

THE MARKET PLACE

Pennsylvania "New" Fairway 1928

IN order to meet the demands of some greenkeepers who regularly use Pennsylvania cutting units, the Super fairway mower manufactured by the Pennsylvania Lawn Mower Works was simplified, and a lighter weight was achieved at their plant in Philadelphia during the past few months.

The new mower for 1928 can be easily adjusted by the tractor operator, and it is so designed that it is readily repaired.

This new design is shown at Booth Number 4, on the show floor of the convention, together with their improved Super Roller putting green mower.

The Pennsylvania Lawn Mower Works wishes to extend their appreciation of the suggestions that have been made to them during 1927 by practical greenkeepers who use their equipment. "The man who uses a mower is the one to be suited, and that's what we are in business for," said Mr. N. D. Perine, assistant sales manager of the company, recently. Mr. Perine will talk with visitors during the convention at the Pennsylvania exhibit.

Analysis of Poultry Manure

FROM the Premier Poultry Manure Company, of Chicago, we have received the guaranteed analysis as required by the Illinois fertilizer registration laws, as follows:

6% ammonia
2.75% phosphoric acid
1.30% potash

The Premier product frequently runs as high as 7% ammonia, and sometimes 8%, which is well above the state law requirements.

About 15,000 tons will be the quantity available at the Premier plant this year, and the supply is in excellent mechanical condition.

A new folder is now ready describing the uses of this product, which will be mailed immediately upon request.

A Useful Broom Rake

THE True Temper Brume Rake, which was developed about two years ago by The American Fork & Hoe Company of Cleveland, Ohio, has met with very enthusiastic reception by golf clubs. First used for cleaning up around the gravel paths and club house grounds, it was soon found to be ideal for use on the putting greens.

It is the only raking tool made which will pick up leaves, trash, litter, etc., from the greens without any danger of tearing the sod. Its blunt, flexible teeth will not dig into the tender grass, but will pick up small objects like twigs and matches.

In using it for leaves it is particularly fast and convenient because the leaves will not impale on the teeth and hence the teeth do not require frequent cleaning. Its easy, sweeping motion is not only much less fatiguing, but much more rapid in operation than the old-fashioned raking motion. It is light, durable and very moderately priced.

A New Gearless Golf Sprinkler For Greens and Fairways

ALTHOUGH getting a late start last spring, several hundred Lark gearless golf sprinklers were sold to golf clubs in the United States and Canada during the past summer, and the reports coming in show that these sprinklers are proving highly satisfactory. Mr. L. R. Nelson of the L. R. Nelson Company writes us as follows:

"The Lark sprinkler has several improved features. An unbalanced rotor with a spray cap on one end distributes the water evenly over the inner circle. This rotor also acts as a vibrator which controls the speed of the entire head rotating on its axis. On the end of the long arm opposite the small rotor is a spray nozzle that sprinkles the outer circle covering an area up to 150 feet in diameter according to water pressure and size of hose used. This nozzle is on a swivel which helps to control the speed of the revolving head, and furthermore it can be turned up for calm weather or down in case of a strong wind.

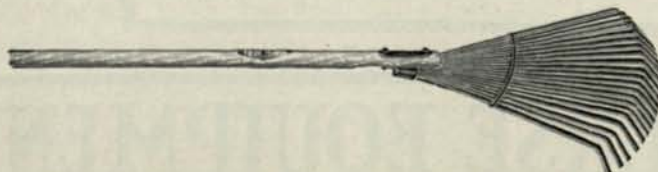
"The Lark has no gears and is so constructed that both the small and large bearings are self-closing to prevent leakage. The head of sprinkler is mounted on a roller base which enables setting the sprinkler at the right spot without getting wet. When the sprinkler is to be moved, one can easily roll it off by pulling the hose and thus avoid walking on the green when the ground is soaking wet. It is sturdy and strong, has nothing to get out of order, and performs on sloping hillside as well as level ground."

The Lark sprinkler will be shown by Mr. Nelson at Convention Booth Number 17.

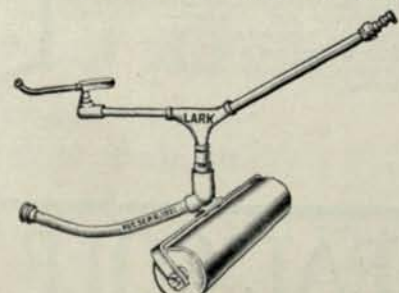
First Man to Use a Royer Machine

A NOTE of interest is added to the exhibit of L. F. Mitten and E. L. Winn, at Booth Number 5B, by receipt of a letter from the first man to make use of a Royer compost machine on a golf course. Mr. B. J. Marley, greenkeeper at the Wyoming Valley Country, Wilkes-Barre, Pennsylvania, writes:

"I have the honor of being the



The American Fork & Hoe Company's Broom Rake



The "Lark" gearless sprinkler

first man to ever use the Royer Compost Machine in the world and to assist in perfecting that machine up to the present time. At this time I look back four years to the time Wyoming Valley decided to enlarge their golf course. At the time I took charge there were nine holes on our course, and they decided to have eighteen. From the start the weather was against us, and I could not foresee the many problems that I would have to face. But the greatest one of all was the preparing of soil for the seed beds on the greens and tees.

