Introducing Wampanoag

A new course lying at the foot of Talcott Mountain, near Hartford, Conn. How hard work and experience brings results.

By WM. E. BALL, Greenkeeper

FELLOW greenkeepers, meet Wampanoag, a new golf course on which construction started July 1, 1924, and was opened for play—at least nine holes were—in May 1925.

Wampanoag is located in the township of West Hartford, Conn., on a 200-acre tract among the foothills of Talcott mountain, which makes a grand western skyline and adds greatly to the scenic beauty of the course. The ground is mostly rolling, with about one-third swamp, the rest clay slopes and gravel knolls with rock outcropping aplenty. Some of the rough tracts were heavily wooded; the swamp land (much of it impassable until drained) was covered with bogs and a dense growth of everything not wanted.

There were a few old fields on the slopes that were not hard to work.

Tractors, dynamite and the clearing gangs were much in evidence at the start. Soon however, the outlines of a golf course began to appear and in September the first nine holes were seeded to fescue, blue grass and red top, that being the formula recommended by the golf course engineer in charge. Red fescue was used mostly on banks of traps.

Grass on greens and tees was cut high three times in October, topdressed in November with a humus mixture and left for the winter.

The first nine holes of course were opened for play the following May (1925) and no one who has not been through the experience can realize the driving gruelling work that was done to make it possible. We were fortunate in having a Donald Ross working plan, which—as a whole—has been carried out in spite of the shortcomings of construction agencies which circumstances sometimes make it hard to combat.

Second Nine Seeded in September, 1925

The second nine was seeded in September, 1925 and the entire course opened for play in May, 1926.

It has been quite a problem to keep pace with the wear on the new seeding but on the whole the greens have all shown a gradual improvement.

I can only give a general idea of the course in this article, suffice it to say that all of the greens are built with a slightly rolling undulating surface, no two being of the same design. The general idea was for a sporty course. All greens have a stone or gravel underlayer to insure drainage.

At each topdressing for the past year, I have given all the greens a light seeding with creeping bent. After experimenting with several kinds in a special seed bed this seemed to hold up as well as anything I have found so far. We also use the bent plugs from nursery wherever needed so that we are in hopes to have all good bent greens in time, which I am convinced give the best wear and the best appearance with the least care of any known grass that can be used in this climate.

There are several courses in this section where the bent stolons have been used with good results. We built a practice green last April, planted it to stolons and opened it to play July 4th. It has stood up well in spite of an excess ant population, supplemented by a family of super-vigorous moles.

Brown Patch Hit us Bad

Brown patch hit us bad last season during the humid weather of July and August, with sporadic outbreaks in September. We had fourteen greens hit in one night in July,

Author’s Note

I came to Wampanoag from the Hartford City Park department (at the start of construction) where I had been employed for the previous sixteen years in general construction and maintenance work, which included the building of an 18-hole municipal golf course, numerous tennis courts, bowling greens, baseball diamonds, playgrounds and other work along those lines. Thus I was able to bring to the job a little practical construction experience added to what I had already gained, especially in the three years preceding my connection with the Hartford Park department, which were spent on construction, maintenance and supervision of the grounds at the Jamestown Exposition at Norfolk, Va., under the very able direction of Warren H. Manning, landscape architect of Boston, Mass.
which meant some stirring to check. We used Uspulun with good results, but where ground was badly affected, especially by the small brown patch, it took a good application of Semesan well washed in to check it. We found that the greens which were protected by woods, especially on the south were more susceptible to the brown patch than those in the open. With the exception of two out of the fourteen greens affected, the grass roots were not killed by the fungus and came back green in a few days after applying a light top dressing and a good application of Ammo Phos in liquid form, applied with a hand sprinkling cart.

We also used the sprinkling cart for the Semesan on greens where a large area was affected. Where only a few spots appeared, the sixteen quart sprinkling can did the business.

