

Greenkeepers' Golf Show Attracts Nation-Wide Attention

Most complete and up-to-date exhibit of supplies and equipment ever gathered together. Chemical fertilizers and power mowers for putting greens attract keen attention. Good business reported by exhibitors

By ROBERT E. POWER

Sketches by C. P. McCartney, Staff Artist

GREENKEEPERS and others interested in golf course maintenance came from all parts of the United States and Canada to see the first National Greenkeepers' Golf Show in Detroit. The show was held in the Spanish room of Hotel Fort Shelby and while the room was small it was crowded full of a most varied and complete line of supplies and equipment necessary in modern upkeep.

The show was run by the greenkeepers' association and only exhibitors who had been especially invited due to their reputation and standing in the business, were permitted to show their wares. In all there were twenty-seven in this hand-picked group and with the exception of tractors and very heavy machinery which could not be displayed through lack of space, they showed the very latest models of machinery, the newest articles of equipment and the most recently developed fertilizers, insecticides and other products used in golf course maintenance.

All the proceeds from the sale of space at the show after paying the ordinary expenses, were turned into the association treasury so that the exhibitors not only profited from the business they obtained but their presence



The Stumpp & Walter booth was a whole show in itself

was a distinct contribution to the greenkeeping profession. Following is a brief description of the exhibits.

Toro Manufacturing Company of Minneapolis, Minn.

THE largest and one of the most complete exhibits at the show was that of the Toro Manufacturing Company, Minneapolis, Minn., one of the leading manufacturers of golf course equipment. This company has been pioneering many new improvements, particularly with regard to hand and power mowers for all classes of golf course work.

They have improved their big 5-unit tractor mowing outfit with the adoption of a new automatic steering device which will be supplied on all the 1928 machines. With this device it is now only necessary to touch a lever slightly to guide the tractor without effort on the part of the operator. A slight touch ahead engages a friction cone which is connected by means of a shaft and worm steering gear to the steering cable pulleys causing the tractor to turn instantly to the left. Drawing the lever backwards turns the tractor instantly to the right. When the pressure is removed the cone



The Pennsylvania exhibit was splendidly arranged with the new Fairway mower as its chief feature

turns to a neutral position and the machine maintains its course.

This company also exhibited a new improved top dresser which has a hopper of new design and of ample capacity. A constantly revolving agitator is provided which keeps the material free in the hopper and greatly reduces clogging. Other improvements are a flexible brush to work the top dressing material into the grass, and two supporting legs which keep the machine in an upright position when not in use. The makers claim that this machine can be used for top dressing the putting greens with a light top dressing every month, without interfering with the play, and is far ahead of the old method of top dressing once or twice during the season.

Another new outfit shown was a regrinding stand which is a simple and practical machine for regrinding the reels and knives of Toro cutting units. This sells at a low price and is motor-driven.

Considerable interest was shown in a new Toro Gopher putting green mower designed for clubs which cannot afford to pay the price for the standard mower. This new mower has eight-blades, with chain driven, Timken adjustable bearings and all driving mechanism encased in an oil-tight aluminum housing.

The Toro exhibit also included a model of the Toro Sea-Serpent fairway sprinkler which consists of two 50-foot sections of one and one-half galvanized pipe. It is equipped with four upright rotary sprinkler heads, each of which will cover a spread of 60x160 feet. The balance of the Toro exhibit contained standard equipment of all kinds well-known in the trade.

Pennsylvania Lawn Mower Works—Philadelphia, Pa.

THIS company had a splendid exhibit of well-known Pennsylvania products with a half century of experience behind them. Perhaps the most interesting was the new Fairway mower, which is a simpler and lighter machine and is said to have fewer parts than any other machine of its type on the market. It may be had in either three or five units.

This new fairway mower has five crucible steel knives running in universal Braun ball bearings. Moving parts are enclosed in grease-tight

gear cases with Alemite lubrication throughout. A feature of the new fairway unit is the new self-aligning bearing.

Naturally the Pennsylvania Super-Roller mower was given close scrutiny by the greenkeepers. This putting green mower cuts an 18-inch swath, has seven blades and its makers emphasize that it is lighter than other mowers and easier to push. This company also showed the Pennsylvania Aristocrat—a seven blade less expensive machine made in sizes from fourteen to twenty-one inches



Kenneth E. Goit explains the merits of Toro equipment

with both high and low wheels. They also showed the Pennsylvania Junior, which is used as a trimmer on golf courses and the Pennsylvania Super Great American, an all-round machine for general use.

