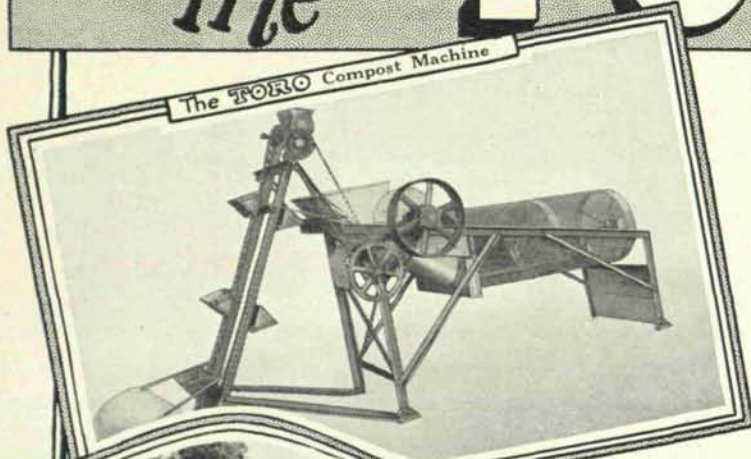


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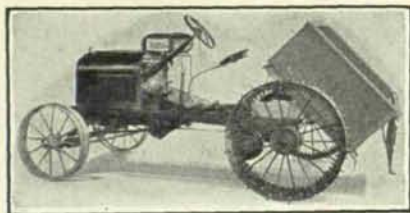
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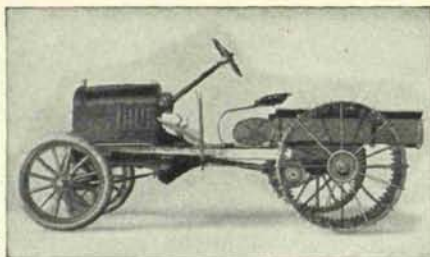
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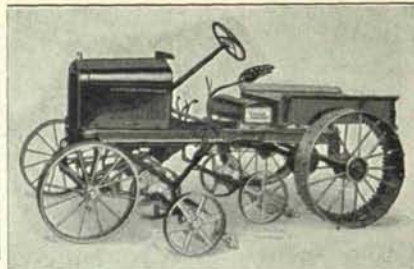
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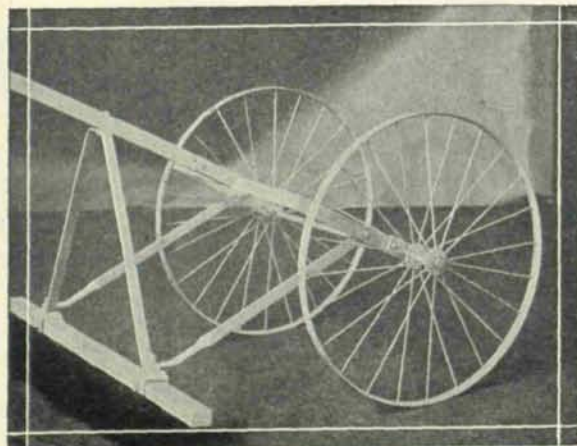
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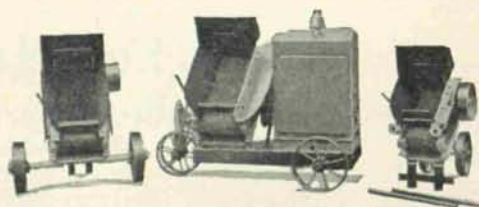
This is a valuable machine, for the greenkeeper, having various uses, some of these are, rubbing in compost after top-dressing, brushing worm casts, bringing the runners of bent to the surface where they can be cut, brushing the greens in the early morning, getting the dew off, and giving the grass a chance to dry off, so that the greens can be cut sooner, also "lessening the danger of Brown Patch."

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Official Organ of The National Association of Greenkeepers of America

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VOLUME I.

No. 11

Wilshire Votes for Bent

By ROBERT S. GREENFIELD, Superintendent
Wilshire Country Club, Los Angeles, California

IN 1920 when I enjoyed the good fortune to become connected with Wilshire Country Club as superintendent, local data of what was suitable as regards turf for Southern California conditions, was decidedly lacking.

