growing in the form of a ball. Crab apples which maintain a low form and the honey locust are good for this region; they blossom and do not get large. Some trees that attain height but do not spread are the spruce, firs, and tamaracks. Then there are times when you want rapid growth; soft maple, willow, cottonwood and box elder are good for such purposes. Along with these you have the elm and black locust which are very rapid growers and are good and hardy. They grow to a good height.

Then you have a number of long lived, slow growing trees which eventually reach a high size. They are hard maple, sugar maple, oaks, basswood, hackberry, pines, green ash, and black walnut. These are long lived trees.

There are two times in the year when it is best to plant trees, fall and spring. We prefer spring planting. The spring planting season here is from about May 1 to 15. You can begin sooner if you want to, but this is early enough unless you are getting the trees from a southern nursery. The fall planting season can be anytime after the first of September.

The cost of the tree goes up with its size. It is a question of how much money you want to invest and rate of growth wanted. Small trees have a better chance to survive than large trees because they don't get as much of a set back as a large tree. Very often you can get along with the small stock. Watch out for watering in the large stock. If you plant smaller stock you can probably get along without watering it at all. In planting a tree remember that it should grow.

Most evergreens look better when grouped rather than planted singly. Group formation about 6 by 6 feet is a good distance. In setting out trees do not plant any trees in the sod. Don't make a hole in the sod and expect the tree to get along. If you have plenty of water it is all right, but in this part of the country it is not satisfactory as grass takes up a great deal of the water. There should be a space 2 or 3 feet where the grass is taken out before you plant a tree.

Evergreens are much harder to handle than the broad-leafed trees. If roots are exposed to the air for a short time the tree dies. There was an experiment conducted in regard to this and those that were left in the sun one minute were reduced in vitality 60 per cent.

Order early enough before the shipping

season begins in the spring. If your orders come in late they will be hustled out. Get your order placed in February or March; you'll stand a better chance of getting good stock. Do not accept stock that has hot or dry root systems. Stick your hand into the bundle and see if it is damp. It doesn't have to be sopping wet but there is no use planting dead roots. If they are moist so you can feel it, water them so that they won't dry out when exposed to the air. The broad-leafed trees don't need this. They stand a great deal of drouth.

Small size stock requires very much less care than large. If you order stock up to one foot high you will get it packed in moss without dirt. Put it into a bucket with some water, dig your hole and plant your tree. Keep stock in water all the time so that the roots will not dry out. When you plant them, plant them at the same depth as they were in the nursery. If you get anything larger than one foot high it should come bailed with burlap. If you get anything much larger than 3 or 4 feet high the only time you can move them with certainty of success is in the winter time when you can take the frozen ground with the tree.

Where roots are taken out of the ground it means that the trees will have a set back. The first year they will grow roots and do not make much growth on the top.

In trimming trees cut back as close to the main stem as possible. All cuts should be painted to prevent infection.

I never put manure on evergreens because if it comes in contact with the roots it burns them.

Question: Why are the oaks dying?

Answer: The oaks are not dying on account of the drouth. It is caused by a shoestring fungus. It is in the ground almost everywhere and affects the black oak especially. There is no way of stopping it as it is in the roots.

Question: Is there any treatment that you can give the ground after you take the tree out?

Answer: I don't know of any. I would not plant another black oak there or white oak. It won't attack other species.

Question: Is Chinese elm hardy?

Answer: It is hardy around here and seems to be a good tree.

Question: What about the mountain ash, and silver poplar?

Answer: The mountain ash is a good hardy tree. It is a large but slow grow-

er. Silver poplar is a very hardy tree, growing comparatively fast and large.

Question: How large a tree can you transplant?

Answer: I don't think there is any limit, if you want to put the money into it.

Question: Are chestnut trees and Lombardy poplar hardy?

Answer: Chestnut trees are not hardy around here, but the Lombardy poplar is perfectly hardy for about 10 or 15 years.

Mole and Gopher Control

By H. L. PARTEN

THE MOLE is causing a lot of trouble on golf courses, but it is one of the most easily controlled rodents we have to contend with. (Mr. Parten displayed a trap and stated that it made a difference in the way you set the trap to get the best results.) Poison bait does not affect the mole. With the gas method you sometimes get them and sometimes you don't because the runway closes up. If the mole trap is properly set you will get them everytime. Be sure not to close the runway.