Those who favor the tried and true took great interest in the Standard Pennsylvania Super Fairway mower, which in the Quint Model contains five 30-inch, 5-blade units and makes a twelve-foot cut. The frame is supported on two separate ground wheels which relieves the cutting units of any extra weight. The frame is swiveled so as to permit each unit to operate independently. This gives

an even cut on fairways which contain small knolls and depressions. These machines have roller bearings throughout and are interchangeable.

E. L. Winn, Inc., & L. F. Mitten, Elizabeth, N. J. and Wilkes-Barre, Pa.

THESE companies combined in an exhibit adjoining the Pennsylvania booth. The main feature was the Royer Compost Mixer, a product known to greenkeepers of the United States and Canada.

A new Model "K" has been added to the Royer line, in order to accommodate greenkeepers of nine hole courses who do not need a mixer as large as the Model "M". The Model "K" can be trundled about like a wheelbarrow and will handle all the work necessary on a small course. Instead of using a screen the Royer Mixer has a belt moving at high speed with rows of steel teeth, which rake and force the fine particles of compost through a narrow aperture.

The makers claim that the standard Model "M" takes sand, soil and manure as fast as three men can shovel it into the hopper, and blend it in one-tenth the time required by the old hand or rotary screen methods. It can prepare and fill a two-yard dump wagon with top soil in eight minutes, handling the soil—wet or dry—as it is turned up by the plow. The mixer can be driven by a tractor, electric motor or gasoline engine.

Mr. Winn showed the popular Lewis Golf Ball Washer set up on a stake especially made for the purpose, and this product especially interested greenkeepers and chairmen of clubs where the sand box is being done away with.

Two other articles in the Winn exhibit which attracted attention were the Elwin Putting Cup made of seamless brass tubing, fitted in the bottom with a cast brass spider. This cup will not rust and is practically indestructible. Mr. Winn also showed his Elwin Proportioner, which he claims does away with the old and expensive method of applying liquids to putting greens by use of a portable barrel and sprinkling can. Complete control of the dilution is obtained by regulation of a single valve on the water supply and one man can cover an ordinary sized putting green in thirty minutes. This

apparatus is built of solid brass and will not corrode through use.

Stumpp & Walter, New York City

TO adequately describe the Stumpp & Walter exhibit would be to write a book. The accompanying illustration gives a fair idea of the magnitude and completeness of this exhibit, which was ably handled by J. M. Melady from the home office in New York.

Prominent in the exhibit was the display of seeds of all kinds for which this company has been noted for many years. Redtop, bluegrass and various kinds of fescues and bent generally used on golf courses were in evidence. The Stumpp & Walter company claim that all their seeds are of the highest quality obtained direct from the most reliable sources of supply and are botanically true to name. All seeds are new and are cleaned and re-cleaned until they are brought up to the highest possible state of purity and germination, special care being given to the elimination of weed seeds.

In addition to grass seed this company displayed a complete line of implements, requisites and machinery for golf courses, tennis courts, polo fields, airports and fine lawns. One of the new articles shown was the Sawco Turf Plugger and Ant-Hill Remover. This plugger, which is 2¾ inches in diameter is placed over the weed, ant-hill or bare patch, and gently pushed into the turf with a slight pressure of the foot. When it is removed it will bring along with it a circular disc of turf, exactly 1½ inches thick. After removing the objectionable weeds and ant-hills the greenkeeper takes the Turf plugger and cuts an equal number of discs of good turf, places them in the holes and top dresses, and in a few days no one could notice the transformation that has taken place.

One of the largest articles in the exhibit was the Rotary Soil-Screen, which operates either by belts from the tractor or with self-contained engine.

Small tools, flags and flag stands, tee markers, cups, rakes and miscellaneous equipment made up the balance of this exhibit. It is well to mention that this company are the sole distributors for the United States and Canada of Vermol Worm Eradicator, a powder which is harmless to



J. H. Melady of the Stumpp & Walter Co. was a busy man

animals, but remarkably effective in promptly bringing earth worms to the surface and killing them.

Roseman Tractor Mower Company, Evanston, Ill.

A TYPICAL Roseman mowing unit was exhibited in this company's booth in the center of the main floor, and was given careful attention by greenkeepers. The new 1928 Roseman mower boasts non-breakable malleable iron side frames and bed knife shoes guaranteed against breakage and defect. They also have a lifting device for transporting mowers which is very useful to those that need it. Unlike other mowing units the Roseman Mower Gang is equipped with large, hollow rollers which places only thirty-seven pounds per foot on the fairways. This is merely a massage treatment to the



L. A. Ferguson, Ideal Vice-Pres. exhibited his pet Bulldogs

grass roots so the makers claim, which makes a dense turf and the full width friction gives the operator more constant power than is obtainable with any other machine. This company also produces a double-handle patented spiked roller, which has a length of thirty inches and a weight of two hundred and twenty pounds.

