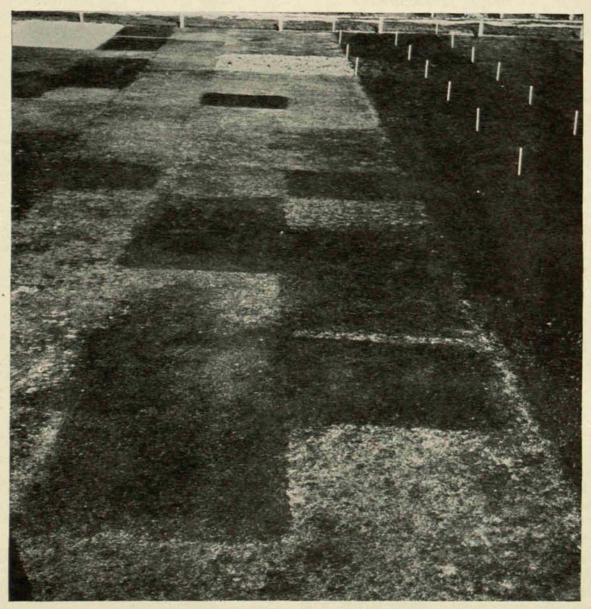
courses, it is considered unwise to take a chance with this accumulation of copper in the soil; consequently, Bordeaux mixture is now little used against turf diseases.

Experiments with Mercurial Compounds

Later experiments showed that various chemicals con-

Uspulun. These two preparations are practically the same chemically and are equally effective in controlling brown-patch.

In the tests conducted during the last few years at the Arlington Turf Gardens, under the auspices of the Green Section of the United States Golf Association, it has been found that there are many chemicals



Control of brown-patch with chemicals. Experimental plots at Arlington Turf Garden where various chemicals are tested. The dark squares are of healthy grass previously treated with several different mercury preparations

taining mercury were effective against both types of brown-patch. Mercury compounds, especially bichloride (corrosive sublimate), have been used for many years against various plant and animal diseases but were not used against turf diseases until recent years. Two of the chemicals containing mercury which have been widely advertised during the past two years are Semesan and containing mercury which apparently are equally effective in checking these diseases. There are differences in the degree of "burning" of grass caused by these mixtures so that some of them are more desirable than others.

Thus bichloride of mercury which is more likely to cause a burn must be used with more care than either (Continued on page 31)

From The Viewpoint Of Local Associations

What District Associations of Greenkeepers are Doing

Minutes Meeting June 20th, 1927

THE second outdoor meeting of the Mid-West Greenkeepers Association was held on June 20th, 1927, at the Chicago Golf Club course, at 10 A. M.

Although this is only our second outdoor meeting, we are being convinced that these meetings will prove a great incentive to the members of the Mid-West Greenkeepers Association for they are providing the means whereby the members may meet in the most practical way, upon a neighboring golf course, examine the visiting course, engage in a friendly discussian as to the problems met by the host greenkeeper on his course and offer an exchange of ideas and experiences. It is this friendly criticism that will cement the greenkeepers into agreater bond of friendship and co-operation.

These meetings will also make the members take a greater pride in their courses, for plans are on hand to take a vote at the end of the season as to the best conditioned course visited during the season and the green-keeper in charge of that course will be invited to give an account of how he has kept his course in such successful condition.

Not only the greenkeepers but the chairmen of the Green committees are taking an interest in these outdoor meetings as is evidenced by their attendance at this meeting.

Chicago Golf Club is one of the oldest golf clubs in the middle west and was formerly the home of Mr. C. B. McDonald whose great pride it was to reproduce at Wheaton some of the famous holes of the St. Andrews course in Scotland.

Mr. John MacGregor, president of the Mid-West Association and greenkeeper at Chicago Golf Club conducted the 30 visiting greenkeepers around his course. He explained about his problems with the water from the deep wells on his property stating that his water carried about 3 tons of lime to every 500,000 gallons of water used. To this he attributed the alkaline condition of the soil. Mr. MacGregor's course indicated that he had a very well planned out maintenance system. His fairways are the best in the Chicago district.

