

Puts Spotlight on Grass Disease Findings

DISEASE pests that attack the grasses of putting greens have been receiving a great deal of attention from specialists. Arnold S. Dahl of the Green Section has been doing considerable experimental work along the line, and the results of his efforts are of importance to greenkeepers everywhere.

Snow mold is one of the nuisances known all over the northern states and Canada as a cause of great damage to grass areas. This is a disease that develops under the snow during the winter and causes patches of dead grass from a few inches to more than a foot in diameter. The patches are usually dirty gray in color and may have a pinkish tinge.

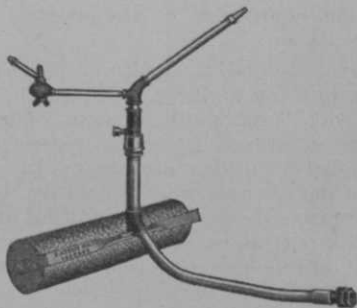
"Snow mold is caused by a fungus growth," Mr. Dahl explains, "and the conditions under which it develops most rapidly are a freezing temperature and a very humid atmosphere. The practices of covering the greens with straw in the fall, and with heavy fertilizer late in the autumn season, often encourage this disease to occur in great severity. In our experimental work, corrosive sublimate and calomel have both been found effective in handling the disease. These remedies should be applied in the fall at the rate of three ounces for 1,000 sq. ft. Smaller quantities, we found, were not sufficient."

Large and small brown-patch, with which many greenkeepers are all too familiar, are two more pests for which Mr. Dahl suggests specific remedies. In describing large brown-patch for identification by those not acquainted with it, Mr. Dahl says that the disease is most likely to occur in patches from a few inches to several feet in diameter during hot, humid periods of the summer. The leaves of grass in the patches are blackened at first and then finally become dry and brown. All the leaves in the patch will probably not be killed unless the condition remains favorable for the disease for several days at a time. The grass will sometimes recover of its own accord if the weather becomes dryer and cooler, or if the turf is treated with the proper fungicides to restore it.

Small brown-patch, the disease that gives a moth-eaten appearance to greens, is usually scattered over an area in patches of two inches or less in diameter. In an attack of this disease the leaves in the patch are killed but the stems and roots remain alive. Small brown-patch can always

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be recognized because the dead leaves look all bleached white.

In their susceptibility both to large and small brown-patch there has been found to be a distinct difference in the grasses used for putting greens. Some grasses are likely to be attacked by both diseases, while some are resistant to one disease and susceptible to the other. Washington creeping bent, for example, is very susceptible to small brown-patch, but resistant to large brown-patch. Metropolitan creeping bent, on the contrary, resists small brown-patch very well, and is often attacked by the large variety. Virginia creeping bent, however, is susceptible to both.

Experiments in the use of fertilizers have shown that some fertilizers encourage the occurrence of the disease while others do not.

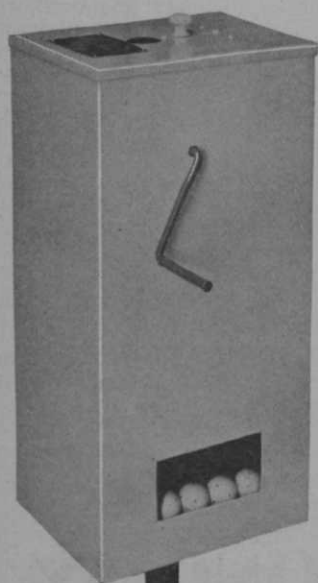
"Urea, especially, when used to excess is likely to bring on large brown-patch," says Mr. Dahl. "Ammonium sulphate, when used too much over a period of years, makes brown-patch quite prevalent. In cases where the diseases were caused by the use of fertilizers, however, the addition of lime has reduced the extent of the disease.