The pocket gopher is closely related to the mole. It is easier to control than the mole. In getting the pocket gopher the trap method is too slow. Cyanide gas works well only about 30 per cent of the time. The gophers smell the gas and push the dirt into the runway between them and the gas.

The following poison will kill pocket gophers:

1/8 oz. sodium bicarbonate.

1/8 oz. powdered strychnia alkaloid.

1/2 oz. saccharin.

This amount will last 2 or 3 years.

This poison is put on pieces of potato cut in slices about ¼ in. thick, then you cross slice it. Sprinkle the poison on each piece of potato, not too thick. Two or three little crystals on each piece of potato are enough.

Find the main runway of the gopher by probing with a stiff wire. The main runway can easily be found by observing the shape of the mound. The mounds are of two general types, heart-shaped or straight on one side and curved on the other. These mounds indicate the direction in which the soil was thrown out by the gopher. The main runway is on the

straight side of the mound which shows an indentation. The probing wire should be pushed into the soil 6 to 18 ins. from the mound. The hole made by the probing wire should be enlarged by the sharpened broomstick, using a revolving motion when putting it in. Don't let any light shine in the hole. Drop two or three pieces of poison bait into the hole and close the hole immediately.

Question: Would this work on striped gophers.

Answer: No. Use cyanide gas for controlling them and rats. Put the cyanide gas in a Major duster and you will find it very effective in controlling the striped gophers. Leave the mounds open so that the gas will penetrate through the runway.

Who Hires the Help? Puzzle to Department Heads

GREENKEEPERS and managers are experiencing this year one of their toughest problems by being compelled by members' instructions to hire certain employees. Unemployment has hit some of the members' friends and the members select the golf club as the best port in the storm.

Department heads complain that necessity of operating short-handed this year makes it essential that each man on the payroll be the best one for the job but in some cases they are afraid to go to the mat for this principle because of fear of losing their own jobs to some one who will hire anyone strongly recommended by an officer or influential member.

AFORMER PRO who now has one of the star positions in the golf manufactur ing business was telling the other day how he got along so well with his club members that they boosted him into one of the first spots on his climb. He mentioned getting acquainted with the members as the prime necessity for a pro. Club politics always are something to be considered and for that reason he said he started in by making the worst grouches in the club his best friends. This, he maintains, was the toughest job he ever had in his life, for it had to be handled so the rest of the members didn't think he was petting the grouches to the neglect of the other members. He couldn't be so oily and servile to any class of the membership that he became offensive.



But is it? Most greens harden too darn quickly, and it is then, when they are too much like concrete, that your trouble begins.

The problem is-

how to build greens that won't become hard; or, how to keep them soft, cushion-like and resilient in spite of hard usage.

Build So They Won't Turn to Hardpan

A great many years of experience in working with Golf course designers, greenkeepers and greens committee members has permitted us to gather volumes of the most important sort of information. We have encountered every conceivable type of soil and climatic condition. We have helped with greens using many kinds and combinations of soil, humus and compost. We can show you some of these greens that are as soft and resilient today as they were years ago when

first put into play. We can tell you how to build this type green on your course.

How to Renovate Most Effectively

Naturally when the basic conditions are not correct, it is more difficult to renovate and make a satisfactory job. But you can renovate with SOR-BEX by working "from the top, down" and ultimately produce a satisfactory condition, because SORBEX is a moss peat humus that is 25 times finer than any peat moss, and it will penetrate right down to the root soil.

And then, through the use of DRICONURE you can maintain better conditions— for DRICONURE both feeds and improves the mechanical condition of the soil. Furthermore, as a natural, organic fertilizer (concentrated cow manure and peat moss) Driconure never burns or harms in any way, never creates a toxic condition—it always improves.



We would like to send you further information, or have one of our turf experts discuss this matter with you.

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STAGE FRIGHT COSTLY

Greensmen's Shyness Permits Fast-Talkers' Mastery

By SKEETER

MAY I ADD MY bit to Leach's remarks in April GOLFDOM? I have followed his spectacular flight and find from direct observation and personal contact that he has about hit the nail on the head. It puts me in mind of one experiment station man who was scheduled to conduct roundtable discussion periods during a turf short-course.