A discussion was held at this meeting as to the advisability of permitting the various golf equipment dealers to be present at our meetings and while nothing has been decided definitely, in all probability this matter will be taken up at the next meeting. In this connection, plans are being made whereby one meeting day will be

devoted to the demonstration of golf machinery, etc., and in this way the golf dealers and manufacturers may be given the opportunity of demonstrating their products.

Another plan on the way is to hold a tournament for the greenkeepers sometime during the fall.

Luncheon was served the members through the courtesy of the Chicago Golf Club.

The next meeting will be held at the Glen Oak Country Club at Glen Ellyn, Ill., and also at the Medinah Golf Club at Roselle, Ill., on July 11th. In this way, two clubs can be visited at one meeting and this will offer a greater opportunity for the members to see the other fellow's accomplishments.

Respectfully submitted

ED. B. DEARIE, JR., Secretary.

Philadelphia Association of Golf Course Superintendents

THE regular monthly meeting of the Philadelphia Association of Golf Course Superintendents was held on June 13, 1927, at the Bala Golf Club.

Mr. Raymond Lane of the above club should be congratulated on the excellent condition of his greens and the course in general.

A large percentage of our members played golf in the afternoon, and at the conclusion of their round the score cards were turned in to the Handicap committee.

Thirty members and five visitors sat down to dinner at 6 o'clock P.M.

The meeting was called to order by President Evans at 7:25.

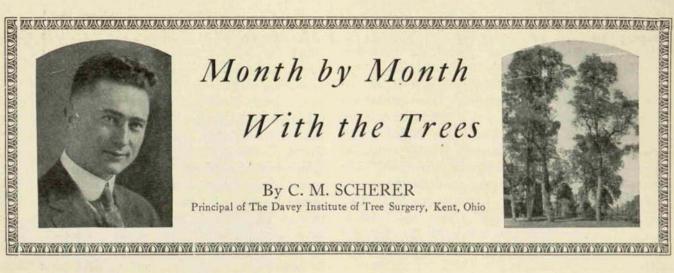
The minutes of the previous meeting were read and approved.

A motion was passed that a final notice be sent to delinquent members and failure on their part to remit their dues before next meeting would result in suspension.

Mr. O. J. Noer, a well known pathologist was introduced as the first speaker of the evening, and his topic was on a fertilizer named Milorganite. He gave a very interesting talk in which he described the different kinds of soil and the various elements contained in each.

The second speaker was Mr. Marshall, who also spoke on a fertlizer, named Urea. He described the superiority of his product over many others, particularly Ammonium

(Continued on page 36)





ANY years ago when for some unknown reason the trees or even plants in general over a certain area of country, withered and died, people had the idea that an evil spirit had visited them. Sometimes they considered the trouble a plague and gave as its cause, unfavorable weather and when this did not account for the malady, they were at a total loss and could in no way explain the causes.

Present day science has shed enough light on the causes of plant diseases, that now it is exceedingly rare when it is impossible to give the definite cause for the passing on of any plant. However, the diagnosis usually has to be made by some one trained in recognizing and interpreting the various symptoms. While to laymen, diseases of plants are still more or less of a mystery, the terms, blight, withering and the like, are still in general use, but their meaning is rather vague and indefinite.

Unfortunately, the study of plant diseases is so new that most of the time of the scientists has been taken up with the investigations of the troubles affecting food and forage crops so that there is still a tremendous field for investigation of tree diseases. However, there is enough information available so that it is usually possible to give the definite cause for the dying of many trees. Since the hot and usually dry months of July, August and early September are especially trying times for trees, we can expect many of them to die within the next two months.

The various diseases causing the death of trees can on one basis be divided into two classes. First, there are those which are caused by fungi. Second, there are those which are caused by some other agency, such as malnutrition, drought, freezing and the like. A fungus of course is a low type of plant life which either never had any green coloring matter or else at some time in its ancient past, lost the green coloring. Any plant which does not have green color cannot do its own work and consequently has to steal its food from either living or dead plants or animals. Ordinarily, these fungous plants reproduce by means of spores which in a general way are quite similar to seeds. However, spores are almost all microscopic in size and are very often called germs, by those to whom the word spore is unknown.