We also found that the liquid Ammo Phos and Ammo Sulph brought a large number of worms to the surface that were ready to go out of business. So you see, the greens at Wampanoag are not always green.

We have no green less than one hundred feet in diameter and from that up; number sixteen being one hundred feet wide and two hundred feet in length.

There are twenty-nine tees on the course, most of them large and all varying in shape and size. These with one hundred and one traps and nine mounds make quite an item in upkeep. Our fairways are ample and so far we have been able to keep them in good shape with one five unit mower.

**Woodland Stream Furnishes Water Supply**

We are fortunate in having a lasting stream of clear spring water which winds through the entire length of the grounds, making plenty of water hazards. There is one spot in particular which has unusual natural beauty, where the water falls over the rocks down through a ravine at the foot of the sixteenth tee (see illustration with bridge at head of falls). About the centre of the course, where swamp conditions were the worst, an excavation was made for an artificial lake covering about two acres, this is fed by the aforesaid stream.

We also excavated a large lagoon in front of both the ninth and eighteenth greens, to make additional water hazards, and—to say they have met all expectations as to hazards is putting it mildly.

The lake and lagoons have added much to the beauty of the grounds and when the shore planting is completed, it will be a great addition. The material from the excavations was all used in filling in fairways on each side of the lake, so that in this part of the work (at least) we really accomplished two things at once.

The stream had a few trout in it when we began work and has since been stocked with fingerlings, which are getting large enough to look quite tempting.

**Bridges of Rustic Construction**

Of course, with this stream, the question of bridges came up and at my suggestion to the Chairman of the Green Committee for rustic construction, I was told to go ahead and see what could be done. Most of the help was laid off about December 1st, with the exception of the outfit that had the contract for excavating the lagoons. This was at the beginning of the winter in 1924. With two picked laborers we began work on the bridges, selecting and cutting our own material in the wooded portions of the course between fairways and—with the exception of some of the oak planking for flooring, all material—mostly white oak and elm—was obtained on the course.

In the three following months we put in twelve bridges, which sufficed for the first nine holes and included three permanent traffic bridges for use in construction of the second nine the following season. The traffic bridges were all sixteen feet wide (built to accommodate the five unit fairway mower) and from twenty to twenty-four feet long.

The following winter, with the same two men, we completed the bridges, twenty-one in all. No two rail designs are alike and each one was designed as we proceeded with the work. They are very attractive and fit in well with the general landscape scheme of the course and—best of all—the members seem to be pleased with them. On one of the longest of the footbridges, we worked the name of the club into the rail design, in rustic letters one foot in diameter (see picture.)

**Kewanee Water System Used**

We use the Kewanee system for forcing the water over the course. There are two electric-controlled pumps driven by two seven and one-half horsepower motors which require a minimum of care. Each pump has a
capacity of one hundred and eighty gallons per minute. All water is pumped into and delivered from a pressure tank of seven thousand gallons capacity, whence it is delivered to all parts of the course through four 3-inch main lines. With the use of “Y” connections at openings, we are able to use a battery of twenty streams at a time in all sections of the course without decreasing pressure, which holds up under the automatic control at from seventy to eighty pounds at all times.

At regular intervals the small tractor with cart attached moves equipment and men to the different locations, which enables one or two men—as the case may be—to water a large area in a reasonably short length of time. When we are through watering, the hose and sprinklers (we use all double Rotary) are brought to the storehouse, the same as all other equipment. Keeping the hose from exposure to sun when not in use will save the life of the rubber more than enough to pay for the small amount of extra work in caring for it.

**Good Mechanic is Most Important**

One of the most important things—to my mind—in the upkeep of a golf course is to have a good all-round mechanic and a well equipped workshop, which means that no equipment is out of order for any great length of time. During the past winter, all equipment and machinery was thoroughly overhauled, cleaned, repaired, painted when necessary, and reassembled ready for the playing season.