"All of the mercury compounds, except

mercury sulphide, when applied in amounts containing the same weight of mercury, were found to be effective in controlling the disease. Large brown-patch can be satisfactorily and economically controlled by mixing together one ounce of corrosive sublimate and two ounces of calomel and applying it to every 1,000 sq. ft. of grass area. Small brown-patch can be controlled with three ounces of calomel."

While most strains of creeping bent seem to be quite free from the disease called *zonate leaf spot*, Virginia bent is often likely to be attacked. This disease at first causes small spots to appear on the leaves. They are about the size of the head of a pin and of a brownish color. After a while the spots get larger and the centers become straw-colored with brown rings around the edges. When the leaves are wet the disease is quite likely to spread and cover the entire surface. In severe cases the turf may be entirely deprived of its leaves.

In the southern sections where creeping bent is used, *pythium disease* is somewhat likely to occur, but it is never very common. *Pythium* causes small brown patches on the turf, usually two or three inches in diameter. The patches may spread so that



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larger areas are covered. It is not difficult to tell this disease because of the cobwebby growth that appears above the patches. The patches are usually seen in streaks across the green. Pythium kills the leaves, stems and roots of the grass, so that when it does occur it is more serious than any of the other diseases.

Experimental work has been carried on for two summers in connection with zonote leaf spot and pythium. Some favorable results have shown up in the control of zonote leaf spot, Mr. Dahl states, but as yet no definite results have been worked out for either of these two diseases.

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Compare Course Costs With Extra Care

LIKE all Gaul, the greenkeeper's problem seems to be divided in three parts, money, methods and results. These pages have been packed with method and results articles but we plead guilty to having slighted the financial aspects of greenkeeping in the allotment of space. The reason for this omission is quite plain, but is losing its strength rapidly with the increase in the number of experienced green-chairmen.

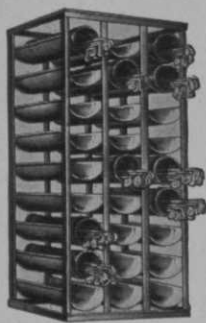
We regarded loose publicity on green-keeping costs and its loose interpretation and employment in the same manner as set forth in an issue of the New England Greenkeepers Newsletter. Mr. Guy C. West wrote what we reprint at length below.

Danger in Skimming

"It is unfair to say or publish that any course is costing more than another to maintain, without giving the greenkeeper and green chairman a hearing at least. It is possible that they may desire to spend more money, getting possibly a better degree of maintenance, and it is probable that they may be able to point out some factors which influence costs there which may not be apparent to the "discoverer of costs" who too often skims the surface.

"It is my personal opinion, and I have made a study of golf course costs for several years, that a search for costs may do some good, if it is complete and fair. What would do much more good would be a campaign to get every course to have and keep a cost analysis system of their own. A comparison of costs from year to year on any course will often do more good than a comparison with costs on another course.

"All the questionnaires ever sent out, and all the results obtained, will not alter the conditions now prevalent that courses spend far different amounts for maintenance. There might be mentioned the fact that different clubs have differing dues, differing memberships, hence different incomes. Expenditure must be governed by income. Then too, there is the range in courses from the "cow-pasture" variety, to one of championship calibre. Add to these differing factors, such as topography, soil, water supply, kinds of grass, yardage, etc., all influencing costs, and one can readily see that costs will al-



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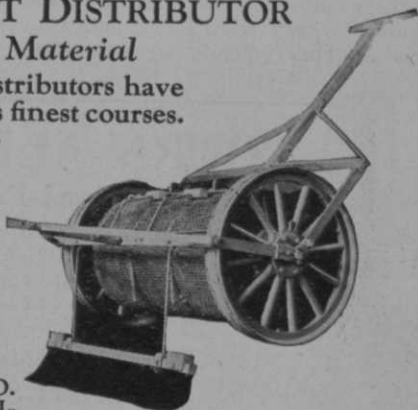
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ways differ. They will differ from year to year on the same course, and the cost system should show why and where they differ. Be prepared to explain these changes on your own course, and do not forget to watch out for unfair comparisons, and to condemn them!"