"The weather being very wet, a screen I decided was out of the question. The chairman of the Green committee and myself realized that if we did not do something we would be up against it for soil when the time came to seed our greens. He is a man who has worked all his life in the engineering department of one of our largest factories in the city and said to me one day 'Have you ever seen how they clean sand in a foundry?' I told him I had, and he then asked if I thought one of the machines would act as a compost machine. My answer was, 'Columbus took a chance, why can't we?'

"We then got in touch with Mr. Royer and put the proposition up to him, and asked if he would send a machine to us and let us try it out. He said he would not only send a machine, but would come along with us and see what it would do, so we started the next day.

"The first machine we used lasted only seventy-two hours and we certainly used it hard. Mr. Royer asked me if I had any changes or suggestions to offer. I told him that he should change the pitch of the belt so it would free itself quicker of the stones, also enlarge the hopper, and that the machine should have more speed. Mr. Royer then went to the expense of manufacturing one of the machines, making the changes I suggested as well as some of his own.

"When the machine came down it was set up on the course and started to operate. The belt lasted thirty days. It certainly was encouraging. The point that made me feel good was the fact that I had enough prepared top soil for six greens. By the 15th of September I had enough soil and the seed beds were all under seed on the greens, tees and approaches. I am still using that first machine and I take great pride in its care."

Testing Soil For Clean Turf

AT Booth Number 26, the La Motte Chemical Products exhibit shows how golf course soil can be quickly and accurately tested. It is not a difficult operation, as will be demonstrated to interested visitors. Every greenkeeper should know what degree of acidity is favorable to the growth of fine clean turf.

In golf course management it is desirable to establish certain species of grasses and eliminate others. This is done by making the soil slightly acid. The acidity happens to be very much more detrimental to the grasses not wanted, as well as to weeds, than to those which are wanted and, as a result, the latter soon hold sway. It is true that a neutral soil has a higher fertility than an acid one, but in this case it is advantageous to forego the higher fertility of a neutral soil and secure instead the desirable species of grass and a good sod.

The various flowers, shrubs, trees and crops also have definite ranges of acidity or alkalinity at which they thrive best and, unless the reaction of the soil is regulated to the proper point, they will either die or will not develop properly.

Preventing Worm Casts

READE MFG. CO., makers of "Electric" Worm Eradicators, have solved the problem of handling and applying worm eradicator. This concern turns out an eradicator that gets the worms and also supplies everything necessary to put the eradicator on the greens quickly and effectively.

With every 10-gallon order, the following are furnished gratis: a measure; a faucet for drawing the liquid from the container, and several one-gallon glass jugs for carrying the eradicator from the stockroom to the greens. In addition, they manufacture an efficient spray cart for distributing the eradicator on the greens.



Armco pipe line being laid at the Verity Golf Course, Middletown, Ohio.

Scott Looks Ahead



THESE two golfers had become so absorbed in the game they over-played the season slightly! This cartoon was used recently by O. M. Scott & Sons Company of Marysville, Ohio to illustrate a letter about golf course seed. Its purpose was to show that there isn't much time between seasons after all and that even with snow on the ground someone must be thinking about the season ahead.

The Scott Company has been distributing golf course seed for a good many years and they are also growers of Creeping Bent Stolons on a rather large scale. The back cover of this magazine shows a picture of a splendid green in New York state planted with the Washington strain of stolons that grew in the Scott nursery.

Improvements in Mower Grinder

IN this "Age of Machinery" the Greenkeeper and green committee of every progressive golf club are interested in equipment which will aid in making theirs one of the popular golf courses in their district.

One of the most important things in golf course maintenance is the care of grass cutting units. The blades should be so ground that when the mower is properly adjusted there is an even contact between the revolving cutter blades and the bottom knife. This will insure a grass clip which is clean and smooth and leave the roots uninjured.

The Peerless Lawnmower Sharpener for 1928 has a rapid traverse reversing screw which returns the grinding head to the left side or starting point. This relieves the operator

of considerable effort. On the old model the head was pushed back by hand.

The feed on the Peerless has been increased, thus saving time in grinding. A new supporting rest has been added for holding putting green mowers with 8-inch rollers placed behind the cutting reel. The main shaft is carried on New Departure ball bearings. The grinding wheel has special ball bearings and is driven with a roller block chain. All parts are interchangeable.

Construction of the Moto-Mower

THE Moto-Mower Company of Detroit, Michigan, was organized in 1919 and in that year started the manufacture of a power lawnmower.



The Moto-Mower in use on terraced lawn

In design Moto-Mower is compact, sturdy and flexible. It is powered by a four-cycle, air-cooled, valve-in-head motor.

Malleable iron, a tough, rigid metal, not subject to breakage, is used in the side frame and all small castings. The connecting rod is drop-forged steel and fitted with split babbitt bearing. Crankshaft and camshaft are of chrome-nickel steel and their bearings are of Bunting bronze shell, lined with babbitt.

Oiling is provided by a combination force feed and splash system. The chain drive is employed because it is considered by many leading authorities to be a most efficient means of transmitting power. Cutting blades

are oil hardened and tempered. A patented feature eliminates "chatter" in the cutting reel and undue wear on the bottom knife. Proper cutting adjustment is also automatically maintained.