Fungi Attack Root, Trunk, Branches and Leaves

The various fungi attacking trees can roughly be divided into three classes. Those which confine most of their operations to the roots. Those which attack the trunk and branches and those which attack the leaves. Of these three classes, those attacking the leaves are probably the best known because they are the most conspicuous. At the same time they are usually the least serious because of the fact they do attack the leaves which ordinarily last for one year and are replaced the succeeding year by an entirely new, healthy set of leaves.

Diseases of Tree Roots

There are a number of diseases which attack the roots, but of the many, one stands out as the most serious and destructive one of all. This disease is the so called Mushroom root rot, caused by the fungus, a mushroom, Armillaria mellea. This fungus lives in the ground and gathers its food material from decaying roots, sticks and other organic material present in the soil. It can grow and flourish on the manure in the soil or on leaf compost which may be applied. However, it much prefers to attack living roots of trees. When the fungus does come in contact with the living root, it spreads a sort of moldlike mass over the roots, secretes a liquid capable of dissolving the bark and sends sucker-like growths into the wood from which it absorbs the food material refined by the tree and intended for the support and growth of the tree. In a comparatively short time the roots die and become a soft mass of dirty white rotten wood. The affected tree begins dying at the top and some times in a surprisingly short while, is completely dead and falls over in a storm or occasionally of its own weight. The disease will attack almost any tree but those suffering most, are oaks and apples.

When a tree has once been infected, the Mushroom root rot is exceedingly difficult if not impossible to cure or control. Most study has been made in trying to control the disease in apple orchards. Here careful examinations are made of the roots and diseased ones are removed and the resulting wounds are treated with a strong fungus destroying material, such as copper in some form and the surrounding soil is sterilized. The idea, of course, is to completely eradicate the fungus from the vicinity of the tree. Even this procedure when carefully followed does not always prove successful, in fact it is questionable if even it is worth the effort and expense necessary in trying to save the tree attacked by root rot.

Canker of Trunk and Branches

Next in importance to the root diseases, are those attacking the trunk and branches. These of course are permanent parts of the tree and when once destroyed, they cannot or at least with great difficulty can be replaced. The trunk and branch disease which has received more publicity than any other one is that which is causing the death of our chestnut trees. This disease attacks the trunk and branches through wounds of various kinds. A wound made by the falling of a leaf, by the claw of a squirrel or the bite of an insect, is sufficiently large for the spores of the chestnut bark disease to readily gain entrance. After the spores are once inside, they germinate in almost exactly the same way as does a seed. The parts of the fungus which correspond to the roots in other plants spread out under the bark, absorbing food and killing the tissues of the tree as they go. In a few weeks little pimples arise on the dead bark and in these pimples are developed new spores to carry the disease on to other trees. The dead area of the bark is called a canker and as soon as it has girdled the trunk or branch on which it is growing, those parts of the tree above the canker wither, turn brown and die. Unfortunately there is no control for this disease and a tree once attacked is almost surely doomed to death. A gentleman near Wilmington, Delaware had his chestnut trees sprayed every two weeks for eight years. At the end of the period his chestnuts were still living while those of his neighbors were dead. Results, however, were so poor that he gave up the battle against this scourge of the chestnut trees and started planting other varieties to replace his dying ones.

In an eastern section of the country, the white pines are going almost as rapidly as did the chestnuts because of a disease which attacks them in much the same way. In some sections of the country the poplar trees are being wiped out. Apple trees have a disease that is nearly as bad.

Causes of Well Known "Heart Rot"

Besides the canker diseases, there are others which attack the wood within the tree. These diseases break down the supporting strength usually without seriously interfering with the health of the tree. It is because of such troubles that we so often see trees which to outside appearances are perfectly healthy, breaking over in storms or sometimes just from their own weight. Examples of this kind of trouble can be supplied by the brown checked wood rot or by the white wood rot. The first is caused by the sulphur fungus and the second is caused by the tinder fungus. Both these fungi attack through wounds in the tree, break down the supporting heart wood and destroy the strength of the tree. When the trouble is discovered in time, the diseased areas can be chiseled out of the tree and replaced by a filling similar to that used by a dentist in treating a decayed tooth. Usually, however, the disease progresses to a point where it is beyond control before it is discovered. Then we can only hope for the tree to stand as long as possible but it is doomed to go sooner or later.