Where Greenkeeper Benefits

This statement sets forth the able greenkeeper's idea on maintenance cost study. He has nothing to conceal and eventually, we hope, club officials will give their greenkeepers full credit for the effort being made to cut maintenance costs. It must be appreciated that the greenkeepers' main hope of establishing a higher salary standard is in maintaining their courses in first class shape with such economy that the thrift will permit a more respectable portion of the budget for the greenkeeper's salary. You can see that legitimate and perfectly human impulse sticking out all over the studious interest and good attendance at the short courses in greenkeeping and at the greenkeepers' meetings.

These fellows are anxious to save money for their clubs but they also are excusably anxious to keep from being nailed to the cross by club officials who hear that a

neighboring course is costing a couple of thousand dollars less to maintain per year, and look no further into the matter.

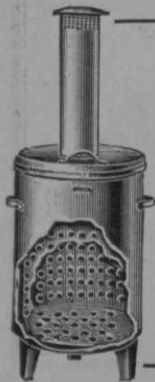
One of the well known greenkeepers, Fred Sherwood of the Birmingham G. C. (Detroit district) reveals the greenkeepers' attitude in the matter. Sherwood says:

What and How Spent?

"Why, once in a while, don't some of the first-class golf clubs that have such praiseworthy features reported of them in the magazines, give their greenkeeper permission to publish in detail the expense of his maintenance for the year?"

"It would make interesting reading not only for the Chairman of the Green-Committee but also for the greenkeeper if one could compare notes with some of the tip-top clubs on such items as labor, fertilizing, seed, equipment, etc., for one financial year. If conditions were all alike it would be a very simple manner to adjust a budget, but all things not being equal in golf courses it is a complex problem to arrive at a figure that would be a basis for an 18 hole golf course (in expenditure).

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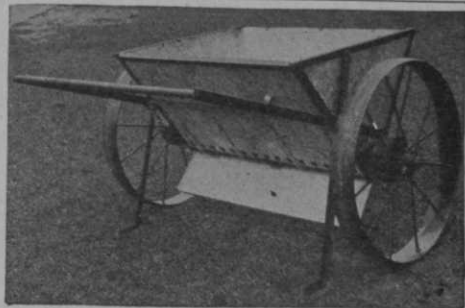
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tions where soil conditions were good in every way; fields which had probably been fertilized for a decade or two. It can readily be understood where this condition exists that the yearly expenditure is not nearly so high as a golf course that is laid out on hilly ground of baked clay or a site which is probably a composition of very poor sandy soil.

"It is a common remark of club members to say, 'I played so and so's course last week, the greens were excellent, fairways were perfect; why can't we have the same conditions here?' The greenkeeper will probably say, 'I hear they are good, but how much do they spend on them?' If budgets were published showing figures of expense so that comparisons could be made, it would be good arguments for many greenkeepers when talking to their chairman. To my mind it is far more important in greenkeeping to keep tab of all your expenditures than it is to say, 'I put on so many pounds of Mr. Black's mixture, per directions.'"

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Member Interest Sags, Club Offers Insurance

ONE of the clubs that was put on the bum by promoters who took their customary deadly percentage of the income during the formative stage, made use of an interesting life insurance plan in trying to revive the moribund enterprise.

The club's bulletin describing the idea read:

Last August the membership voted an assessment of \$250.00 and about four hundred members have met this assessment to date. If you pay this assessment you are insured under a 20-Year Endowment Policy for \$250.00 plus the amount you have already paid in for your membership. The Club pays the premiums on the Life Insurance Policy, which means that you or your beneficiary are assured of the money paid in and you have your membership equity without cost. The money so collected will remain in trust until there is sufficient amount to go ahead with the building. If sufficient money is not raised, the money less nominal expenses will be returned.



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By JACK FULTON, Jr.