Applying Semesan for Brown-Patch

THE preventives and cures for some diseases are so well known and so generally recognized that the disease and the preventive are usually thought of in the same connection. One of the standard preventives and controls for both the large and small forms of brown-patch is Semesan, a Dupont product.

Although Semesan may be applied in the original dust form, the majority of greenkeepers who have brown-patch to combat prefer to apply it as a water solution using power sprayers. One pound to a barrel which effectively covers 1000 square feet of green is the strength recommended and most generally used.

A bad attack of brown-patch can practically ruin the playing quantities of an expensive green in just a few days so it pays to be prepared for the first spell of "brown-patch" weather. Be sure and visit the Du Pont exhibit in Booth 21 at the National Greenkeepers Show to pick up practical pointers on the use of Semesan under the condition at your course.

J. Oliver Johnson Reduces Prices

A REPORT has been received from J. Oliver Johnson, Inc., of Chicago, distributors of a large line of general golf course supplies, that their prices on many items have been reduced for 1928. "The large vol-

ume of business received in 1927, due to the support and patronage given our company by greenkeepers all over the United States, has effected a reduction in manufacturing cost which we are passing on to the clubs," writes H. S. Bailey of the golf department.

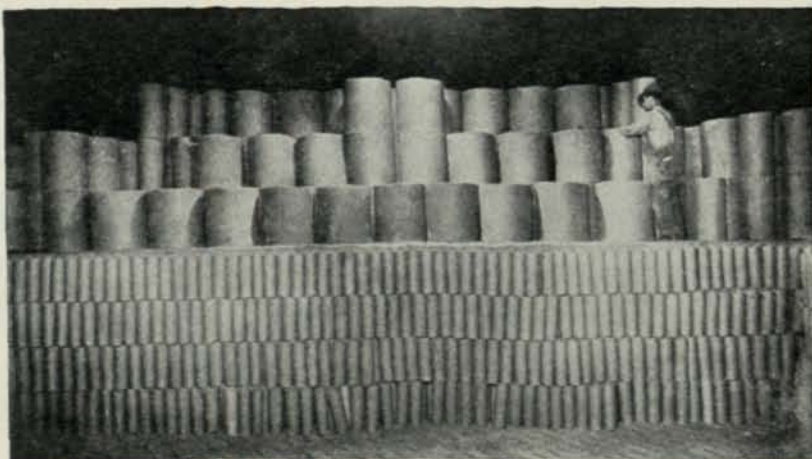
An oval shape divot cutter, patented by Harry Collis of the Chicago district, and distributed by the Johnson company is called to the attention of our readers.

The Buch three-section gang fairway spike roller is used on many courses for the dual purpose of rolling fairways and opening up the turf for quicker action of fertilizers. The entire line of Buch rollers is distributed by the J. Oliver Johnson Company, and stocks of various types are kept on hand.

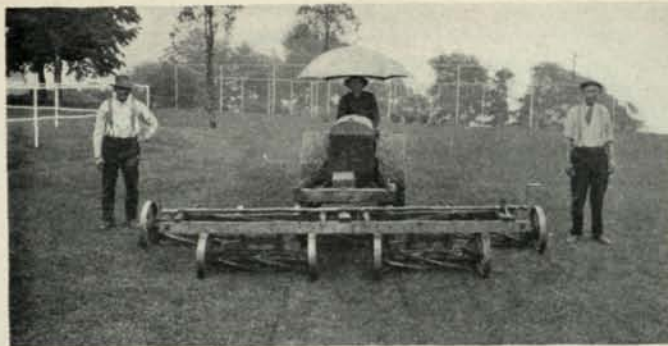
Recognizing the need of an up-to-date tee marker, J. Oliver Johnson, Inc., have patented a tee arrow, which will have the number of the hole, the yardage and par placed on it by means of removable figures and letters. The idea was to reduce the cost and at the same time give adequate information. By the use of this arrow the direction of play is indicated and extra figures may be obtained so the yardage can be changed at will. The arrow has a baked enamel cream finish and the raised letters are in red. Arrow is about 14 inches long and set at a 45 degree angle to the turf to permit of easy reading.

Automatic Self-Closing Valve Introduced by Buckner

BUCKNER Manufacturing Company, of Fresno, California, has taken over the national distribution



Setting drain tile in the kiln before firing at the plant of the Hancock Brick & Tile Company, Findlay, Ohio



First Toro machine ever built. Taken at Minikahda Club in 1919



Latest model Toro mowing outfit, taken at Minikahda Club in 1927

of a new underground snap valve for water systems, the purpose of which is to eliminate outlet boxes on the course, and allow of instantaneous connection at any point.

The Golf King sprinkler Number 6 is now manufactured by Buckner for connections from 3/4-inch to 1 1/2-inch size, and is used for both putting green and fairway watering.

The two items mentioned above represent the latest accomplishments of Mr. W. A. Buckner, pioneer in hoseless water systems for golf courses. Write him, giving particulars of the system you have already installed, or your water system problems on new courses.

Smaller Model Sea Serpent Fairway Sprinkler

BUILT of brass, and in the exact proportion of the large Sea Serpent, made by the Toro Manufacturing Company, of Minneapolis, Minn., this new item on the Toro list bids fair to exceed in popularity the mother model. It will be demonstrated at the Toro booth, Number 1A, in the center of the golf show floor during convention week.