We were fortunate in having an old farm house on the course which was placed at my disposal. With a few alterations (all of which we did in stormy weather with our own men) we have arranged a good store room, paint shop, seed room, tool room, workshop with heat and a convenient office with open fireplace. The old open wood shed adjoining the house we floored and closed in with rolling doors, giving us a good three-car garage. One of the farm barns which had a good slate roof and was well timbered, was moved to a central location near the pumphouse, for storage of the more bulky equipment.

**Re-modelled Barn Provides Ample Storage**

During the past winter, we have remodelled the barn on the inside to fit our requirements, putting in heavy overhead floor, which gives us an ample storage building for all time. We have also built a shed at one end of the above building, large enough to house one of the heavy tractors that was used in construction work on the course. It is pretty well shot, but still in the ring. The wheels were practically out of commission, but by taking them off and setting the remains on a solid foundation, we have power for a Rotary screen and circular saw for cutting wood, all under cover.

One of the countless places where our all-around mechanic fits in is in getting this unit of the course in operation and I assure you he is one of the busiest men in my crew. His activities include anything from repairing a mouse trap to adjusting a motor all of which he does with equal credit to himself and honor to the fraternity.

**Greenkeeping is Complicated and Serious Matter**

It seems to me that greenkeeping, if looked at in the proper light, is one of the most complicated and serious matters in connection with golfing. However the benefits of and pleasure in a well-managed clubhouse cannot be overestimated. A good professional can do wonders to make his course popular and harmonize the activities of the club, but to the greenkeeper comes the multitude of detail that is not realized by the average player. However, let me say right here that if this detail is not attended to, the same average player will notice it mighty quick.

We are very fortunate in having as Chairman of the Green Committee a broadminded man, who knows golf and golf courses (from long experience) throughout the United States and Canada, a man who makes his wants known and expects results, but leaves the detail of labor, supplies and execution of the work largely up to me. I think any greenkeeper reading this article will agree with me that it is a pleasure to work with a man of this make up.

In closing I want to say that I believe that greenkeeping should be considered and recognized as a profession by itself. There is no end to the problems that are constantly arising and to my mind this magazine is the best medium we have ever had for solving them.

The good that will be derived in the future from its mutual insurance proposition cannot be overestimated. It is up to every greenkeeper to support it as a unit and appreciate its support to help us to be a united self-respecting body of men in one of the most popular, solid and growing recreational institutions of the country.
Responsibilities of a Greenkeeper

By JOHN MORLEY, President
The National Association of Greenkeepers of America

IT HAS always seemed to me, that the responsibilities of a greenkeeper are often greater than he realizes. He is first responsible to the chairman of the Green committee who holds the greenkeeper responsible for everything which comes under his jurisdiction. Therefore, the greenkeeper must be on the job to see that the work of maintenance and construction is done in a creditable manner.

He is responsible for the opening of the course at the earliest possible date. As soon as the weather is permissible, he must start to get the course in condition for play and there are a great many things to be done in a short time. Cleaning up the course, burning dead grass in the rough, getting the sand traps trimmed, the sand loosened, and weeds taken out take time. The greens, tees, fairways, and rough have to be rolled, greens top dressed, the equipment gotten ready for operation, benches, tee boxes, and tee markers placed on the course and bare spots to be patched.

Low places where winter kill has occurred have to be raised and resodded, the water system has to be gone over, the water turned on, the water lines examined for any defects and drinking fountains uncovered and cleaned.

Must Keep Course in Perfect Condition

From that time until the close of the season, he must keep the course in perfect playing condition, as he is (with the exceptions of weather conditions) practically responsible for the attendance at the club, and the amount of business done at the Club. He is the hub of the wheel, the spokes, representing the different departments, radiate from him; if the hub is defective, it affects the whole wheel. The result is dissatisfaction, and a financial loss to the club, which cannot be refunded, except by assessment of the members.