Ideal Power Lawn Mower Company, Lansing, Michigan

IDEAL "Fordson" Bulldog gang mowers formed the backbone of the exhibit of this company, which has for its keynote sturdiness of construction in order to stand up under modern tractor speed. Some of the features are an indestructible all-metal frame carried on wide faced casters. Sturdy close coupled cutting units suspended beneath the frame by side arms allow free vertical motion of the unit.

The company claims that the Ideal Bulldog is the only fairway mower that pulls the frame and pushes the unit, and as a consequence they hug the ground and wade right through the heaviest kind of cutting. Extreme flexibility of the frame is a feature permitting the close-coupled units to ride over narrow ridges and sharp contours and do clean smooth work.

The 5-Unit Bulldog mower cuts a swath 138 inches wide and the net weight of the outfit is 1675 pounds. The mower has Timken roller bearings, easily adjusted, with Alemite lubrication throughout.

This company also handles a complete line of golf course equipment, which may be seen on display at its various stores in all the prominent golf centers of the United States and Canada.

Kemp Manufacturing Company, Erie, Pa.

IN connection with the Ideal Power exhibit the Kemp Manufacturing Co. showed a Kemp Soil Shredder equipped with sieve. The Kemp shredder has been on the market for a long time, and is well known throughout the golf field. It has a self-contained gasoline motor, and not only shreds compost but is used to screen sand and gravel for use in the bunkers when equipped with sieve.

Soil and other material put through the Kemp machine is not only shred-

ded, but is also aerated, and practically all the moisture removed. The sieve is provided with a mechanical shaking movement that is of vital importance in helping the meshes to clear themselves.

Besides golf clubs the Kemp Soil Shredder is used by florists, nurserymen and cemetery superintendents. It is an independent unit which does not require a tractor to either haul it into position or to operate it.

**Ernest Chamberlain, Inc.,
Detroit, Mich.**

THIS exhibit in the corner of the main floor featured the well-known product of the Worthington Mower Co., Stroudsburg, Pa. Of particular interest was the new Worthington "Overgreen"—a power putting green mower embodying a new adaptation of the Worthington triple mower principle. It consists of an engine of national reputation mounted on a two-wheel balloon tired chassis towing three small cutting units behind it. The wheels are twenty-seven inches in diameter and the tires are equipped with two yielding pad-like surfaces which fit flat on any slope and distribute the pressure over a considerable area, and are large enough to secure ample friction for traction purposes without doing any injury whatever to the surface of the green. Extending back from the tractor are two long handles like phills on a sulky, which the operator uses to control and maneuver the machine.

The makers claim that at a speed of from two and a half to three miles an hour the average putting green can be cut in from ten to fifteen minutes. It is also claimed that by the special arrangement of pads the balloon tires will not injure the turf, and finally which is of great importance that the three small mowers adjust themselves to the undulations of the green and shave the entire surface evenly, which is very important in putting green mowing.

A noticeable improvement over the forward and back cut of a hand mower may be expected, due to the fact that the "Overgreen" mows in concentric circles. This spiral swath combined with the even quality of the cut, insures a practically unvarying turf resistance to the putted ball. The tractor in going from one green to another, which it does under its own

power, carries these units on its frame to which they are mechanically raised. This automatically renders the cutting knives inoperative and the use of separate unit carrier unnecessary.

Other Worthington products consisted of the tractor and hand mowers that are well-known throughout the golf field. The 1928 unit has the new herringbone blade design brought out last season.

**Jacobsen Manufacturing Com-
pany, Racine, Wis.**

THIS exhibit contained three of the well-known Jacobsen Power mowers, the 19-inch and 24-inch for



P. C. Williams ably maintained the national reputation of Scott's seeds

putting greens, and the 24-inch bunker mower which is used in cutting hillsides, sand traps, hazards, etc. It is also a splendid general purpose machine for cutting approaches, tees, clubhouse grounds and any place where a fairway unit is not practical.

The Jacobsen company is a pioneer in the production of power putting green mowers. The 1928 model shows many improvements, and some of its features are as follows: The motor is a Jacobsen four cycle, 2½ inch bore by 2½ inch stroke. Air cooled with splash lubrication. The cutting unit is a seven blade, high speed cutting reel, mounted on Bower roller bearings. It is quickly adjustable from one-eighth to two inches and is equipped to travel from green to green under its own power.