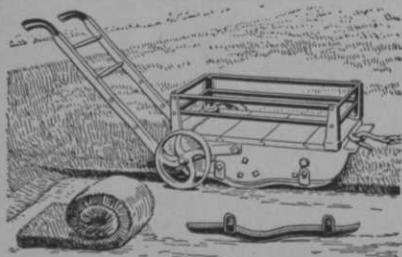
LEADING all other golf clubs in volume of operation, Olympia Fields C. C. in the Chicago district, with its four 18-hole courses and its palatial "million-dollar" clubhouse, naturally does things in wholesale fashion. To service the demands of its 1,000 members, the club has nearly 300 employes on its payroll, a surprising number of them tucked away in behind-the-scenes departments of the mammoth clubhouse where they never come into actual contact with the members.

Naturally, in so large an establishment it is necessary to employ the very latest in labor-saving and money-saving devices, and Olympia has installed many a piece of equipment, operates many a sub-department not ordinarily to be found except in the better-run hotels, which in final

analysis, Olympia resembles (in its house operation) more nearly than it does a golf club. Yet there are a number of these added departments which any first-class golf club could likewise install to its ultimate financial profit. For example, at Olympia there is the club laundry.

Col. C. G. Holden, manager of Olympia Fields, is thoroughly sold on the advantages accruing when a golf club runs its own laundry. He pointed out to the writer that not only is there a large saving over and above the cost of sending the club's dirty linens to a commercial laundry but there are other savings as well.

"Take added linen life, for example," he said. "Many outside laundries operate to turn work out in the quickest possible time. They employ washing compounds as strong as they think they can get away



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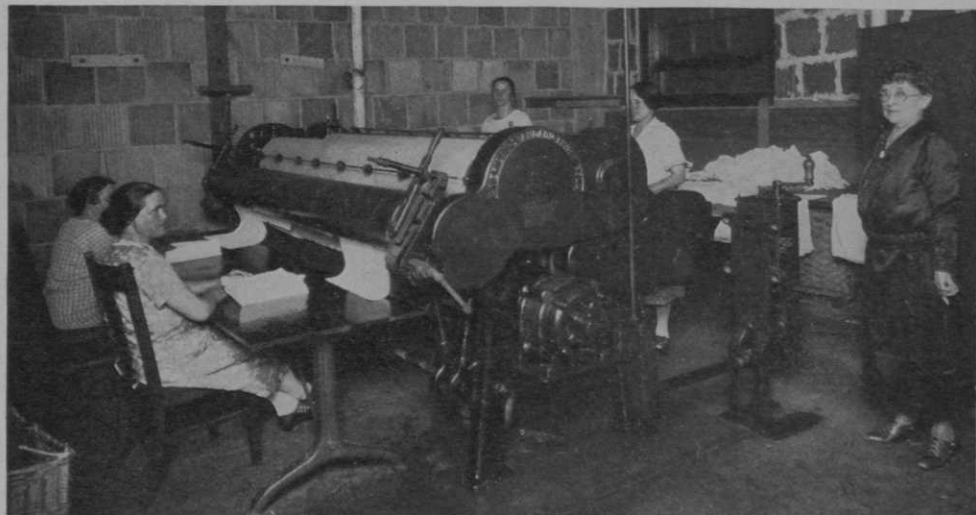
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One corner of Olympia's laundry, showing the 3-roll ironer in operation. The hand towels, being ironed and folded here, go through the machine at a rate of 250 pounds per hour

with, use bleaching powders to hasten the work, and of course, have far less interest in preserving the life of your linens than you yourself have. At Olympia, we find

our "flats" last from 13 to 15 months, a period that could not be approached by any commercial laundry I have ever heard of.