The greenkeeper is responsible for the amount of money which is spent for the maintenance of the course. He must be economical, but not to the detriment of the course, and he should be able to buy the best at the most reasonable prices. He should also be able to handle men to best advantage, selecting the men and assigning them to the duties which they are best adapted for, thereby getting his crew properly organized.

Greens Are Biggest Responsibility

The greens are the greenkeeper's biggest responsibility and are a constant care, as destruction can come in a night. The greenkeeper should ever be on the alert more especially during the hot humid weather, as this is when the brown patch is most prevalent, and he should have remedies at hand to combat this disease as soon as it is noticeable. The greatest part of his time should be spent in devising ways and means to keep his greens in the best possible condition.

He is responsible for the equipment used on the course, a department to which he must give a good deal of attention. If he is lacking in knowledge of machinery, he must make himself familiar with it as it is necessary that he keep well informed on new machinery, and whether it would benefit his club, to purchase any new machine, which has been placed on the market. Equipment in proper working order is an asset, otherwise it is an expense.

Water Systems Require Care

He is responsible for the water system which is something that is becoming more extensively used, on a larger scale than heretofore and he must be thoroughly fa-
Making and Using a Bent Nursery

An expert’s advice on the planting and care of stolons in order to secure fine smooth bent sod for putting greens. Selection of ground important

By HIRAM F. GODWIN, Greenkeeper
Redford Golf Club, Redford, Michigan
Read before the annual convention of the National Association of Greenkeepers of America at Detroit

WHATEVER I know about bent grass I feel has largely been acquired from others. I wonder if we appreciate, now that our working conditions have been so improved and freed of ineffectual methods, how much we owe to the work of the Green Section in not only gathering and making available information from practical sources and trained scientists, but in breaking down that old country idea of trade secrets which perpetuates false theories and is a barrier to progress.

Fifteen years ago, our position was little if any better than day laborers; today, we are able to meet together from all over the country as greenkeepers and friends. Our organization itself owes its existence to the unselfish work of the Green Section. I myself appreciate it and I only wish that on my part I were able to add something to the work.

Your committee has requested me to say something about bent nurseries. Now that is something I am really interested in and when I began to think what I could offer that might be original I came to the conclusion that I am entirely a parasite. All that I know has been gathered from others. However, I understand from our scientists that some parasites are harmless and I trust that I am one of that kind.

Took Interest in Lawns

I CAN remember, when I was a boy, I took a good deal of interest in the lawn about our home and that I was very much interested in an article on lawns, in the 1897 Department of Agriculture Yearbook, by Lamson-Scribner. In one paragraph, he described how good turf could be secured by planting pieces of sod six or eight inches apart. This appealed to me and I gathered and planted some pieces. What kind of grass I do not know; any kind of grass that grew on a lawn was bluegrass to me, except quackgrass. I knew quack and that it was hard to mow. It wasn’t quack that I planted.

However, no spectacular results, if any, were obtained and being a boy of fourteen, I forgot about it in a few weeks. I am sure that all who took care of turf between 1897 and 1918 realized the great need of improvement in turf, but even with such a plain hint as to how it could be procured as was obtained in Lamson-Scribner’s article, it took Lyman Carrier and those associated with him in the Department of Agriculture to show us how to do it. I wonder how many hints are now lying around pointing to improved ways of doing our work? In this connection, we might find helpful a turf nursery.

When I heard about the new way to obtain turf being tried in Washington, I was anxious to try it. By this time, I was fairly familiar with desirable turf species; and, as soon as possible, I began to obtain samples and put them out in test rows. I gathered them locally, received them from friends, some from Washington, and one that has been called Inverness in this locality from Mr. Rockefeller, at Toledo. I am still enthusiastically trying new samples; still have hopes some day of finding a grass that will stay green over most of the winter, be entirely immune to all fungus, and so thick and fine as to crowd out even chickweed and pearlwort.