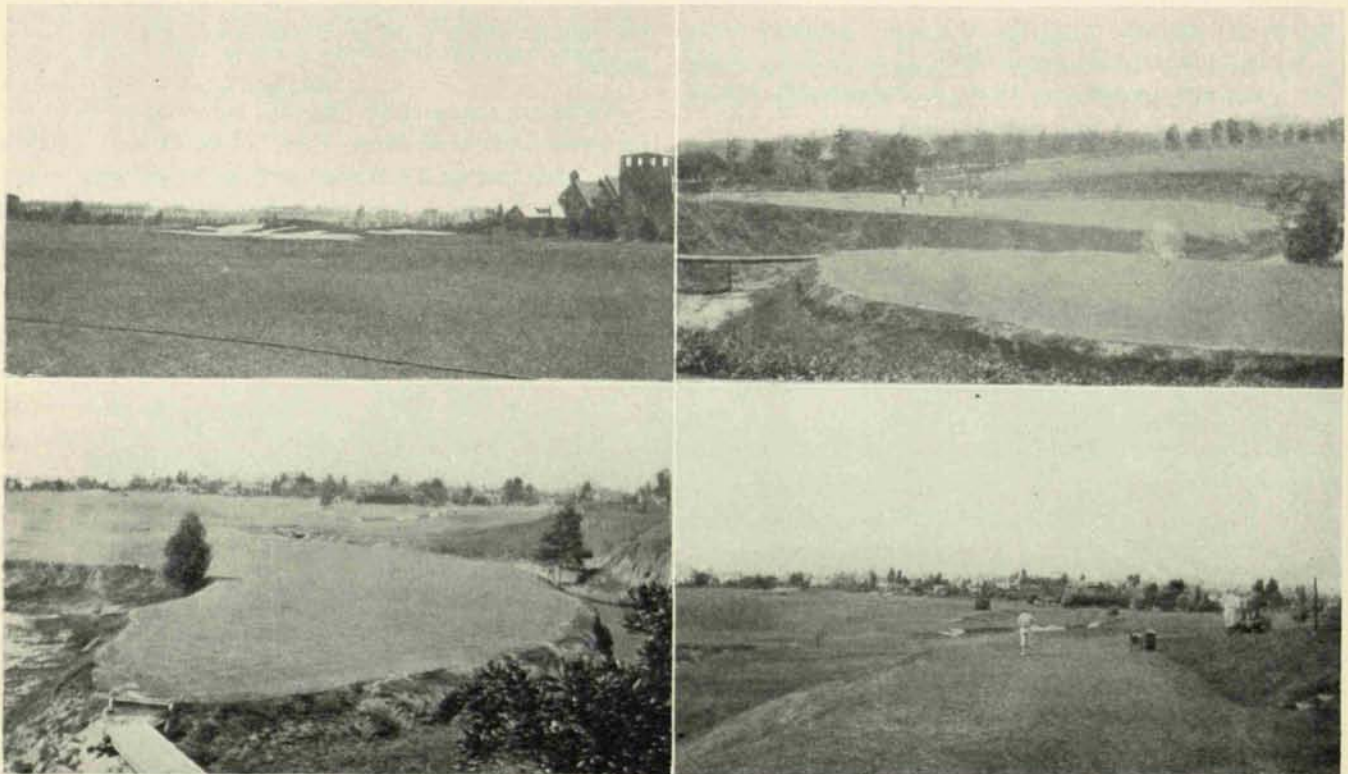
We had up to that time fair results from the popular green mixtures, though these mixtures were made up by eastern seed houses not fully acquainted with our climate and soil conditions.

We decided to buy only straight varieties of seed, and

put in our own mixture of Chewings fescue, redtop and blue grass, and following the advice of the United States Green Section as regards care and feeding we have enjoyed excellent results.

Bermuda for the Fairways

Bermuda grass having been used for fairways by all clubs at that time with good results, Wilshire did likewise, and though this grass is extremely difficult to keep out of the greens, I'm still an advocate of Bermuda un-



Views of Wilshire Country Club, Los Angeles. Upper left, sand trap replacing old pot bunker; upper right, number 16, a 560-yard hole; lower left, 410-yard number 18, and lower right, number 10, 155 yards

less the soil conditions are favorable for the less hardy grasses.

During the last two years bent has become very popular in Southern California, and among the local greenkeepers is something of a "bone of contention" regarding the mixtures of the various strains.

Seeding Bent on Established Greens

At Wilshire after considerable experiment we decided on "Cocoos" strain as our choice owing to the fact that seed is available and also that the seed will germinate quite highly in established turf. The last was the deciding factor as the greens were too good to be torn up.

Wilshire greens are free from Bermuda, but the cost of never ending weeding, and annoyances to the players of having men on the greens all day made it necessary for us to try for greens with a thicker, more compact turf having a tendency to keep out weeds and undesirable grasses. So far the results are most encouraging.