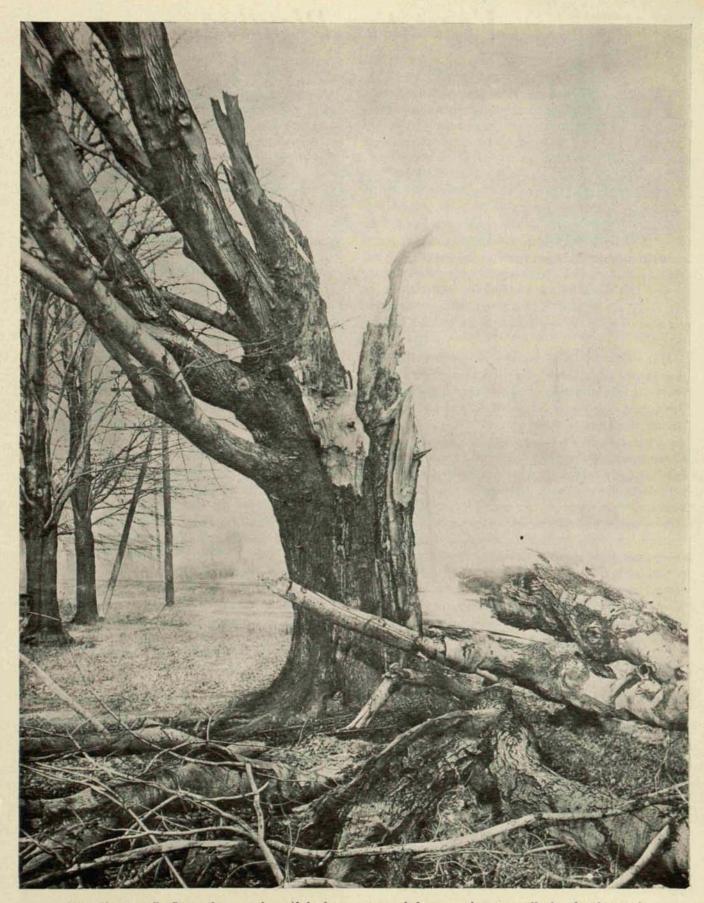
Leaf Mildew

Because the leaf diseases are so conspicuous, they have probably received more study as a class than any of the others and among the leaf diseases, the mildews are probably as well known as any because they attack not only trees, but also many other plants such as roses, chrysanthemums, onions, corn, wheat and many other plants of tremendous importance. When the leaves are attacked by mildews, they look as if they had been covered with a white powder. They become more or less deformed and stunted. When the disease is serious, they wither and die. Fortunately, by dusting with sulphur most of the mildew troubles can be cured. Even spraying with a sulphur solution or with a copper solution helps, but dusting is usually considered the best.

Anthracnose Prevalent on Sycamores and Maples

Another type of disease is known as anthracnose. When the trees have this particular trouble, they wither, turn brown and die, so that the tree has the appearance of having been scorched by fire. The oaks, the sycamores and the maples are the trees most commonly affected with this disease. During the spring and early summer of 1927, thousands of sycamore trees were so badly diseased that they lost all of their leaves. After the first set of leaves were lost a new set was developed, providing of course, the trees had sufficient vitality. If the trees were none too strong to begin with, the loss of the leaves proved fatal with death resulting. The same fungus attacks the oaks and in many cases is very nearly as serious. Anthracnose of the maples is caused by a different fungus and a recurrence of the trouble during two or three succeeding years, often times proves

(Continued on page 33)



How "heart-rot" affects the most beautiful of our trees and destroys them annually by the thousands

Vegetative Planting

By LYMAN CARRIER

TEN years have passed since the vegetative method of planting creeping bent was originated to meet the emergency then existing from the scarcity of fine turf grass seed. Five years were spent in experimental work and demonstration when only a few greens were planted. But during the past five years there has been a steady increase in the use of this method despite the adverse criticism from some golfers.

It is not the purpose of this article to give the details of planting but rather to call attention to a few common mistakes that are made in the handling of this kind of turf. Most greenkeepers understand planting stolons and those who are unfamiliar with the method can easily get detailed instructions from the commercial growers or from other greenkeepers who have had experience.