The transmission is gear driven—cut steel gears completely enclosed in oil tight housing. All gears are mounted on roller bearings. One clutch controls the operation of the mower with full control at the steering handle. A bevel gear differential between the rear rollers provides easy turning and handling of mower, preventing any injury to the turf.

In order to save weight the Jacobsen mower frame and castings are made of a special grade of aluminum, which brings the weight of the 19-inch model down to one hundred and sixty-five pounds.

Some of the 1928 improvements include rebalancing of the entire mower, increasing the reel speed, altering the position of the driving gear, and the installation of a third clutch to increase ease of handling and efficiency.

The greenkeepers gave the Jacobsen exhibit very close scrutiny and many orders were placed for early delivery.

**O. M. Scott & Sons, Marysville,
Ohio**

"SEEDS that Grow and How" was the main topic of conversation in this booth on the main floor of the exhibition hall. The Scott company has a national reputation in its line and one of their claims is that twenty percent of all the golf clubs in the United States have sowed Scott's seed. In fact they publish a booklet giving the names of all these clubs, which may be had for the asking.

Besides showing seed samples the Scott company distributed some very interesting literature relative to the care of lawns and putting greens, also a special booklet on Bent, which describes the harvesting and use of Bent seed, and also gives details on vegetative planting of creeping bent from stolons.

The educational nature of the literature distributed by this company gained them many friends. When the fact is added that Scott's seeds are standard and thoroughly guaranteed as to germination and quality one may easily see why their business has grown to such large proportion.

**Armour Fertilizer Works,
Chicago, Ill.**

ASPECIAL fairway mixture bearing the name of this large and well-known company featured

this exhibit on the main floor. This fairway mixture is a chemical plant food combination especially prepared for the finer turf grasses. It makes a thick, heavy turf which keeps green, stands the heat of the summer and is less affected by winter killing so its makers claim.

This large company makes a specialty of supplying plant food for all purposes, and their experimental department and laboratories have made most exhaustive tests of materials and have gained information of great value to greenkeepers and all those engaged in growing turf.

L. R. Nelson Manufacturing Company, Peoria, Ill.

THIS company is better known by the name of its product, "Lark" Sprinkler, which can be seen everywhere on the golf courses of the United States. A beautiful specimen of this sprinkler in nickel finish was shown in operation using compressed air instead of water. Through this demonstration the elimination of gears and complicated wearing parts was readily apparent.

The "Lark" Sprinkler covers an area easily up to one hundred and fifty feet. The main stream soars far out, revolving very slowly and covering evenly a broad outer circle. Opposite the main stream on a shorter arm is a small motor which turns at moderate speed, completing the even distribution to the center. Its vibrating impulse, a patented feature, makes possible the perfect control of the main stream at slow or moderate speed. The "Lark" Sprinkler is mounted on a roller base which prevents damage to greens and allows changing position without shutting off the water.

Samples of many other sprinklers and sprinkler heads were shown, most of which are used for gardens and lawns, cemeteries and parks. This company also makes hose-couplings and nozzles, and a water gauge for determining flowing or static pressures which come in either three-quarter or one inch size. This can be easily attached at the silcock, at the sprinkler, or at any point in the line of hose, and quickly reveals any loss of pressure through long lengths.

Another feature of the exhibit was the Globe Water Strainer designed for attaching to the larger types of sprinklers when gravel or other sediment is present in the water. Finally, a "Flaring Rose"

sprinkler head was shown which has small perforations that emit a fan-like sheet of tiny jets that are just like gentle rain. This is especially adapted for sprinkling newly planted grass, flowers and delicate foliage.

Bean Spray Pump Company, Lansing, Michigan

THIS company's booth on the main floor was a center of interest, although space would not permit the exhibition of the large Bean Spray outfit on the floor of the exhibition hall. But a modern Bean Sprayer was shown in a nearby store-room so that those especially interested were able to see it.

This company has been in business forty-three years and its president, Mr. D. C. Crummey who is eighty-three years old has been for the last forty years actively engaged in the manufacture of spraying machinery, therefore with this experience as a background it is natural that uncommon interest centers in the new Bean Super-Giant Junior Pump, which is the latest development of this concern. This Junior pump with Timken tapered roller bearings and porcelain lined cylinders is said to be the most powerful and durable spray pump ever built.

"I am eighty-three years of age, and for the last forty years I have been actively engaged in the manufacture of spraying machinery," says D. C. Crummey, president of the Bean Spray Pump Company in commenting on his latest achievement. "During that time I have kept in close touch with every improvement that has been made in the industry, and I sincerely believe that the new "Bean" Power Spray Pumps constitute the greatest improvement in spraying machinery since the introduction of the "Bean" Pressure Regulator nineteen years ago. I am proud of them."