Pot Bunkers Changed to Sand Mounds

Styles of courses have changed much since Wilshire was constructed. We enjoyed or suffered from the old style pot bunkers, but having a heavy adobe soil, drainage was very difficult and often impossible and the usual troubles developed during the winter rains.

We are fortunate in being a "close-in" club, so close in fact that the city has grown all around us, so by scouting around we were able to get free dirt from various building excavations and have filled in our pot bunkers above water level, making some very attractive sand mounds at nominal cost.

The usual troubles of the Eastern greenkeepers are ours also; brown-patch, worms, grubs, etc., which we try to combat with standard remedies with average fair results.

Maintenance is rather a big item out here with the necessity for nine or ten months' irrigation, but we are gradually bringing costs down. The introduction of creeping bent is, I believe, the biggest single advance in greenkeeping during the last ten years.

Do You Grow Mushrooms?

By JOHN McNAMARA, First Vice President
National Association of Greenkeepers of America
Pittsburgh Field Club
Pittsburgh, Pa.

NOW that the brown-patch fungus season is about over for another year, I thought it would interest the readers to tell them of a better flavored and much more profitable fungus called 'mushroom.'

In past years, when tractors and machinery had not replaced horses, and manure was thrown or given away, I used to supply not only the club but the members as well with this table delicacy, but now that manure is at a premium I have given up this practice as

the club at which I am employed does not have a riding stable.

There are many clubs that still maintain a stable and the greenkeepers of these clubs can fill in some of their spare time during the winter months by growing mushrooms. It is a very interesting occupation. Any barn or cellar where the temperature ranges between 50 and 60 degrees is suitable. Although the mushroom is a variety of fungus it will not thrive in an unclean place, therefore it is of vital necessity to keep the barn or cellar whitewashed and clean.

This is a good month to start preparing the compost for your bed, and in the snowy months you will reap the benefit of your labor.

The picture of the mushroom bed was taken in the cellar of my house at the Pittsburgh Field Club in February. A time exposure and cellar lights with a small box camera produced it. It gives you a faint idea of the crop and you can see that there are plenty of mushrooms in the bed.

If the compost is mixed on the outside and transferred when ready to be put in the beds, you will find that it does not carry any objectionable odors, either in the house or barn.



Mushrooms growing in Mr. McNamara's house cellar.

After the Constructor—What?

By CAPTAIN DAVID L. REES, Vice-President
National Association of Greenkeepers of America
Progress Country Club, Purchase, New York



Captain David L. Rees

IN these days when new golf courses are coming in to being in such steady and quick succession, it may not be amiss to consider for a moment the greenkeeper in relation to the strictly new course. There must be many who may have been in our greenkeeping profession for years and years without having been called upon to take over a brand new course and these many can probably be called fortunate, for the entirely new proposition confronts the greenkeeper with a thousand and one new problems, the handling of which will prove decidedly more of a tax than the mere maintenance of an already established course.

The greenkeeper going to take over a new course seems to me very much like the housewife contemplating moving into a newly built house. She sees the building contractor complete his job and take his departure, but does she expect forthwith to put rugs and furniture in place and sit down in bland comfort? Oh, no, the house must first be dried and aired and that must perforce take time. Then the countless details of making the house habitable and wholly comfortable have to be tackled—altogether quite a long time elapses between the completion of the builder's work and the day when the house is ready for occupancy.

And exactly so it is with the new golf course. The constructor's job entirely completed, there remains many an essential to be taken care of before the course is ready for play and still many more before the course is sturdily established and capable of being maintained on anything approaching an accurate budget.

The Training of Greensmen

The first problem facing the greenkeeper is the labor one. If he is fortunate enough to be in a neighborhood where other golf courses flourish, he may secure a number of experienced greensmen. His problem would in such a case, of course, be very greatly simplified, but even so he will, for a while at least, have to give considerable time to personal supervision, until he has all his greensmen working exactly according to his own particular methods. If circumstances compel the greenkeeper to employ local labor and he finds it wholly untrained, he must then carefully choose his men, and



A winter view of Number 15 green at Progress Country Club.

proceed carefully to train them. This will make an exacting demand on both his time and his patience—good greensmen are not made in a day—indeed, I sometimes think that good greensmen are born, not made.