Much fault has been found with creeping bent putting greens which could easily be avoided by those in charge if they only knew how to take care of the turf. First, take the matter of speed of the ball. Simply because there is a thick covering of grass on the ground does not necessarily mean that the greens are slow. Compared with the ordinary seeded greens of German bent the most popular strains of creeping bent turf are very fast. I have heard a chairman of a Green committee give orders to cut the greens closer while at the same time the professional was raving about their being too fast. A slight gradual raising of the cutting bar of the mower is often all that is necessary to satisfy the critical player.

Do Not Cut Too Closely in Late Fall

Another characteristic of creeping bent which does not appear to be well understood is that it stops growing when the nights get cold and frosty in the fall. It is a mistake to keep on cutting creeping bent turf late in the fall at the same height as in the summer. It is not at all uncommon to have the geens so fast late in the season and in the winter that they will not hold a ball. Letting the grass get a little longer as it goes into the winter will make better turf in the spring before warm growing weather comes.

Brush Well Against Grain

Then there is the matter of "grain" in the turf. Practically all of the creeping bents which are planted vegetatively hug the ground naturally and would rather grow down hill than up. This habit of growth, especially on steep, sloping greens makes for fast putting in

one direction and slow in the other. Unfortunately the faster direction of the grass is down hill. It is the writer's opinion that steep greens should never be built but, nevertheless, it is often done and sometimes these steep greens are planted with creeping bent. Brushing against the grain before mowing will do much to overcome this fault. Some greenkeepers use a fine toothed rake and others coarse brushes for this purpose. Any tool which will straighten up the ends of the grass stems without tearing into the turf will answer.

Topdressing Often Too Rich

Judicious use of topdressing will do much to overcome the flat or lateral growth of creeping bent. The more stems that are covered with the topdressing the more buds there will be in the turf to grow and the new shoots which come through the dirt will have a more upright habit of growth than will those which develop above the surface of the ground.

Another point about creeping bent is that it does not require an overly rich soil. Excessive use of manure in the construction of greens or too frequent use of rich compost or fertilizers may cause the grass to become coarse in texture. The writer has in mind one of the first courses to plant their greens in Washington strain of bent. For fear of losing their fine stand of grass they topdressed with compost and fertilized with ammonium sulphate about every three weeks the first year. The grass grew so fast it was necessary to cut the greens every day and some of the time twice a day in order to keep them in playable condition. Since that first year they have greatly reduced the amount of plant food given the grass and now they topdress with just ordinary sandy loam topsoil. There has been a remarkable improvement in the texture of the turf because of this change.

Why Washington Bent is Most Popular

Use of an inferior strain of creeping bent has led to many disappointments with vegetatively planted greens. There are two strains which have given the most universal satisfaction. These are the Washington and the Metropolitan. In the use of these names I am referring to the original strains of bent which were distributed by the United States Department of Agriculture prior to 1925.

Turf of the Washington strain of creeping bent comes near to being pefect. Other strains of bent may be finer in texture. Any of them are likely to make (Continued on page 38)

Plant Your Native Shrubs and Trees

By CHESTER MENDENHALL Greenkeeper, Sim Park Golf Club, Wichita, Kansas.

A S I have been enjoying the articles by our brother greenkeepers in The Greenkeeper and have received a great deal of good from them, I will attempt to give you a few hints on shrubs and trees for golf courses. As we all know our club grounds should be made attractive along with our nice greens and fairways.

For this work I believe in using native trees and shrubs for they do not look so artificial and will grow better, and they add more to the attractiveness of your grounds. Shrubs are very effective especially when planted around on mounds or hills. I have used for these plantings evergreen trees, sand plum, coralberry, matrimony vine and yucca.

Use Evergreens for Backgrounds

The evergreens and elms are very attractive in the background around the tees, as the evergreens are green and dense all the year and the elms furnish shade during the summer months. The smaller shrubs should be used in front of the tee as they will not interfere with play.