The use of soluble fertilizers and spraying machinery is rather recent in golf course work, but is one of the new and growing ideas. Undoubtedly this year will see tremendous strides forward in the matter of special fertilization of putting greens and approaches and weed control on the fairways. Use of power sprayers is an integral part of this program and only time will tell what the development will be. One thing is certain—greenkeepers and golf club officials generally are fortunate in having such reputable manufacturer

as the Bean Spray Pump company taking an interest in their problems.

Friend Manufacturing Company, Gasport, New York

ONE of the hits of the Show was the Friend Sprayer exhibited in a large corner booth on the mezzanine floor. This outfit which sells for a very low price is well adapted for golf course use. It consists of a two hundred gallon compartment cypress tank with drain wells for cleansing, a filling strainer and a propellor or agitator. Forward of the tank is mounted a Friend ten gallon per minute Duplex high pressure pump driven by a Fairbanks-Morse motor.

This outfit is mounted on a wide tire truck arranged to be towed by the golf course tractor or it may be towed by a horse if desired. It also contains seventy-five feet of high pressure hose line with a ten-gallon per minute golf spray gun, which delivers the dissolved fertilizer, fungicide or insecticide to the desired place in the form of a fine spray.

This same outfit can be had in two hundred and fifty and three hundred gallon sizes. In addition to the golf course proper this Friend Sprayer can be used for the shade trees on the golf course, also the trees and shrubs around the clubhouse.

"The most effective and economical way to apply soluble fertilizer," said Mr. William C. Tyson who had charge of the booth, "is to dissolve it in the compartment tank of the 'Friend' High Pressure Sprayer, which is equipped with a powerful mixer or agitator, and apply with the 'Friend' Golf Spray Gun weekly in this diluted form, rather than full strength. Then once a month wash it down where the grass roots are able to consume this nutrition without being overtaxed, and the growth is naturally vigorous."

It seems highly probable that the use of power sprayers on golf courses will become quite popular with progressive greenkeepers this coming season. The interest shown at the Detroit Show would indicate a decided tendency in this direction.

Dickinson Seed Company, Chicago, Illinois

GERMINATING chamber with grass actually growing was a feature of this exhibit. This company also showed glass plates carrying sufficient moisture to germinate

seed, and these were carried on transparent cases so that the process of germination could be very easily observed.

The Albert Dickinson Seed company is probably the largest of its kind in the world. Their seeds are cleaned in their own plant and are sold through jobbers in all parts of the world. This company is the distributor for Soiltex outfits which are used for testing soils for acidity and lime requirements. It is used much by farmers who are trying to eliminate the acidity in the soil because the farmer's motto is "sweet soils produce best."

The Dickinson company emphasizes the importance of purchasing grass seeds for golf course work which are thoroughly cleaned and re-cleaned and then tested accurately for purity and germination. Handling large quantities of seed they are always able to supply fresh stock at reasonable prices.

Hardie Manufacturing Company, Hudson, Michigan

THIS company exhibited the largest machine in the Show, a power sprayer of ample capacity, which exerted the facilities of the small space at the disposal of its makers. This company has been in business twenty-eight years and its first product is largely used by fruit growers throughout the United States and Canada. But the varied uses for the power sprayer on golf courses has brought them sharply to the attention of golf club officials and greenkeepers so that the time is very near when every up-to-date golf course will have a power sprayer in its mechanical outfit.

The Hardie Sprayer is especially adapted for the use of soluble fertilizers, fungicides and insecticides. It has a highly developed pump—driven by gasoline engine with capacities from five to sixteen gallons per minute.

Of especial interest to small golf courses is the Hardie Junior which weighs only six hundred and fifty pounds, carries a hundred gallon tank with agitator and is equipped with a one and one-half horsepower pumping outfit.

George A. Davis, Inc., Chicago, Illinois

MR. DAVIS is an equipment dealer from Chicago who was energetic enough to take space at the

Detroit Show and be present himself throughout the week.

A feature of the Davis exhibit was Uspulun Nu-Green, a product of the Bayer company of New York City, which is largely used for prevention and control of brown-patch. It is claimed for Nu-Green it not only controls brown-patch and cures it in from three to five days, but makes the greens luxuriant and healthy and will not burn or injure the grass. It is used as a solution in water and may



Synthetic Nitrogen Products exhibit at the Greenkeepers' Golf Show

be easily sprinkled or sprayed on the greens. Unlike most preparations Nu-Green, so it is claimed, does not require the application of ammonia sulphate or other fertilizer after the treatment.