As we watch the smooth operation of modern fairway mowing equipment, most of us forget what some of the machines used in the early days looked like. It is not so long since tractors displaced horses on the golf course. Tractor equipment was cried down less than ten years ago by some of our best known golf maintenance authorities, and was more or less ridiculed on all sides. Just as one example of what the greenkeeper has to thank the persevering manufacturer for, examine the photographs of the Toro fairway mowers, then and now.

Development of "Friend" Sprayers

NEARLY a half century ago, Hull Brothers, when they were but boys in business, displayed particular ability in solving mechanical problems, those, particularly at the time, in connection with agricultural and horticultural machinery. They



"Scotty" McLaren, the Toro service engineer, who has an ear for motor music

conducted a little repair shop in the heart of the Niagara Fruit Belt and were pioneers in the making of spraying machinery. Their activities, quite naturally, were confined to western New York until the reputation for dependable sprayers began to extend into more distant regions, until now, the name "Friend" in connection with Sprayers and High Pressure Auto Washers is universally known.

During these years, the developments have been noteworthy because

in the beginning, a 100-lb. pressure was not only wonderful in action, but regarded as quite dangerous; whereas now, there seems to be no particular limit, and any of the sprayers bearing the name "Friend" will maintain 300 pounds with perfect ease and some of them, those for special work—operate at 700 pounds.

The developments have all been the result of very closely followed field observation and practice. The first gasoline power sprayer ever built was a "Friend" and the only motorpump so called ever placed upon the market is a "Friend." In this machine there is a combination of motor, transmission, and high pressure pump, all in one unit, on a common base or frame, with stress self-contained.

Because the pumping of caustic spraying solutions is more difficult than clear water, it is highly important to have greater accessibility features, finer adjustments and facilities for quick and economical replacements than with water pumps. Furthermore, facilities for easy and positive lubrication of such pumps are very important.

When the need for golf sprayers became apparent, here the "Friend" Company again demonstrated its ability to meet the situation and has developed a line of machines made in several sizes to meet all conditions—machines that can be used, not only for the application of liquid fertilizer, insecticides and fungicides, for putting greens and fairways, but the complete spraying of golf course and country club shade trees and shrubs.

John MacGregor Filled His Own Need

STARTING six years ago at the Chicago Golf Club, from a former position as greenkeeper on Long Island, John MacGregor found both climatic and soil conditions of a dif-

ferent nature than contended with in the east. Modifying the heavy clay top-soil of the new greens with top-dressing laboriously spread by hand, was an expensive and not thoroughly satisfactory method, so he conceived an idea to lighten the work.

In spare time he finally constructed a screen cylinder to run on wheels, and the first time the men hauled it out on the course, a member called after him, "What are you going to do with that contraption, John,—catch butterflies?"

The first attempt worked fairly well, and encouraged, he went ahead with another and better constructed machine. From his own need as a greenkeeper, the present well designed and constructed MacGregor compost distributor came into being, and after that, he completed the outfit with a brush.

At Booth Number 22 on the show floor of the Greenkeepers' convention, this spreader and brush will be exhibited, and as one of his fellow greenkeepers says, "Ye'll find it a verra gude job."

The Urann Fairway Top-Dresser Dresser

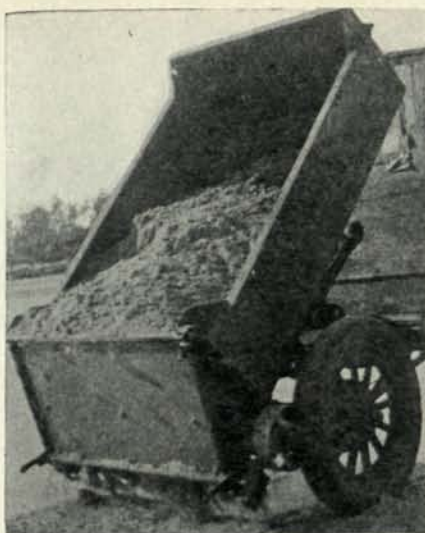
TWIN enemies of thick fairway turf are drought and starvation. Modern golf course water systems include outlets along fairways for protection against a long period of hot and dry weather. Starved turf, even when well watered, will not thrive, therefore it is safe to say that fertilization of fairways is an item that is carefully considered by golf club officials in planning maintenance appropriations for yearly operations on the course.

Top-dressing putting greens is now taken for granted as a method followed by expert greenkeepers to fertilize and "true up" the putting surface, and to insure a proper "springiness" and moisture holding capacity. Putting greens have frequently been over-fed, but the soil on thousands of fairways is no better than that which supports the thin growth considered ideal for the rough.

A regular system of fairway top-dressing is followed at the Kittansett Club, Marion, Massachusetts. In sending us this information, Mr. Elliot D. Pierce, superintendent of the grounds, states as follows:

"I am greatly interested in golf courses and am on the lookout for anything that is a money saver and labor saver.

"Mr. Carl B. Urann of the United



The Urann Fairway Top-Dresser

Cape Cod Cranberry Company, Wareham, Mass. has the credit of inventing a top-dressing machine to spread top-dressing on fairways, which certainly is a big help to golf courses.

"I have tried this machine out and I find that it is what the golf courses have been lacking to improve their fairways with, at a greatly reduced price.