On my No. 15 tee which is located on a small hill I have a planting of evergreen, elm and sand plum in the background with coralberry, matrimony vine, and yucca in the front. Coming up to the tee from No. 14 green through this shrubbery I have a gravelled walk lined on each side with cobblestone. I have, descending in front of this tee, rustic log steps filled with gravel and lined on the sides with cobblestones with shrubs overhanging the stones.

I also have a few shrub beds between paralleling fairways. They help to break the monotony of the landscape. These beds are about 100 feet in length and 5 to 8 feet in width and planted with shrubs that grow 4 to 5 feet in height.



Rustic steps descending from Number 2 tee at Sim Park.

Screen plantings are very effective around the utility buildings. They may be transformed into a feature of your club ground landscape by a background of trees and such an arrangement of shrubs that the



Chester Mendenhall

buildings will blend into the surroundings. Evergreens are especially suitable for this purpose. The shrubs that are used should be planted in groups and masses. The taller varieties should be located in the rear of the group and the smaller ones in the foreground. Our most attractive shrubs grow wild in the woods.

Hardy Shrubs and Vines Demand Little Attention

Red bud, which is known as a small tree, is made very attractive when kept cut back to about 6 or 8 feet. It blossoms in early spring before any leaves appear.

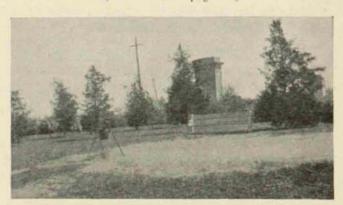
Coralberry (buck bush) is a hardy shrub and can be used in many places owing to its height of only 3 to 4 feet. Its most striking characteristic is the quantity of bright red berries which persist until late winter

The matrimony vine is considered a climber or vine but makes an excellent low shrub. It bears crimson berries in the fall, grows in very poor soil and stands lots of abuse.

Hall's honeysuckle is a hardy vine with dark green foliage which persists in the winter and gives the vine an evergreen appearance. This vine is very desirable for covering banks or back sides of bunkers.

The yucca is similar to an iris in appearance. It blossoms in June with a tall spike of cream lily shaped

(Continued on page 33)



Number 3 tee at Sim Park. Note evergreen planting



The Clearing House



Address all questions relating to general golf course maintenance to this department. Every question answered free of charge by a committee of experts.

What is your opinion as to the planting of bent seed over stolons?

Zanesville, Ohio

If a vegetatively planted green is well planted and well kept it makes a fine putting surface. There is a great diversity of opinion on this question. Greens seeded with fine quality German mixed bent seed are free from the "nap" so often encountered on stolon greens. Follow later issues for discussions.

Is it possible to mix Calogreen with sulphate of ammonia that is when using water as the carrier?

Zanesville, Ohio

If applying Calogreen in water, the mixture should be kept agitated as this chemical remains suspended in water only a few minutes. It can be applied in solution with sulphate of ammonia, but it is recommended that Calogreen be mixed with compost or sand, but thoroughly mixed, at rate of 3 ounces per 1000 sq. ft. of area. Scatter this fine material on green as you would seed.

My greens show a slight reddish brown stain of the grass blades after the vigorous growth produced by sulphate of ammonia. What can be the cause of this?

Greenville, Michigan

This may be due to lack of potash, or over supply of moisture, or to several other conditions. We suggest that you test your soil, also experiment by watering only enough to keep the surface firm but not hard for a few days. Watch results and report further.

What are the fertilizer requirements for the best growth of bent?

Greenville, Michigan

Do not use too much fertilizer in organic form. When over fed, bent grows coarse.

Several white birch trees on my course are dying off at the top. What can I do for them?

Milwaukee, Wisconsin

This is probably due to the bronze birch borer but may be lack of fertilization or that they are growing on a shale rock or hard pan bottom.

Is there any help for chestnut tree blight? There isn't a single perfect chestnut tree left around here.

Hartford, Connecticut

There is no help, unless through discovery of immune trees. This work is in process at several universities, notably at Brown and Yale. Some progress has been made, but no conclusive reports have been made. This disease was imported from Asia, and first attacked the chestnut growth in New York State. It is now widespread.

A Chat With Our President

(Coninued from page 17)

is kin of the late Oom Paul Kruger of South African fame, and he is certainly a chip off the old block.