Only Two Strains of Bent

OF ALL the strains tried, at present, there are only two creeping bents which I would recommend for
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Dr. J. J. Montieth, Jr., in the December, 1927, issue of the Bulletin of the U. S. Golf Assn. Green Section, says of NU-GREEN:

"The areas treated with Nu-Green soon developed a luxuriant, dark, healthy green color, which stood out in sharp contrast to the untreated portion, where the turf retained the pale yellowish cast so common on many greens. In cases, these plots were so striking that they became a source of wonder and amazement to greenskeepers, professionals, club officials, and players."

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Say you saw the ad in The National Greenkeeper
putting greens in this locality and they are designated by the Green Section as "Washington" and "Metropolitan." I believe though that you will hear much more about velvet bent during the next year or so; several samples are well worth trying.

Nurseries might be classed as two kinds, one for growing sod or stolons of some particular strain which you have decided on investigation as the one you wish to use. I would suggest putting this on as true a piece of land and free of stones as you can; it will enable you to do a more even job of sod lifting.

The other, an experimental nursery, can properly be on quite rolling ground, so that it will have slopes at least equal to your greens, as some strains of bent apparently give a true surface when flat but on rolls or slopes they have a tendency to form a nap or grain.

My early trial plats taught me a few things about preparing ground for a nursery. If a well worked piece of ground is not available, do not try to plow and work under old sod; it is surprising how persistent and almost impossible it is to weed out the rootstocks of bluegrass, redtop, etc., when you are watering and fertilizing a nursery as it should be. Taking old sod off to the depth of two inches will eliminate the bulk of grass roots and weeds. It is not necessary to work the soil up; in fact, I think that leaving the soil firm is better.

Start Nursery in the Fall

It is preferable to start a nursery in the fall, then, by the following fall you are sure of plenty of stolons; but good results are obtainable from spring planting. Make straight trenches about an inch or two deep. If fall planted, three feet apart; in the spring, two feet. String your stolons along this trench and cover with soil scraped from trench, or, if you want to hurry the growth, cover with compost.

Right here, it might be well to speak a word of caution about allowing stolons to dry out. Some drying does not necessarily kill, but it slows up germination and affects the vitality materially. Stolons that are kept fresh hardly stop growing; it seems as though the leaves keep right on developing. But on stolons where the leaves are badly wilted or dried, the nodes are slow to root and send out new shoots.

It is necessary to plant stolons near the surface and to keep them moist during hot, dry weather, the surface of ground must be kept wet. Anyone who has tried this knows that it is not so easy to do, because to prevent washing, only a small amount of water can be put on at a time. After the nodes root, the grass is more able to take care of itself.

If the rooting period is long drawn out, there is just that much more chance of an accident and weeds have a better chance to get started. As soon as the rows show, begin to cultivate, but use care not to chop off or cover up ends of the runners as it checks the growth. Another thing that checks growth very materially is allowing seed heads to form. This can best be prevented by using plenty of water and fertilizer.

Grass That is Forced Does Not Seed

Grass that is forced shows very little tendency to seed. While hoeing or weeding, eliminate any grass that shows a variation from type you have selected; difference of growth shows up readily in rows. If you do not use your nursery rows for stolons the first fall or following spring, I think it pays to turn them into a sod bed by mowing and topdressing, and start new rows for stolons. A stolen nursery need not be over one-fifth the area you wish to plant with stolons.

Usually, after the first year, when sod has formed, some clover, bluegrass and other weeds work in; these weeds, along with the bunchy way sod comes up, require more weeding and topdressing to produce a good turf than where year-old nursery stolons are used.