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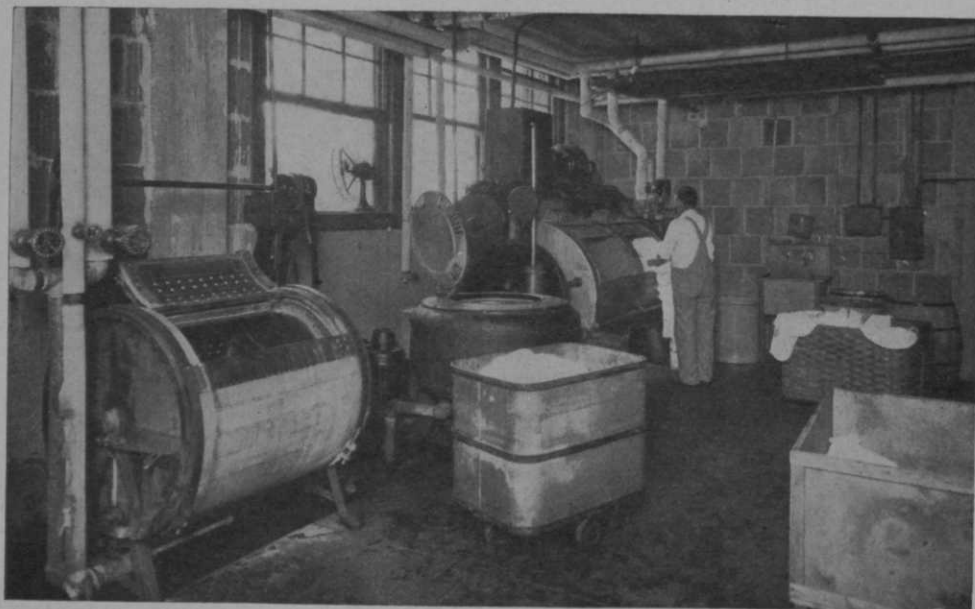
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Olympia's two washers; the one for greasy towels in left foreground, the one for ordinary wash in the back corner. Between is the centrifugal extractor

"There is another reason why it will pay any club to install its own laundry. Consider the reduction in inventory possible when you know you can pitch in and launder up fresh a supply of any item—like face towels, for example—you may happen to run short of on a busy week-end. Suppose you have had a big Saturday patronage on a very hot July day. Members have used so many face towels in the washrooms that your supply for the following day, if the hot weather continues, will be far from adequate. What are you going to do—put in a rush order for several hundred dollars worth of additional towels, with a good chance they cannot be delivered from your local jobber in time? Or pay the outside laundry overtime rates to launder your towels Saturday night and deliver on Sunday?"

"With your own laundry, the towels dirtied on Saturday are in the wash at seven o'clock Sunday morning, and within an hour thereafter a large part of them can be rushed to the linen room, cleaned and ready to be issued for use again."

Olympia's laundry is located in the basement of the mammoth clubhouse. The equipment, furnished by the American Laundry Machine Co., cost \$12,000 installed and includes:

1 42x72 motor-driven cascade washer.

- 1 30x30 motor-driven cascade washer.
- 1 30-in. solid-curb extractor.
- 1 super-suction drying tumbler.
- 1 100-in. 3-roll flat-work ironer.
- 1 coat and trouser presser.
- 1 valet press.

There are hampers, wheel trucks, work tables and other smaller items to complete the layout.

The two washers have a capacity of approximately 350 lbs. per hour, the larger one being used for all soiled items except the kitchen towels and similar extra-greasy cloths, which are handled by the smaller washer. The flat-work ironer has a capacity of 250 lbs. per hour.

"The laundry," continued Col. Holden, "is under the direct charge of our housekeeper. She manages the linen-room, is responsible for issuing supplies to the locker-rooms, bedrooms and dining rooms, and therefore knows what items are needed from the laundry to replenish heavy withdrawals and can issue orders to the laundry accordingly."

"We employ a foreman and five women workers. They report for work at seven in the morning and work forty-eight hours a week. On Thursdays and Sundays they work half a day; other days in the week they are on the job for eight hours. The "soils" of the day before are collected and