"This machine will spread a load in two minutes and will spread very even, much better than can be done by hand.

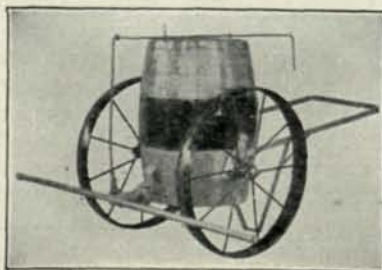
"By hooking on back of machine, a common metal door mat, the whole job of top-dressing and smoothing up of fairway is done at the same time.

"The amount of top-dressing on a fairway is regulated by the speed that the truck is driven.

"There is an actual saving of \$25.00 to \$35.00 an acre with this machine.

"The machine will pay for itself in top-dressing eight acres."

Write Mr. Carl B. Urann, United Cape Cod Cranberry Company, Wareham, Mass., and he will be glad to answer any inquiries in detail.



The "Cleveline" sprinkling cart

The New "Cleveline" Sprinkling Cart

MANY greenkeepers employ the use of sprinkling carts in the application of soluble fertilizers, chemical cures, etc., to putting green and fairway turf.

The newest cart of this description which has come to our attention is of the usual fifty-gallon size, with a six-foot boom, with holes drilled three-quarters of an inch apart, for a more penetrating and even flow.

It is fitted with a valve which can be turned off and on at the handle.

This new cart is manufactured by the Golf Course Supply Company, 3049 Carnegie Avenue, Cleveland, Ohio, and their literature also describes other new items they are offering to golf clubs this season.

Vitreous Enamelled Tee Markers

LIKE liveried ushers in a public theatre, they are sources of service and information. . . . One marker politely requests you to replace the turf. . . . The other marker gives you the number of the tee from which you are playing, the distance to the next green, and the par."

The foregoing paragraph was taken from the copy now in process of being made into a folder for distribution to the golf course trade by the Chicago Vitreous Enamel Products Company, of Cicero, Ill.

The tee markers in question are made of cast iron, heavily vitreous enameled, with a black background and white lettering. Made to order for each individual club, and special drawings submitted in advance.

Early delivery is impossible unless orders are placed well in advance. Clubs desiring distinctive markers should write Mr. E. Hogenson, at the factory office address given above.

The New Worthington "Overgreen" Mower

LAST year the Worthington Mower Company of Stroudsburg, Pennsylvania, introduced an innovation in the shape of a fairway cutting unit with reel designed on a herringbone pattern. This was considered a radical departure in cutting reel design, but evidently did not create a vacuum in the Worthington engineering department, as now the new "Overgreen" power putting green mower is contributed to the golf course field.

It is in reality a miniature reproduction of the Worthington fairway tractor with triple mowers. The

drive wheels are tired with compressible pads to eliminate marks on the turf, and there is a special lifting attachment which will take the mowers high enough off the ground when crossing roads and paths to guard against injury of the cutting reels. The mowers are 13-inch size.

The machine may be used with triple greens mowers, or all three may be detached and the regular 30-inch fairway cutting unit attached for mowing lawns, approaches, etc.

Added to the Worthington line we also find an all-steel constructed hand putting green mower, designed like the units used with the "Overgreen," only with an 18-inch reel.

Visit Booth Number 10, where Ernest Chamberlain, Inc., the Detroit Worthington representative, will tell you all about these new pieces of equipment.

Driving from the Mower Seat

THE Continental Cultor Company of Springfield, Ohio, manufactures a light weight fairway tractor which can be used with mowers, rollers, and other maintenance equipment, as well as with side-cutter bar for mowing the rough.

One of the features of this tractor



The "Cultor" with mowers in operation

is an elongated steering post designed to allow the operator control from the seat of the implement, away from the heat of the motor, and allowing clear vision of the work in process.

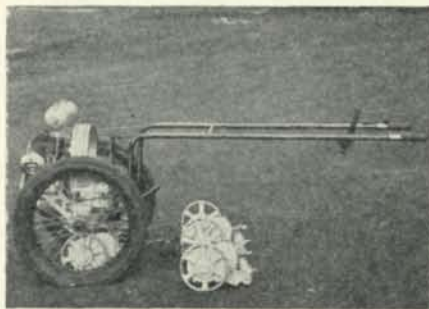
Pictured herewith is the "Cultor," showing its unusual operation with gang mowers.

Invitation to Try "Nu-Green"

THE Bayer Company, Inc., manufacturers of "Nu-Green" used for the control of brown-patch, have issued an invitation to greenkeepers to try out this product on several greens this coming season.

"Nu-Green" is a chlorophenol mercury preparation, combined with a special stimulant which encourages a new growth of grass to replace the diseased areas. It is valuable in the prevention and cure of both large and small brown-patch.

A reduction in price of fifty cents per pound is announced on this product, and a card to the Agricultural department of the Bayer Company at 117 Hudson Street, New York, will bring you a trial package of "Nu-Green" to use this season.



The Worthington "Overgreen" mower

Write for Miniature Golf Bag

THE Philpott Rubber Company of Cleveland is introducing a new water hose, which is unique in its appearance, and practical from a service standpoint.

It has a flat top corrugated cover which will not roughen up new grass or collect sand and dirt. These corrugations are so placed as to reduce kinking.