Before starting any nursery, be sure that you can give it regular care. Sod from a neglected nursery is not desirable for a green and experimental plats would give you no real information. Nurseries can be useful, or only a matter of expense. Do not try to have a sod bed so large that it would be three or four years before you could use it. Have just about what you will use in a
For the Control of Brown-patch on Golf Greens

TURFCALOMEL is the outcome of experiments to determine the most satisfactory, efficient, convenient, and safest fungicide for both large and small brown-patch. It contains both corrosive sublimate and very finely powdered calomel carefully adjusted in composition with mineral matter. This composition has distinct advantages. It prevents caking, gives bulk, and allows of a more even distribution of the active ingredients—thus reducing to the minimum any possibility of burning the turf. Will also serve to eliminate earthworms.

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year; it saves a good deal in the cost of mowing, weeding, etc. Keep renewing your nursery where sod has been removed; you will find after removing the first crop of sod, that successive plantings are much more free of weeds. Sod is formed quicker and at less expense by broadcasting stolons.

Use Sod Nursery to Replace Greens

ON an established course, I should always rely on a sod nursery for the material to replace a green. A few years ago, I took the mixed sod off of nine greens and replanted by the stolon method. Although I did not begin the work until after September 15 I had them playing on better greens than the old ones, by the following May 30. Even so, there was plenty of complaint about being off the regular greens. My greens chairman and his committee certainly stood behind me, but I knew from occasional anxious inquiries as to how the greens were coming that they were recipients of complaints that I never heard about. Since then I have found that I could grow sod, transfer it to the greens during the latter part of November or the first part of December, and the players generally are not inconvenienced.

Some sod of the same strain as the greens comes in very handy for patching. Early last spring some vandals; that is, caddies not busy caddying, found a can of oil which they poured on a portion of a green and then set fire to it. On discovery, I immediately had the oiled patches replaced with nursery sod and after two weeks of growing weather you could not tell where the patches were. Knowing that he can replace destroyed turf immediately relieves a greenkeeper of just that much worry.

Use sod for plugging where large weed patches are removed; although with a good strain of bent on a green, I do not think large patches should be allowed to form. One thing I would not attempt to do; that is, to change the character of turf on a green by plugging with sod.

A few years ago I heard a greenkeeper say that they had several acres of "Washington" bent sod that they would not use because it turned brown over winter. I did not know what kind of turf he had on his greens; I doubt very much if it was as fine putting and as easily taken care of as the Washington would have been. Now, there was an expense that could have been avoided by the use of an experimental nursery, as a plat 10 x 10 would have shown that club the characteristics of Washington bent.

For Testing Strains, Plant in Rows

FOR testing strains, I should plant in rows. One piece of sod I received from Washington, supposedly of a particular strain, showed on being planted in a row that it was composed of at least five distinct strains.

A nursery is just the place to try out that chemical that

Say you saw the ad in The National Greenkeeper
you have been told will kill chick weed and not hurt the grass, or that acid that clover doesn't like. If you think that watering in the sunlight hurts the grass and night watering is better; try the two ways on different spots in the nursery.

Nurseries from seed have small value, as stock from which samples were taken would, of course, not be available when crop had developed.

I would say that if you have never handled bent, it would pay to try some experimental plots for a couple of years to find out which strain you like and how to take care of it. Then you will have a sod bed which, properly cared for, offers a means to change permanent greens over into the finest turf, at no inconvenience to the players.

Philadelphia Greenkeepers Meeting

President Lewis M. Evans gave the Philadelphia greenkeepers a rousing talk about the Detroit convention at the regular March meeting of this association. Mr. Evans was recently elected treasurer of the National Association of Greenkeepers of America, also a member of the Executive committee.

Mr. Leroy, the next speaker spoke on Pennsylvania oils of paraffin base regarding their viscosity, flash point and lubricating properties. Mr. Young a representative of the Ford Motor company next spoke on the quality and properties of the ammonium sulphate produced by his company. Mr. Farnham reviewed the by-laws on membership and asked for criticisms.

The meeting adjourned at 6 o'clock at which time dinner was served.

E. T. Young, Secretary.

Noer Addresses Mid-West Greenkeepers

Mr. O. J. Noer, author of the ABC of Turf Culture, addressed the regular meeting of the Mid-West Greenkeepers Association held in March at the Great Northern Hotel, Chicago.