THE efficient management of our association will make for increased tolerance, charity, sweetness and good will in the lives of all our members.

If you enjoy reading what others have to say, don't forget that others will enjoy what you have to say. If you can't spell all the words correctly, the editor will do for you what I get done for me. There are a lot of greenkeepers, who like myself, never had a chance to go to grammar school.

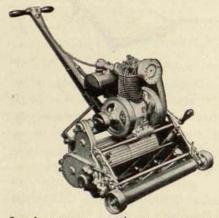
IN a recent issue of Golf Illustrated I was interested in reading an article entitled "Keeping in Step with the Times." The paragraph reads as follows:

"The professional golfers of America, an army of al-

most 3000 have reached the point where something definite should be done for their individual and general welfare. Other sports have found it advantageous to engage counsel to aid in their development along proper lines. And this method has proved successful. We feel that the time is ripe for the Professional Golfers Association to double its membership of 1200 and to engage a good man in whom it could repose the utmost confidence and whose counsel would be heeded. The undercurrent of both club and commercial gossip should be stilled or referred to some recognized head for disposition. A paid secretary on the alert for the best interest of the players and the traditions of the game would be a progressive step."

(Continued on next page)

The Market Place



Jacobsen power putting green mower

In talking with one of the leading greenkeepers of a middle western city, he recommended the use of a small implement called a "weed stinger" for use in killing scattering dandelion and other unsightly weed growth about the course.

This implement is on the order of a small force pump, with a needle at the tip which punctures the weed as the gasoline or other chemical is forced down with a quick pressure on the handle. One excellent type is manufactured by J. Oliver Johnson, Inc., Chicago.

DEMONSTRATIONS of the Jacobsen power putting green mower have been going on at a fast rate all over the country this season, the latest as we go to press being one held at Brookside Country Club, Can-

ton, Ohio, on July 11, at a monthly meeting of the Cleveland District Association of Greenkeepers.

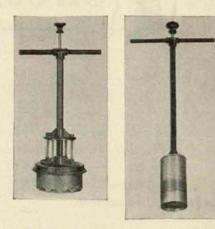
For six years the Jacobsen Manufacturing Company of Racine, Wisconsin, has been in the process of perfecting this mower, and it is now guaranteed to make a clean close cut on vegetative greens, with no danger of throwing oil in operation.

It is built in two models, one making a 19-inch cut, and the other a 24. Accompanying photograph is of the 24-inch model. The 19-inch is different only in size. The 19-inch mower has sufficient speed to mow 17,000 square feet of green in 39 minutes.

The Jacobsen Manufacturing Company is anxious to give the new mowers every chance to prove themselves, and your request for a demonstration will be given prompt attention by the factory at Racine, Wisconsin.

THE golf courses of South America are looking to the United States to furnish them with modern equipment, and we have recently had word from L. F. Mitten, distributor of the Royer compost machine, that he has just shipped one of his large models to the Golf Club Argentino, Buenos Aires, Argentine Republic.

NE small piece of equipment constantly used on a course, and often in a continual state of dullness, is the hole-cutter. In order to withstand the repeated sharpening, the cut-



Left, Hercules 10-inch plugger; right, regulation size Gem hole cutter

ting edge of a hole-cutter should be of steel so treated in manufacture that it has the right degree of hardness and resiliency.

The blades of the cutters illustrated on this page and manufactured by the Golf Course Supply Company, Cleveland, Ohio, are subjected to cyaniding which penetrates to a depth of one-sixty-fourth of an inch. They are made of seamless steel tubing, with a plunger which knocks the plug out of the cutter with no breakage of the turf.

Two sizes are manufactured, the regulation 4¼-inch, and a 10-inch plugger for patching purposes and turf nursery transplanting.

Inquiries should be mailed to the manufacturers at 3049-51 Carnegie Avenue, Cleveland.

A Chat With Our President

(Continued from page 28)

We quote the above paragraph to illustrate and prove that before The National Association of Greenkeepers of America was finally organized in the City of Chicago, March 26th, 1927, the founders of this association secured legal advice on all important matters pertaining to organization, by-laws, etc.