It is manufactured under the Hydraulic Lead Mold Process which thoroughly impregnates the tube through two braids of cord into an unusually heavy cover.

The name of the club will be imprinted without charge on every

twenty-five feet of hose purchased. Sample of hose in attractive miniature golf bag will be mailed upon request.

Prosperity Fertilizer Distributor

THE Prosperity Laboratories Company reports that a great many clubs are now making fertilizer application to their fairways. A two-fold purpose is thus accomplished—the fertilizer will work its way down to the roots when the ground thaws, and less difficulty is experienced in obtaining uniform distribution.

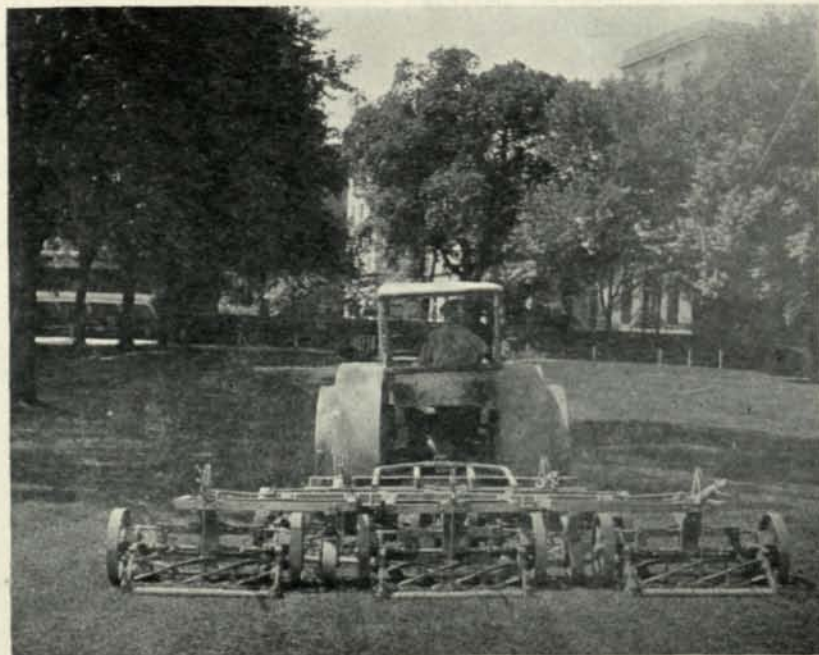
Their special fertilizer for fairways is almost entirely from organic sources and provides a continuous supply of food throughout the growing season. The quantity and proportion of the essential elements are incorporated in the ratio, and are released gradually into available forms, as required by the plant.

The benefits in prolonged vigorous growth of deep color are obtained at a reasonable cost.

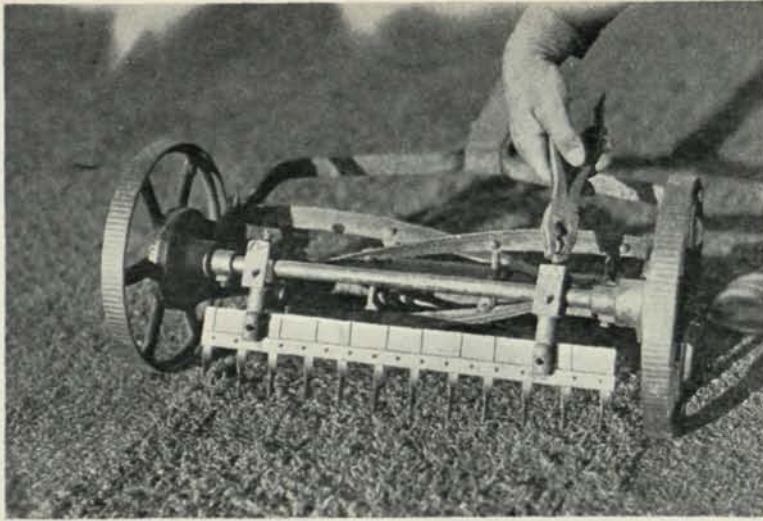
A folder describing this as well as their Bent Grass Fertilizer, which is built for Bent Greens only, will be mailed upon request.

Dayton Sprinklers of Sturdy Design

THE Dayton Irrigation Company of Dayton, Ohio, will show the Dayton Greens Sprinkler, Type G-2, especially designed for



The F & N "Quintet" in use on the course of the French Lick Hotel,



The new "lawn comb" built by Stumpp & Walter Co.

hard usage, at Booth 24, on the golf show floor of the convention. We are informed that the slow moving adjustable nozzle of this sprinkler makes it possible to cover any area desired up to a 100-foot circle. It delivers 15 gallons of water per minute and distributes it evenly from base to the extreme outer edge. The vital moving parts are concealed in a rust-proof housing which protects it against the rough handling which most sprinklers must stand on the average golf course.

It is so designed that dirt or foreign substance cannot get in the driving arms, clogging up the driving arm holes.

It is small and compact and can be furnished on a roller base if desired.

The Dayton Fairway Sprinkler-Type "E" is sturdily made and simple in construction. In describing the construction and operation of this large sprinkler, the manufacturer states, "it has only three moving parts. It connects to a 2-inch hose and will throw 100 gallons of water per minute at 70 lbs. pressure over an area of 160-foot circle. It gives even distribution and thorough coverage. It is equipped with interchangeable nozzles for water pressure available. It is positive driven, built for hard usage, and is fully guaranteed."