This professor asked one of his men why the response during his period was so poor, especially since the subject matter was good and well prepared. The man made this reply: "You make the mistake of holding a round-table session when others than greenkeepers are present. Greenkeepers are not a talkative lot when mixed with outsiders; but boy, just get them together with yourself and your subject, which is very vital at the present time, and then have some 'joint-oil' ready—you'll need it for your tongue in order to keep up with their questions."

The man was right. The greenkeeper does keep to himself and very possibly is too clannish, but nevertheless when he tries to put an idea over and the hot air merchant in him is not good enough to prevent his being overruled, he shuts up rather than continue to "take" it. Of course, if the other "merchant's" stuff goes over (it very often does temporarily) the greenkeeper was wrong; if it doesn't go over, the poor greenkeeper gets it in the pants.

After years of this and that, with here and there a little feeling of friendship from some of our technical friends, the greenkeepers have found that the basic soil principles established long before golf courses arrived still stand, yet they are almost daily disregarded. In construction and maintenance, too, it is ignored.

Greenkeepers in my own state have had the good fortune to be given the highest sort of co-operation from the state college; the main difficulty has been lack of funds. The station certainly has been working along the lines of greenkeeper's queries, such as: how much acidity can we stand and for how long? what kinds of bent like what pH values? how much lime can be used and for how long? what are the

basic causes of clover in greens? to what extent do soil variations affect grass types? will our native stoloniferous grasses produce good turf? will they resist disease better than established turf grasses imported from some other part of the country?

Greenkeepers realize that many theoretically correct recommendations cannot be carried out in practice where the greenkeeper must catch as catch can with topsoil, etc., but nevertheless they are very glad to work with the stations and find out whenever possible the good points and the poor points of a given line of experiment. Practical results are what the greenkeeper wants and he is willing to go along with all who want to help.

Mich. and Border Cities Greensmen Make W. Smith Chief

THE MICHIGAN and Border Cities Greenkeepers' Assn. held their seventh annual banquet and election at the Birmingham (Mich.) G. C., March 28.

Forty-five greenkeepers and their guests sat down to a fine dinner.

Present as guests were S. L. Beymer, president of the Birmingham club; G. E. Baldwin, vice-president and chairman of the house committee; H. E. McCurry, chairman of membership committee, and representatives of the Lawn Equipment Corp., Ideal Power Mower Co., Birmingham Lawn Supply Co., E. Chamberlain Co. and Toro Mfg. Co. After dinner the guests were taken to the recreation room to enjoy billiards, pool and ping pong while the greenkeepers held their election.

The following officers were elected: President—Wm. Smith, Red Run G. C., Royal Oak, Mich.

Vice-President—Benj. Bertram, Burroughs Recreation Farm and G. C., Brighton, Mich.

Secretary-Treasurer—Ruben Scott, Detroit Municipal G. C.

Directors: John Gray, Essex County C. C., Windsor, Can.; Wm. Beaupre, Lockmoor C. C., Grosse Pointe, Mich., Leo Wedyke, Glen Oaks C. C., Farmington, Mich.; E. Stoddard, Monroe C. C., Monroe, Mich.

Herb Shave, retiring president, was tendered a vote of thanks for the able manner he had carried on with the association. Herb also was appointed publicity man for 1932.

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means yet devised. Distributes water with sufficient force to penetrate to the roots of grass, yet does not injure the tenderest turf. Will not puddle—will not pack or wash soil. No burned turf.

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Women Show Keen Interest in Greenkeepers' Work

By BETTY BURTON

B OB DUGUID, greenkeeper of Evanston (III.) G. C. is nominated by his members as the best greenkeeper in the country. He is not the phantom that exists at some clubs, where the members never see their greenkeeper.

Bob is out on the job where the members can see him and make any suggestions they have in mind. He knows how to handle the members. He knows the whims of them all, he says, and could call them all by name, until the last few years when the membership has changed so greatly. As we talked at the first tee, which he was enlarging, some players passed by and called out, "Hello Bob." He responded in his happy way, then said to me, "I know their faces, but I can't recall their names."

