jacobsen Mfg. Company
Worthington Mower Company
Roseman Tractor Mower Co.
Cooper Mfg. Company

Power Mower Blades The Budd Mfg. Company

Rakes Golf Course Supply Co. Pennsylvania Lawn Mower Works

Rhode Island Bent Seed

A. N. Peckham

Rollers Stumpp & Walter Company Toro Mfg. Company Worthington Mower Company

Rough Mowers
Toro Manufacturing Company
Pennsylvania Lawn Mower Works
Jacobsen Mfg. Company
Worthington Mower Company
Roseman Tractor Mower Co.

O. M. Scott & Sons Co.
J. Oliver Johnson, Inc.
Stumpp & Walter Co.
Golf Course Supply Co.
Seaboard Seed Co.
A. N. Peckham
T. W. Wood and Sons.
Peter Henderson & Co.
Philadelphia Seed Co.
J. M. McCullough's Sons Co.
Illinois Grass Co.
Lyman Carrier

Standard Mfg. Company

Siphons, Corrugated Iron Armco Culvert Mfrs, Association

J. Oliver Johnson, Inc.

Hardie Mfg. Company

R. Nelson Mfg. Company Buckner Mfg. Company Thompson Mfg. Co. Pelican Works Campbell Irrigation Co.

Sprinkling Carts
Reade Mfg. Company
Worthington Mower Company

Stolons O. M. Scott & Sons Co. Hubbard Nurseries

Storm Sewers, Corrugated Iron Armco Culvert Mfrs. Association

Street Culverts, Part Circle Armco Culvert Mfrs. Association

Sulphate of Ammonia Koppers Products Co.

Tee Mowers

Toro Mfg. Company
Pennsylvania Lawn Mower Works
Jacobsen Mfg. Company

Tee Stands
Ideal Power Lawn Mower Co.

Top Dressing Hyper-Humus Company The Ohio Humus Company Atkins and Durbrow, Inc.

Tractors
E. G. Staude Mak-A-Tractor Co.
Toro Mfg. Company
Roseman Tractor Mower Co.

McWane Cast Iron Pipe Co.

Well Casings, Corrugated Iron Armco Culvert Mfrs. Association

Worm Eradicators Reade Mfg. Company Peter Henderson & Co.

Classified Advertisement

PRO-GREENKEEPER WITH TEN YEARS experience desires position. Successful experience in greenkeeping, construction and maintenance. Best of references.—Address—J. O.—The National Greenkeeper, Cleveland.



BETTER LAWNS

at Lower Cost

The combination of cow manure and Peat Moss Soil Improver brings you the best turf and lawn builder it is possible to secure in one reasonably priced product. The advantages over other conditioners is the fact that the dehydrated cow manure is natural food for the soil organisms on which plants thrive; and peat moss maintains aeration, moisture constancy and many other valuable requirements. INVESTIGATE.

\$2.50 per 50 lb. bag \$75 per ton f. o. b. Juliustown, N. J.

Atkins & Durbrow, Inc. 27-G Burling Slip New York, N. Y.

means of taking care of these small

However, during the spring of 1929, this storm water overflowing across the fairways had worked out the turf in places and had also deposited large quantities of clay silt which would be very objectionable to the players even though the sod were uninjured.

Storms Cause Washouts

FTER several bad washouts had Athus occurred it was decided that THE new course of the Country, weather flow. No attempt was installing pipe large enough to carry Club of Cleveland on South made to provide ample capacity for the maximum storm water flow

Cleveland Club Installs Armco Pipe

Woodland Road lies in some of the most beautiful country in northern Ohio. The terrain of the course is gently rolling and is crossed by numerous streams which add both to the beauty and difficulty of the course. Many of the fairways pass through groves of magnificent beach, maple and oak which make their contribution to the harmonious natural attractiveness of the course.

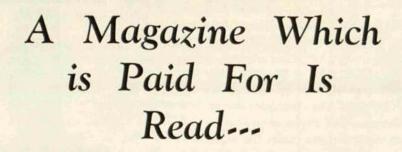
The course was constructed in 1928 and since then work of improving both the grounds and the buildings has gone steadily forward. This improvement will culminate in the spring with the completion of a \$600,000 clubhouse. The course itself will be formally opened about July 1.

When the course was constructed in 1928, it was planned to carry only to carry the ordinary dry

storm water, which was left to flow would lead to lessened maintenance over the fairways. At the time it costs and better playing conditions. was thought that this plan would As a good growth of sod had been provide an economical and adequate obtained on both greens and fair-



INSTALLING ARMCO PIPE AT THE CLEVELAND COUNTRY CLUB the smaller streams under the fair- Photo shows Bert G. Sheldin, greenkeeper, helping lay a 30-inch pipe on ways in tile of a capacity sufficient No. 5 fairway. A minimum amount of excavation, quick placing and easy aligning are characteristics which speeded up the work



Queens Halley Golf Club, Inc. FOREST HILLS, N. Y January 7th. 1929 The National Greenkeeper, 405 Caxton Building, Cleveland, Ohio, Gentlemen, Year, to the following: W.C. Taggard, 22 Abingdon Road,
Kew Cardens, New York, Please send The National Greenkeeper for one S.J. Reynard, 18 Outhbert Place, Kew Gardens, New York, W.L.Baker, 515 East 16th. St. Brooklyn. N.Y. The above is the new Green Committee for this year and our fresident has asked me to have them receive Can you start them with the January issue? Send the account for the three subscriptions to the club. Very truly yours, Queens Valley Gois Club, Jane A. Whitey Manager-Greenkeeper.

Above is an unsolicited subscription order from a prominent Long Island Golf club for ALL the members of the Green committee.

Proving the powerful reader interest in

The NATIONAL GREENKEEPER

The only journal in the world on turf culture and golf course maintenance ways during the summer of 1929 it was necessary to choose a pipe which could be transported over the fairways and laid with as little damage to the grass as possible. All the commonly used types of pipe were considered with this in view.

As the work had to be done during November and December and as the roads over the course are unimproved, it would have been difficult or impossible to get the heavy rigid pipe of the required size to the site of installation. Even though the pipe could have been delivered it could not have been moved across the fairways and laid without great damage to the sod. A monolithic box would have involved the mixing and placing of sand, gravel and cement on the fairways which would again have been disastrous to the turf.

On investigation, it was found that injury to the turf could be avoided with corrugated iron pipe which weighed only one-tenth as much as rigid pipe. Also this type of pipe has characteristics—quick handling, self-aligning, frost proof—which, in addition to its durability, make for economy of installation. Hence Armco corrugated pipe was selected as the best suited for the purpose, and a careful survey of the tributary watersheds revealed that 30, 42 and 48-inch pipe were required in the various fairways through which the streams passed.

The Armco pipe was furnished in 20-foot lengths to expedite laying. Delivery was made by truck to the nearest point reached by improved roads, from where the pipe was rolled over the fairways and newly made greens to the place of installation, in some cases a distance of over 1,000 feet, without damaging the sod in the least. Three men, at the most, were needed to roll these sections.

Excavation for all the pipe installed on the golf course proper was done by hand. The pipe was lowered into the trench with rope slings. no special equipment of any kind being needed. Backfilling was done by hand and immediate steps were taken to provide an early growth of turf which will remove all traces of the former troublesome streams. In all approximately 1,000 feet of the various sizes of pipe were installed, the improvement being carried out under the supervision of Bert G. Sheldin, greenkeeper and superintendent.