Stumpp & Walter at Booth 8

BOOOTH Number 8 at the Greenkeepers' Show will be filled with a diversity of items used by the greenkeeper. Before mentioning any

of them, let us call your attention to the new issue of "Golf Turf" for 1928, published every year by this company, and which contains worthwhile information for greenkeepers and Green committee chairmen.

From the large number of S & W products, we select one which has enjoyed an unusually large sale to golf courses during the past year. The Sawco rotary soil screen in Model Number 2 has a special modification for the pulley, allowing the use of engines of varying R.P.M., and adjustments insuring the proper speed of the screen cylinder.

Don't forget your copy of "Golf Turf" when you visit the Stumpp & Walter booth.

Two new appliances are introduced by this company which will be found most useful on golf courses, parks, cemeteries, and in fact anywhere that a fine turf crop is cultivated. One is a Lawn Comb, which may be attached to any lawn mower, a sharp toothed tool designed to scarify the turf, break soil crust, and aerate the soil around the feed roots. It is also useful in eradicating crabgrass and clover, pulling up Bermuda runners, and in preparing turf for top-dressing, fertilizing and reseeding.

The second item coming to our attention is a lifting attachment for side wheel mowers, which locks the rear roller and when the handle of the mower is raised into operating position, it is possible to mow grass which has grown too long to cut readily.

These two new items are shown herewith, and information about them will be forwarded by the Stumpp & Walter Co., of New York.

Power Soil Shredder

KEMP Soil Shredders have a feed drum that will handle any kind of soil or top-dressing mixture. Two sizes are made to handle from six to twelve cubic yards per hour and they load from either side and front. They are also equipped with single or double screens. Mounted on flat, wide wheels these compact machines are easily hauled about making them practical for field or shed work.

A gallon and a half of gasoline will run Model No. 1 for 10 hours.

If you write to the Kemp Manufacturing Company, Erie, Pa., they will be glad to send catalogue showing different models.

Jacobsen Power Bent Mowers

THE news of the month from Jacobsen Manufacturing Company, Racine, Wisconsin reports unusual activities in this well-known Power Lawn Mower factory. They state that this year especially shows the tendency of greenkeepers to select and purchase their equipment well in advance of the opening of the golf season. In fact they seem to "out-smart" the superintendents of parks and cemeteries who often wait until the last minute to get their equipment. For this reason orders for Jacobsen Creeping Bent Power Mowers in both the 19-inch and 24-inch sizes are topping production records at the Jacobsen factory just now.



Special lifting attachment for all side wheel mowers, a new specialty of the Stumpp & Walter Co.

Hardie Sprayers for Golf Greens

THE Hardie line of sprayers has been for 27 years one of the outstanding lines used by orchardists and horticulturalists, and offers several especially suitable models for the spraying of fertilizers on greens. The manufacturers describe their construction and operation as follows:

"Hardie sprayers are so designed and built as to provide complete and constant agitation of the fertilizer solution, thus assuring that every application is of uniform strength. The spray distributes evenly over the green and the spotty and uneven results of hand application of dry or liquid fertilizers is avoided.

"The use of the sprayer on the greens results in a great labor saving and insures the maximum results from any given quantity of fertilizer, much of which is often wasted when applied by hand. The sprayer not only handles all fertilizing solutions, but affords the means of effectively applying the chemical solutions for brown-patch.

"Hardie units which find favor with greenkeepers are, The Hardie No. 9 Triplex delivering 9 gallons per minute at 300 pounds pressure and The Hardie No. 12 Mogul with the greater capacity of 12 gallons per minute at 350 to 400 pounds pressure. Both outfits carry a 200-gallon tank.

"All Hardie power sprayers are self oiling, yet offer no enclosed or inaccessible parts to present costly service trouble. It is impossible for the spraying solution to mix with the oil. Hardie outfits are mounted on specially designed trucks which afford ease in handling, and the line includes over 20 models suitable for spraying requirements on greens."

Look over the Hardie exhibit at Booth 7 where one of their models will be displayed for your attention.

"Herbicide" for Weeds

THERE are many places around golf and country clubs where a weed destroyer can be used to great advantage for getting rid of undesirable vegetation. For example, Herbicide is used for destroying grass and weeds in sand traps, around bunkers, on roadways and parking spaces. It is also used extensively on tennis courts.



The purity room of the International Seed Testing Laboratories in the Park Murray Building, New York City. Mrs. Pattison, director, seated at the right. Miss Stanton, assistant director, at left

Good Seed Means Good Turf

SEED is necessary for turf, but good seed is absolutely necessary for good turf.

For this reason we know the readers of this magazine are going to appreciate and find helpful the articles which the Directors of the International Seed Testing Laboratories are writing for us, and which will be a feature of our 1928 issues.

The International Seed Testing Laboratories were established in September, 1927, by two well known seed analysts, Ethel Ely Pattison and Julia M. Stanton.

Mrs. Pattison has had ten years' scientific experience at the Seed Laboratory, U. S. Department of Agriculture and ten years' commercial experience in this country and in Europe. She is perhaps better known internationally than any other woman in the seed world.