Equipment, Repair Shop and Storage

Having lined up his gang, the greenkeeper turns his attention to equipment. The constructor has probably bequeathed him a scarred and well-worn tractor and possibly a fairway unit. Those will doubtless have to be overhauled and there will be putting-green mowers to select. The question of housing of equipment is one that very often receives sadly scant attention and the greenkeeper may find nothing more than an inadequate, weather-worn shack assigned him as an equipment shed. He would be well to insist at the outset on a sound, satisfactory building for this purpose, including a repair shop for machinery equipped with lathe, grinder, drills, etc. The equipment shed should be of such size as will allow for the winter job of repainting equipment, tee-boxes, markers, etc., and the greenkeeper must also have dry-room storage for seed and such commercial fertilizers as sulphate of ammonia. The ideal equipment storage building will, naturally, be furnace heated.

Road Construction

The golf course constructor is not naturally, perhaps, concerned greatly with ways and means of maintenance and it is unlikely that he has troubled to make roadways and tracks over which the tractors may be taken from one fairway to another. The making of these tracks will be one of the new greenkeeper's earliest tasks.

Starting Nursery and Compost Pile

On a new course there will be seldom, if ever, a sod nursery already prepared. The greenkeeper will have to choose a good location for this—somewhere well out of the line of play and then extend a water-line to the site. The compost pile, too, will seldom be already started, and the making of a new one will claim the greenkeeper's immediate attention.

Cleaning Up the Fairways and Rough

If the constructor has been pressed for time—and he always, always is—there will probably be tree-stumps here and there that have yet to be removed. After a season's frost, many stones will make their appearance on the fairways and throughout the season the weight of the tractor mowers passing over and over the ground will cause still more stones, or rocks, or boulders, to show up. This business of getting rid of stones, rocks, stumps, etc. will of a surety absorb a good deal of time for perhaps a couple of seasons.

And again the rough areas of the course may have received little or no attention at the hands of the constructor, and if those are to be cut by a rough-machine, then the greenkeeper no doubt will find quite a number of boulders and rocks there that must perforce be removed.

Laying Extra Drain Tile

One of the most important of the new problems for the greenkeeper will be drainage. While a certain amount of drainage work will undoubtedly have been done by the constructor, there will still be a great deal more drainage work to be done in the first year or so, and the greenkeeper, by reason of his constant observation and attention, ought to be the one to know best where drain lines ought to be laid. Spring and autumn seepages and summer rains will reveal to the greenkeeper where the water is to gather and only after a full round of the seasons will he be in a position to know exactly what he will be called upon to do in the way of drainage work.

Grading and Finishing Touches

Very frequently on his new course the greenkeeper will encounter steep grades at the backs of greens and the sides of tees. Such grades are, of course, hard to maintain and he will be called upon to remedy such defects by grading. Around traps, too, he will in all probability find that he really must put more of an "edge" than has been left by the constructor—this to prevent surface water from pouring into the traps. And so on, such extra jobs as those enumerated above will absorb the new greenkeeper's care, attention, and time throughout his first and possibly his second season—and only after they have been taken care of will he be able to settle down to more or less routine maintenance.

Perfecting the Putting Greens

While those manifold "extras" have been receiving his attention, the greenkeeper will be occupied with the all important task of bringing his putting-greens up to standard. It is comparatively easy for the constructor to get a good "catch" of grass, since he merely has to sow the seed and let the grass grow naturally, but it turns out that the period of the constructor's care is the only time when the grass will really be allowed to remain in its natural state. When the greenkeeper arrives on the scene he begins the constant cutting of the greens and then it is only by his assiduous care and judicious application of top-dressing, with persistent attention to the matter of weeding, that the greens will be brought to the stage of perfect putting surface and maintained as such.

Nebraska Conditions Challenge Skill

By J. O. CAMPBELL, Greenkeeper
Eastridge Country Club
Lincoln, Nebraska

I CAME to the Eastridge Country Club, Lincoln, Nebraska, April 1 from Oakwood Club at Dodson, Missouri, a suburb of Kansas City.

Eastridge is an 18-hole course, eight greens of Columbia bent and ten of Washington bent.

We have a re-construction program which we intend to carry out within the next three years. It includes trapping fairways, re-modeling old greens and building two new ones. After this work is completed we will have a real championship course.

The plans for the re-modeling were furnished by Orrin E. Smith, golf architect of New Britain, Connecticut, and I am doing the construction work. I have already trapped two fairways—Numbers seven and ten. I have also built Number ten green, planted it with Washington bent stolons September twelfth. We expect to bring this green into play by July 1st, 1928. We use no drainage under the greens as our soil is a rich sandy loam, therefore eliminating drainage difficulties.