Milwaukee Sewerage Commission, Milwaukee, Wis.

ADJOINING the Davis booth on the mezzanine floor was the very interesting exhibit of the Milwaukee Sewerage Commission, manufacturers of Milorganite, a nitrogenous fertilizer well known in the golf course field. Mr. Victor H. Kadish of the Sewerage Commission and Mr. O. J. Noer, well known turf expert were both on hand to discuss with the greenkeepers their various fertilizer problems.

Milorganite is an organic product, uniform chemically and physically and free from bacteria and weed seeds of all kinds. In appearance it looks not unlike dried coffee grounds. It is finely and evenly ground—ninety-five per cent or more passing a ten-mesh sieve and being retained on

a forty-eight-mesh sieve—and contains five per cent or less moisture. In round figures an average analysis shows six and one half per cent ammonia and also some available phosphoric acid although the nitrogen element is the most valuable.

Milorganite is used in the construction of golf courses as well as after the turf is established, in fact it is all-around fertilizer used either alone or in conjunction with other fertilizers and is more or less the bread and butter of the plant food family.

Synthetic Nitrogen Products Corporation, New York City

THIS company specializes on the well-known fertilizer "Urea" which is a highly concentrated nitrogenous fertilizer produced by the air nitrogen process. It may be used in dry or liquid form. If used dry one pound of Urea mixed with a goodly quantity of compost, humus or peat moss is used to cover an area of one thousand square feet. If in liquid form one pound of Urea is dissolved in fifty gallons of water and applied to one thousand square feet of turf. It is said to be the richest nitrogen plant food on the market, and should be applied only early in the morning or late afternoon followed by a thorough sprinkling with plain water.

Another fertilizer marketed by the company is called Nitro Phoska a 15-30-15 fertilizer which is said to be equal to three times a 6-10-5, or about four times a 4-8-4 fertilizer, with more nitrogen. Nitro Phoska is used by dissolving four to six pounds to fifty gallons of water applied to one thousand square feet of turf. It is especially adapted for use in the early spring. It can also be broadcasted in cool weather if watered in evenly.

E. I. du Pont de Nemours & Company, Wilmington, Delaware

SEMESAN, a mercury compound for the control of brown-patch constituted the chief feature of this exhibit on the balcony floor. The principal ingredient of Du Pont Semesan is a complex organic substance, made from carboic acid, chlorine and mercury, which is known as chlorophenol mercury.

With this extremely effective chemical are compounded certain other substances that intensify its disinfecting properties and make it possible to apply Semesan by the quick, convenient and non-laborious dusting

method or, by the more commonly practiced water solution treatments.

Semesan possesses highly selective toxic qualities, by virtue of which it is deadly poisonous to the lower forms of life, such as the brown-patch fungi, yet at the same time harmless to the higher types of life to which the grasses and plants belong.

The DuPont company in its typically thorough manner have made a very exhaustive test on brown-patch control and its product is highly recommended by many of the largest and best golf clubs in this country. At the Show they exhibited a circular giving many interesting facts on brown-patch identification and control, and it would be well for every greenkeeper to have a copy, because brown-patch is quick in its destructive action and requires speedy methods to abate its ravages.

MacGregor Compost Distributor Company, Wheaton, Illinois

IT WAS a treat to the greenkeepers and Green committee chairmen to be able to personally inspect the MacGregor Top Dresser and brush unit which was on display in this booth. This machine was developed by John MacGregor, greenkeeper at the Chicago Golf Club, and one of the vice-presidents of the National Association.

Developed after the great many years of practical experience the MacGregor machine consists of a cylindrical drum of fine meshed screen suspended between two wheels which rotates as the machine is pushed across the green and deposits a fine layer of topdressing quickly and evenly over the entire surface. On the rear of the machine is a wide brush which works the top dressing into the turf and saves a tremendous amount of hand labor. It is said that the MacGregor Top Dressing machine will save its cost in a season's use.

This company also showed the MacGregor Compost Brush which is used not only for working compost into the turf, but is very effective in keeping the runners of bent stolon greens erect and in shape for cutting. By using this brush against the grain of the bent grass it overcomes one of the objections of this type of green, particularly on slopes where the runners are hard to control.



Carl Bartle of the DuPont Company talked Semesan and How

Lyman Carrier Products, Granger, Indiana

ALTHOUGH Lyman Carrier personally could not attend the Show his able assistants received the attention which this splendid exhibit deserved. Three products were on exhibition, to wit:—Cocoos bent seed, Washington creeping bent stolons, and Lecco, a scientifically prepared grass food.