You merely sprinkle the ground with the diluted "Herbicide," and in about 48 hours the vegetation is completely killed. It is, therefore, a great labor saver.

Each gallon of "Herbicide" can be diluted with 50 gallons of water, and it can be applied with ordinary watering cans.

"Herbicide" is manufactured by the Reade Manufacturing Company of Jersey City, N. J., and they are pleased to ship this material on approval.

Miss Stanton for five years previous to the establishment of the Laboratories was the Seed Analyst for one of the largest seed merchants and importers on the Atlantic Seaboard.

The Laboratories were established for the sole purpose of giving much needed "Seed Service." Just what is meant by "Seed Service" is demonstrated by visiting the very well equipped laboratories and offices at 11 Park Place, New York City. The equipment is the very finest and most modern. Everything is strictly in compliance with the standard set by the Association of Official Seed Analysts. Their "seed service" includes testing for purity and germination; arbitration, purchasing, special experiments, etc.

The laboratories are members of the Association of Commercial Seed Analysts, an association which Mrs. Pattison was largely instrumental in forming.

Traveling Fairway Sprinklers

AT the Pine Lake Club, Pontiac, Michigan, there is an installation of Pelican traveling fairway sprinklers which has been in operation for two years. We learn from the Pelican Works, 148 Woodbridge Avenue, East, Detroit, Michigan, that these sprinklers operate automatically straight down the fairway on the force of water pressure through the hose as it turns off the reel.

Plans of water systems will be

carefully studied by engineers of the Pelican Works, and estimates of individual installations will be made to any golf club interested.

Mower Reel Bearings Guaranteed

"WE claim that we have the only self-adjusting and self-sharpening fairway mower made," says the F & N Lawn Mower Company. With this goes a guarantee that during the life of the mower the reel bearings will never be out of adjustment.

The F & N Quintet in operation on the French Lick Hotel Company golf course is shown in the accompanying photograph.

having service stations in all of the other large centers. This nationwide network of branch offices and distributors is supplemented by a force of some fifteen field men who spend all of their time in direct contact with the trade, both dealer and consumer.

In New York City the factory branch of the Ideal Power Lawn Mower Company is located at 237-39 Lafayette Street, with Mr. W. I. Alling in charge. Mr. Alling has been in the golf and power lawn mower business for a great many years, being associated with the Ideal Company at the home office in Lansing before taking charge of the eastern

tributors and dealers, covers the states of Indiana, Illinois, Iowa and Wisconsin.

The newest branch is located in the Detroit district at 161 Vester Street, Ferndale, Michigan, in charge of Mr. Robert N. Rockwell, who formerly sold the Ideal line through one of the large eastern distributors. The Detroit branch cares for the territory including the eastern half of Michigan and western Ontario.

In all of these branches in Detroit, Chicago, New York, as well as at the factory in Lansing, is maintained a complete stock of maintenance tools and equipment that the purchasers in practically any section may be close to the source of supply for whatever may be needed.

Bean Power Sprayers on Demonstration

THE Bean Spray Pump Co., of Lansing, Michigan, (Booth 16 at the National Greenkeepers' Convention and Show in Detroit at the Fort Shelby Hotel) will be very glad to discuss with anyone interested the many advantages of applying fertilizers, fungicides and insecticides to the golf greens with high pressure spray machines. The Bean Spray Pump Co., are pioneers in this business and are the world's largest manufacturers of high pressure spraying machinery, having been in the business for nearly 45 years.

During the last several years a great many machines have been sold for use on golf courses for applying fertilizers, as well as applying fungicides for the control of Brown Patch and insecticides for the control of different pests. These machines are also needed very badly on a number of golf courses for spraying the shade trees due to the number of pests that attack the foliage of the trees.

Another use for these machines is the applying of whitewash and cold water paints to the fences, barns and other out buildings on the golf courses.

The Bean representatives will be very glad to take anyone interested to a nearby garage and demonstrate one of the large model machines. As the time is very near when every golf course will consider a sprayer as much a necessary piece of equipment as the mower it would be well for greenkeepers to get first hand information on these machines while at the Show.



The New York Ideal Factory Branch at 237 LaFayette Street

Ideal Service in America

IT is doubtful if there is any class of business where service is more important than in connection with the sale of equipment for the golf field. Practically every golf club with its land, buildings, etc., represents a considerable investment and the amount necessary each year to keep the entire layout in good order for the players means considerable expenditures.

Realizing this situation the Ideal Power Lawn Mower Company with their home office and factory at Lansing, Michigan, has built up a nationwide service to look after both the sales and service of a varied line of grass cutting equipment and allied supplies. This complete organization consists of four factory branches located in New York City, Chicago, Boston, Detroit, with distributors

territory. Under direct jurisdiction of the New York Branch is the factory and service branch for the Boston territory located at 273 Boylston Street, Brookline, Massachusetts, these two offices, with numerous sub-agencies, handling all of the New England states and eastern territory from a line east through the center of New York State.

The Chicago Ideal Branch is located at 413 West Chicago Avenue, Chicago, Illinois, this being a new location recently leased by the company to give more room and better service and display facilities. This branch is in charge of Joe M. Egloff, another old Ideal employe, Mr. Egloff formerly traveling for the company, covering several of the central states before taking charge of the Chicago district some two years ago. The Chicago Branch, with their sub-dis-