We have our own water system of two deep wells and automatic pressure tank. We have fairly good pressure over the entire course. We are making plans to water the fairways, which is very necessary in this part of the country as we have very little rainfall during the summer months. We water every night during the hot weather in order to keep our greens in good playing condition. Our course is built on high, rolling ground and with the hot winds the greens require lots of water.

Methods Vary With Local Conditions

I wrote a short article for the July number of *Golfdom* on—"Midsummer Methods in Nebraska." In the September number of *Golfdom*—a greenkeeper criticized my method of watering from 7 A. M. to 6 A. M. He says, "If I watered that many hours I wouldn't expect any greens at all." I say and I know from experience that if we don't give that many hours of continuous watering with the thermometer registering 100 degrees or more, and a thirty to forty mile gale blowing, by noon our greens are dry and hard, so that a pitched ball onto the green will not stick, and our grass begins to take on that dreaded drab color. Then all the members are wondering why their pitched shot won't stay put.

I learned greenkeeping in the east, and this is my second club in the middle west. I have found that the

methods used in the east cannot be used satisfactorily in this part of the country.

I have been asked by several greenkeepers the best time to plant greens. I am convinced that fall planting is the best time if planted early enough to get a good stand of grass before winter sets in. My main objection to spring planting is the weed problem.

Sulphate of Ammonia in Weed Control

During May and the early part of June we had a great amount of clover. We are gradually getting rid of it by the use of sulphate of ammonia. I have applied it every ten days since July first. This is a slower process than hand weeding, but it is a more economical way and saves scarring the greens which naturally follows hand weeding. I had no bent to fill in with, but have a nice nursery of Washington bent growing now.

There is very little brown-patch in this particular section of Nebraska. We have had a few slight attacks of the dollar patch, which was easily checked by the use of calomel, one-half pound to the green.

The Nebraska State Open Tournament was played over Eastridge, August 17th and 18th. After all the hard usage the greens received during the tournament they were in perfect playing condition, and I received lots of fine compliments from visiting golfers.

Keeping Mowers Adjusted

My method during the summer is to water greens every night and mow them every day. Adjust the mowers to the proper height and leave them during the mowing season, see that your reel is properly adjusted each morning before mowing. My experience has been that, by raising and lowering the mowers it causes the turf to become fluffy and uneven.

Fertilizing Methods

About once a month compost with a mixture of 50 per cent sand, 15 per cent horse manure and 35 per cent of good black loam. Be sure to use plenty of sand as it lowers to its level. It acts as an aerator and lets oxy-



gen down to the roots of the grass. I used commercial fertilizers as needed. Sulphate of ammonia, ammonium phosphate and Urea. Urea if properly applied is very effective for turf culture, but it is dangerous if carelessly applied, as it burns roots as well as stolons. There is no comeback as there is with the other chemicals. I apply all of my chemicals in liquid form with a barrel sprinkler and water immediately.

Make Your Nursery Your Laboratory

I certainly do not believe in experimenting on the greens. Use your sod nursery as a laboratory. During the tournament I had a talk with an entrant from a neighboring state—he told me that an expert from a chemical house had been allowed to experiment with a number of chemicals on a course in his town and had practically ruined four or five new bent greens which were in excellent condition before he started. I wonder how many of the men the chemical houses send out have had practical greenkeeping experience. We all know that grasses in different localities must be handled differently. For instance in the east they say, "do not water at night" during the brown-patch season," but every time I fail to water at night even if we have a light rain, I find some brown-patch on my greens in the morning.

Eastridge is a comparatively new club. Before I came here there was no greenkeeper. The chairman of

the Green committee was in charge of the course, but being a very busy man he could not devote as much time as was necessary, and the results were the course had not been properly maintained. The members tell me it shows a 100 per cent improvement this season.

Where Not To Cut Expenses

Reducing the club budget is usually started by cutting the force on the golf course. This in my opinion is a mistake as 90 per cent of the club members are golf players. Take away the members who come to the club for the purpose of playing golf and there aren't many left to maintain the club. Yet they seem to think the course maintenance is the least important of all.

I have found the Green committee a very fine group of men to work for, and feel that we have really accomplished considerable for the amount of money we have spent.

Let's Meet in Detroit in February

I have enjoyed the articles in the GREENKEEPER. Have learned a great deal since our first magazine was published.

I especially enjoyed the "Chat with our President" in the September number. I hope he writes many more. I would like to meet most of the members in Detroit in February.

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To be reprinted in Book Form

THIS remarkable series of articles on the growing of turf grasses for golf courses which has been appearing exclusively in the NATIONAL GREENKEEPER since last January will be published in book form at the end of the year.

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