Actual growing turf samples of Cocoos bent and Washington creeping Bent were prominently displayed. The Cocoos strain is of a very fine texture, and although a new grass it appears to have a wonderful future.



J. H. Keys, President of the Dayton Irrigation Co., a pioneer in the sprinkler game

It is a seaside variety of creeping bent which Mr. Carrier discovered growing in its native state in the Coquille valley, Coos county, Oregon. Cocoos is a native American grass and there is but one strain. This insures a uniformity of turf, which is not obtained where the seed is collected from different sources.

The Washington strain of creeping bent stolons which are grown in the Granger, Indiana nursery is well-known and extensively used throughout the country.

As to Lecco more could be said than space here permits. It is the result of Mr. Carrier's twenty years experience, and like all his products is high-grade in every particular. It is not made from the cheapest fertilizing material but is a combination which exhaustive tests have proved gives the best results regardless of cost.

LaMotte Chemical Products Company, Baltimore, Maryland

SOIL testing sets shown in actual operation was the principal feature of this popular booth. Two sizes were shown—a pocket-size field set and a larger and more expensive laboratory set. These sets enable one to determine not only whether the soil is acid or alkaline, (that is sour or sweet), but the exact degree of acidity or alkalinity. This is of importance because some plants require a slightly acid soil, others a more strongly acid soil, while still others require a neutral or alkaline soil.

With modern greenkeeping coming to be a science it is almost imperative that the greenkeeper make tests of his soil at regular intervals, in order to check the action of fertilizers and top dressing. In this way many separate problems may be easily solved.

Dayton Irrigation Company, Dayton, Ohio

THIS interesting display of sprinklers was one of the most interesting of the Show. In the front of the booth was a plot of turf with a Dayton Underground Automatic Pop-up sprinkler head operated by compressed air. It is one of the most ingenious pieces of equipment in the golf field, and is so cleverly designed that it is not visible to the players on either greens, tees or fairways.

When the water is turned on the heads pop up and deliver water to the turf just like natural rain. Each head is self-draining and with the water lines laid six inches below the

sod line there is no danger of freezing. The makers claim that about four heads will cover a putting green of ordinary size.

Another interesting Dayton feature is the new Dayton Special Sprinkler for fairways and large areas. It consists of a four wheel truck on which is mounted a large revolving sprinkler that will throw five thousand gallons of water per hour at seventy pounds pressure. Through the use of several nozzles it will cover a 160 foot circle, which makes it indeed one of the greatest sprinkling machines ever made.

Several smaller type sprinklers were shown by this company for use on lawns and grounds around the clubhouse. The Dayton engineers make a practice of working out sprinkler problems especially for new courses and their services are at the disposal of clubs interested.

Prosperity Laboratories Company, Cincinnati, Ohio

AS THE name indicates this company manufactures chemical fertilizers, weed killers and fungi-

cides. They also put on the market a fertilizer distributor, which has a patented wobble motion of the agitator which insures a free flow of the material that is being spread. It is small and easily operated by one man and is so constructed that it will not harm the turf.

Another feature of the Prosperity exhibit was a bent grass fertilizer especially designed for new creeping bent greens that need not only a balanced ratio of food but one that will produce acidity in the soil. Another product is the Prosperity Dandelion Killer developed after several years of experimental tests. This Dandelion Killer works in a scientific manner—it kills dandelions by being absorbed by the leaves and stems of the plants thus increasing the internal pressure in the cells to such a high point the cell walls are burst. This releases the cell fluids and causes the plant to die down to the top of the ground.

Michigan Cedarcraft Company, Berkley, Michigan

ALTHOUGH he came into the Show late, Mr. A. D. Fraser representing this company found a very attentive and interested audience. He gave away samples of canes made of Michigan cedar which found ready takers among the green-

keepers and were carried away to all corners of the continent.