Mr. Noer talked upon the subject of “The Physical Structure of Soils,” illustrating his talk by means of charts showing the various soils and their classifications namely—clay-silt, very fine sand, fine sand, coarse sand and clay loam. Also the chemical composition of soils, the soil structures and the individual aspects of soils were very interestingly told.

The subject of soils is of tremendous importance and knowledge of same is the fundamental upon which the future construction of greens will be based in order that the best results may be obtained from the application of fertilizer and fertilizer materials. Following Mr. Noer’s lecture, questions were asked him.

Ed. B. Dearie, Secretary.

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Say you saw the ad in The National Greenkeeper
A Western Experimental Station

By CHARLES EVANS, Jr.

A GOLF course can be no greater than its greens, and every greenkeeper is well aware of the fact. Experiments with grasses, soils and climates have been conducted for a long time with considerable success, but there is much more to be done and learned.

The United States Golf association conducts a station near Washington, D.C., and the knowledge and discoveries of its green section are at the service of the membership clubs of the association, and in the comparatively short time that it has been engaged in this technical work it has been of great service to the clubs of the country. But climate has a great deal to do with the growth of the numerous species of grasses, and the sort of grass that flourishes best near the city of Washington might not be the very best kind for Chicago and other parts of the Middle West, therefore, an experimental station a little nearer home might be of considerable value.

SOMETIMES I have thought that there could be found a sort of grass that would grow in any soil or climate. At least I might have believed that had I never seen Butte, Mont.; having seen it, I find myself occasionally afflicted with a strange unbelief, but perhaps I should never expect anything except lichens to grow on rock. I am encouraged in my attempt at optimism by the knowledge that in many states of the South, where grass on tees and putting greens was practically unknown, Bermuda grass now has justified its name and turned the dark, sandy places on golf courses into bits of pleasantly green landscape. With the advent of Bermuda grass in the South there came champions, so who knows what a really fine new grass might do for our section.

The bent grasses and the planting of their stolons for quick greens have taken a very certain place on all courses, but there is still a very decided uncertainty about our greens, and I know of no place where thousands of dollars can be dropped more easily, and no place where one cares less to experiment. Yet, how often are we called upon to run these risks.

I recall a time when, for a number of years, the old Homewood club had the finest greens around Chicago. Then they began to change, and with all the expense and expert care given them they continued to deteriorate. There seemed to be no knowledge expert enough to meet the situation, and finally, as I remember, the greens were dug up and completely rebuilt. A rather tragic situation for any club to have to meet. Having to destroy and begin over again puts a whole course out of play for a long time.

THE Chicago Golf club, after years of unprecedented success, suffered greatly with its greens. Now I understand they are in beautiful condition, but the course has been almost entirely made over. The Edgewater Golf club has also suffered with its greens, but now has very good ones but the great question about these successful greens is: How firm is the foundation on which they are builded? Will they keep indefinitely in good condition, or will they have to be rebuilt after a few years, at a great cost of money and inconvenience to the members? Or have their greenkeepers attained the certain knowledge of upkeep that means good greens lasting from year to year? Happy the time when we know the care and treatment necessary to insure us the green and velvety beauty that we love to associate with our courses.

THEREFORE the commissioners of the forest preserves of Cook county are willing to give free of charge to a responsible association the ground and a house for an experimental station in the raising of grasses. The clubs of the district will pay a fee for upkeep and experiments in soils and grasses. Such a station should be invaluable to the golf courses, and even to the farmers, of the Middle West.

The probable location for this interesting experiment that promises to be so useful is at Dam Number Two, just west of Wilmette, Ill. It may mean everything that is good to our part of the country and that is why I have saved the announcement for the very end of the article.

Editor's note—This article is reprinted by permission from the April number of the 10,000 Lakes Golfer.