We were also fortunate in securing the services of a paid secretary who has had several years of practical experience, and above all the loyalty and esteem of all greenkeepers who have had dealings with her in a business or fraternal way. We have one who has the ability and dignity at a moment's notice to attend and address any gathering of greenkeepers and discuss with them both pro and con any item that may be of interest to the greenkeepers in general.

We are at the present time endeavoring to double our membership by having each member secure one new member, and from all indications we expect that by the time the next issue of our magazine is in the hands of the greenkeepers our aims will have been accomplished.

We even went one step further in order to be able to exchange our views and researches along scientific and practical lines and secured the publication of a magazine devoted exclusively to the welfare of greenkeeping.

We are not in a position to know whether "Golf Illustrated" was informed of our methods, which may have prompted them to print the paragraph referred to, but anyway we are glad to know that their views on these particular lines are ours. Watch us Grow!

John Morley, President

TATE asked, and we have received. It is the function of the NATIONAL GREENKEEPER to give the information most desired by the greenkeepers of the United States and Canada, and from the numerous replies to our requests in the June and July issues for suggestions, we should judge that warm weather and hard work has in no way prevented careful

NE of our Charter members, and vice-president of the association, Ford Goodrich, of the Flint Country Club, Flint, Michigan, in response to the call of the Executive Committee, sent in three new members in July. This is the largest number sent by any one member. They are George L. Welsh, greenkeeper at the Lapeer Country Club; Vernon A. Sincerbead and

Andrew Welsh of Swartz Creek Municipal Golf Course.

reading of this magazine.

TICTOR George, greenkeeper of the Country Club of LaFayette, Indiana, protested submitting article on the basis that he is no author. Since reading the article, which you may look for in the September number, we believe that if he keeps greens as well as he writes, it is no wonder his chairman is his good friend.

WE had about decided we would have to go out to Pebble Beach, California, and collect the article Joe P. Mayo promised to send us soon after the annual meeting in March, but we received it in time for this issue, with pictures and everything. Look for "Brown-Patch at Pebble Beach," in which he recommends the

use of bichloride of mercury for prevention and control.

THERE are thousands of fairways in need of considerable encouragement in the way of fertilization and irrigation, and many inquiries have been received as to the most economical and efficient methods to use. C. W. Strouse, greenkeeper at Highland Country Club, Grand Rapids, Michigan, would like to hear a discussion on the subject of fertilizing established fairways. W. A. Buckner, who for a number of years has been working on irrigation engineering for the golf clubs on the Pacific Coast, tells in this issue of the progress that has been made in California in preserving fairway turf with modern watering systems.

RETROSPECTION

When I was sixteen years of age I was a self-sufficient sage; My knowledge had become a bore; I had no room for any more.

And I was fully twenty-three Before I'd had a doubt of me, And even then 'twas passing small; I shouldn't mention it at all.

When I arrived at thirty-two And inventoried what I knew, Today in memory I shrink; I found it written in red ink.

At forty-odd or thereabout I often found myself in doubt, And rarely said "I know", unless I could not substitute "I guess."

Youth cannot hear for its own voice, And carelessly it makes its choice, Extending notes at sweet sixteen That fifty pays for, sight unseen.

But harrowed well with our mistakes, The vine of knowledge slowly breaks Through soil made rich with laughs and tears, And blossoms in our later years.

—By Gertrude A. Farley.

MANUFACTURER

who has not been represented in the GREENKEEPER this season, called at our office in July and asked for advertising contract forms. We accommodated him, and he signed up for a year, saying as he did so that he had dropped off on a trip from Tennessee, Nashville, Chicago, with the idea of getting all set with the GREENKEEPER NATIONAL and having it off his mind. He was enthusiastic about the organization, and said emphatically that the support of the National Association he had noted among greenkeepers during the period of a trip of several months was "The greenremarkable.

keepers of your organization are doing the manufacturers of high grade equipment and supplies the greatest favor that has ever been done them in carrying on a magazine of the character of the NATIONAL GREEN-KEEPER. More power to you!"

A NOTHER message was received while this manufacturer was visiting us, which we consider a fine tribute from one of our charter advertisers, "At the present time we are carrying no ads in any other papers, and are so well pleased with the results we are getting from the NATIONAL GREENKEEPER, that it is the writer's

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