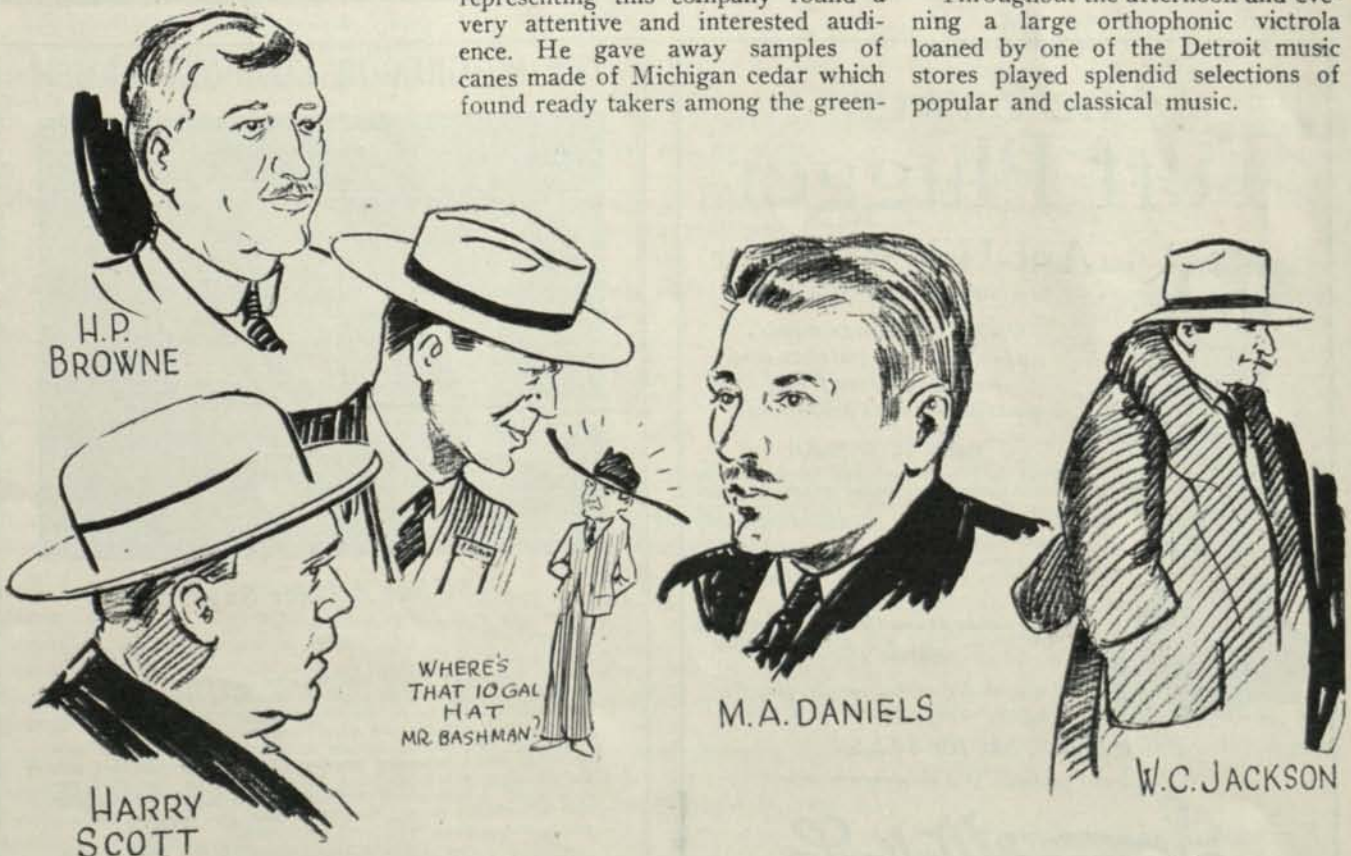
In addition Mr. Fraser exhibited photographs of lawn and golf course furniture, including shelter houses, benches, tee boxes, etc., all made of this light indestructible wood for which northern Michigan is noted.

Lawn Equipment Company of Detroit & Golf Course Supply Company of Cleveland

BOTH of the above concerns were represented in the large Toro space, as they are distributors of Toro products in their respective territories. Mr. F. J. Fellman of Detroit, and Mr. A. E. Flack of Cleveland were present in the Toro booth taking care of the many friends of their district who came to see them.

Among the side features of the Show which added to the comforts and interest of the visitors were the large booths fitted with comfortable chairs and rugs and donated to the Detroit District Green Section and the National Association of Greenkeepers of America. These booths provided resting spots and were in constant use throughout the week.

Throughout the afternoon and evening a large orthophonic victrola loaned by one of the Detroit music stores played splendid selections of popular and classical music.



Dignitaries sketched by the Greenkeeper's staff artist. H. P. Browne is chairman of the Island Country Club, and president of the Michigan Alcalite Co.; Harry Scott is greenkeeper, Reading C. C., Reading, Pa.; C. Basham, greenkeeper at River Crest C. C., Fort Worth, Texas; M. A. Daniels is Supt. of Parks, Pontiac, Mich.; W. C. Jackson, is greenkeeper at Camargo Club, near Cincinnati, said to be the wealthiest club per capita in the United States