The first tee, formerly about 20 ft. deep by 65 ft. wide, was too shallow to allow much changing of the tee plates. There is a green and white iron railing around three sides of this tee and that fact made the usable space even smaller as there was the possibility of hitting the rail on the back swing, he explained. Then, too, it was a mental hazard to the players, for even though their clubs did not hit the rail they had to stand so near it that they could see it out of the corner of their eyes when addressing their balls. Now that tee is being made 60 ft. deep.

He is very proud of his greens which are all of the same texture. They have a good body and are slow. "Most of the ladies seem to like them slow, so they can hit the ball," he said. "They find the down hill, side hill putts on fast greens are very difficult to hole."

Ladies' Day at Bad Time.

When the playing season officially opens Bob changes the holes every day. He knows what is going on; he has a schedule of the men's and women's events. When the ladies play on Tuesday he does not place the cups at the near edge of the green, but does put them on some level spot. Like most greenkeepers he

topdresses his greens on Monday, and by Tuesday they are not quite in the condition he would like to have them for the ladies to play on. He has suggested that they change their regular weekly Ladies' Day to Wednesday, and then the greens would be in perfect condition. He also says that on Wednesday there are not so many men playing the course. The ladies have considered this, but as yet have not made the change.

He has two sets of tee plates; one set ahead of the other. Since the majority of players are high handicappers and they maintain the course, they should be considered. The older ladies "daddle around in front," he says. They are permitted to use the forward tee plates in their friendly play during the week, but in competing in events on Ladies' Day they must play from the men's tees, Mrs. H. D. Raymond, of Evanston G. C. and first V. P. of women's Western Golf Assn., reports.

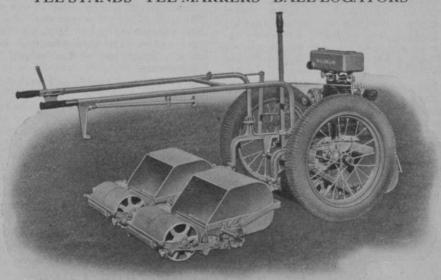
Mr. H. D. Raymond, new chairman of Evanston's green-committee, is planning to have rough in front of all the tees except the first one.

Bob has his course in good condition and members have been playing on the regular greens all through the winter. He also has his job well in hand and there seems to be perfect co-operation between him and the men and women players. This is his ninth year at Evanston. A member was waiting to talk with him so he excused himself.

I turned and saw a fine approach shot sail up to the eighteenth green and the putt was holed. As Mrs. R. L. Wetzel, an 8 handicapper, picked up her ball out of the cup she was asked how she liked their greens. "They are the finest around here," she said. "They are slow, but true. I like our greens but I notice a difference when I play at other clubs where the greens are faster." In regard to the tee plates she said: "When playing a match, and giving strokes to a poorer player, the back tees should be used, so the good play-

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er, with her longer drive, will not have an advantage. When they reach the green the poorer player has the same chance and frequently is the better putter."

No Women on Green-Committee.

Mrs. Raymond was questioned as to the advisability of having a woman-one who knows golf and what the woman golfer wants for her course-on the greencommittee. Her answer was one that all the greenkeepers, no doubt, will highly approve of. She was not in favor of it in the least. "It is bad enough to have cranky men on the green-committee without having a woman also," she said. "If you have a capable greenkeeper it is best to give him plenty of leeway and let him work unhampered. Of course the women should be permitted to make suggestions. Often their ideas are adopted."

Mrs. Eliot Evans, chairman of Chicago District Women's golf team, and one of Evanston's leading women golfers says she prefers to have the tee plates at the back of the tees, but that she thinks perhaps the majority of women like them placed at the forward end.

- The idea of mowing a path for 50 yards

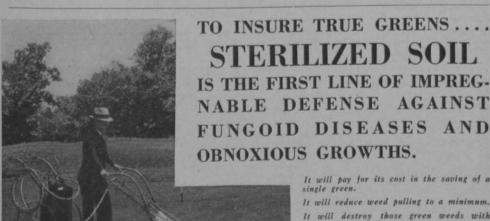
in front of the tees where there is rough, so the poorer players might not get lost in the rough, struck Mrs. Evans as being particularly funny. "The poorer players could not always hit the path, anyway," she said. "But a path should be there so the players will not have to walk through the rough if it is very high."

She does not like the holes placed at the near edge of the greens nor does she think they should be in too absurdly difficult spots either. The slow greens at Evanston are what most of the women favor. she believes.

Mrs. Helen Hepburn, new president of the Chicago Women's District Golf Assn. says her course-Skokie-is always kept in good condition.

She does not know the greenkeeper, Fred Boye, who has been there only two years, but when any special event is scheduled the women just let the greencommittee know in time. In Mrs. Hepburn's words, "The course is combed for us and clean towels are put at every tee box."

The course is watered at night and the women are not bothered with sprinklers.



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SURESULTS PRODUCTS COMPANY 10 Park Place . . . Morristown, N. J. Their Ladies' Day is Friday—consequently Monday topdressings are no source of worry to them. Traps are raked early Saturday morning in order to be ready for the week-end play.

Again quoting Mrs. Hepburn: "Our greens are just medium, possibly on the slow side, and we like them. We are just scared to death when we go to Indian Hill where the greens are so fast."

"Skokie's ninth hole has a long water carry. The tee plates are left where the men play from, but some of the women players go forward to shoot. "However," continued Mrs. Hepburn, "we advise against it as they will never play a good game if they always baby their shots."

"Cash" Easton, who grew up with Briergate, is serving his eleventh consecutive year as greenkeeper there. His course is in fine condition and is ready for members now. All the greens are mowed, the fairways cut, and the tees neatly trimmed. Plenty of barbering done on that course, but he asked to be excused for the rough on his face which he hadn't had time to drag the scythe over.

Topdressing Bothers Women.

He seldom has any complaints about the condition of the course. The main trouble he says is after topdressing on Monday the greens haven't had time to get into perfect condition by Tuesday, which is Ladies' Day there. He brushes the dressing in as well as possible. He topdresses only every 6 weeks during the summer so it is not often that there is a complaint. It isn't the better players who complain, he says.

Minor things, like a tractor mowing in an adjoining fairway, worry some of the temperamental players, and once a woman golfer asked to have a mower two fairways away shut off! Another "kind soul" had her caddie open the door to the sparrow cage in which six vicious little vagrants were awaiting disposition by "Cash."

On Ladies' Day instead of locating the cups in a strategic place the kindly "Cash" puts them in the center of the greens. There is rough in front of some of the tees, but a path 15 or 20 ft. wide is mowed for the players' convenience. There are no cock-eyed tee plates at Briergate; the keen-eyed Mr. Easton always places them at right angles to the line of play, thus saving the player any unnecessary thinking when lining up his ball.

Water pressure was not strong enough during the hot months of July and August



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last year so Mr. Easton had to use the sprinklers day and night. About August the turf on the greens becomes slightly dormant, so he raises the blade of the mower for higher cutting, which slows up the greens, but also saves them. The players do not know all the little tricks he uses to keep the course in condition and to keep them happy. He seems to accomplish both these things.

"There have been plenty of assessments and they have something coming to them," says this conscientious greenkeeper.

Fred Kruger, veteran greenkeeper of Olympia Fields, doesn't try to know the players, but he certainly knows his greens. Last year he had three assistant superintendents to help him see that the four courses were in good condition. This year he is three-in-one. Those assistants were released and Fred buzzes about from course to course in his Ford. Three dozen workmen assist him. An improved arrangement is now in effect. Each workman is restricted to a certain number of holes. In this way one man does not cross another man's work.

The topdressing is done when there is the least play and when the weather is most favorable. Ladies' Day is Thursday, a good day for a club that has only one course, but with Olympia Fields' four courses and the girls playing a different course each week, they are not annoyed with topdressing. "But I don't know who could build a flock of courses like these now," said the genial Mr. Kruger.

Most of the tees are long, but for Ladies' Day the plates are usually placed in the middle, and the cups in the middle of the greens. Cups are changed about every other day. The last few years the greens have been kept longer.

For Fast Play.

One doesn't often find rough in front of the tees nowadays, it was suggested. "It slows up the course. You have to keep the players moving to keep them happy, and they can't afford to lose the balls nowadays," said Fred.

Asked about a woman on the greencommittee, he smiled and answered: "It would be just some one else to argue with.

"Every day clean towels are put at the 72 tees, but they don't remain clean long when those little Polish caddies begin wiping their hands on them."

The line-up at Oak Park C. C. this year