

opinion than the compost pile method.

(4) George Davis of Louisville, Ky., told me that he had changed blue-grass greens to stolon bent by inserting stolons into the turf with a sharp spade or knife. It takes time and perseverance, but can be done. Am afraid covering of stolons with top-dressing would result in the runners drying out.

(5) A light top-dressing is $\frac{1}{2}$ cu. yd. per 5,000 sq. ft., which covers green 1/32 in. deep; a medium top-dressing is 1 cu. yd. per 5,000 sq. ft., which covers green 1/16 in. deep; a heavy top-dressing is 2 cu. yds. per 5,000 sq. ft., which covers green $\frac{1}{8}$ in. deep. Clip the grass close from the time growth starts in the spring. Top-dress lightly as growth slows in the fall.

B. R. Leach.

Aiding Faulty Greens

Sir:

We have 18 bent greens, last year being our first year of play. All year we were bothered with small brown-patch, the worst coming at the close of the season. The turf looks very bad at this time, and I am wondering if our top-dressing last year—good black dirt, peat and sand—was the cause. We fertilized with sulphate of ammonia.

The greens are temporary, to be used until our permanent course is completed, and were laid on clay soil with very little care taken in building. Would limestone help, and if so, in what proportions?

Do you suppose the brown-patch will be gone from the greens since they have been dormant all winter?

We are fertilizing our greens and fairways with milorganite, 800 lbs. to the acre on the fairways. What amount would you use on the greens?

B. F. H. (Indiana).

Reply:

Briefly, your problem is to thicken up the turf by encouraging the bent grass to spread. The fertilizer will do this providing the soil of the green and drainage are O. K. If the soil is hard and poor, the fertilizer may not show quick results. All the fertilizers in the world will not remedy insufficient care in the building of a green.

Discontinue the peat and use 10% rotted manure in the top-dressing. Apply 30 lbs. milorganite and 3 lbs. sulphate per 1,000 sq. ft. of green at once.

On May 15, would apply 50 lbs. ground



Why Modern Golf Courses Use Cast Iron Pipe

Genuine cast iron pipe gives a golf course absolute dependability in its water system. Cast iron does not rust. It lasts for centuries. Once laid it can be forgotten. A golf course properly should be a place of pleasure—not of trouble.

Clow-National Two-Inch pipe is furnished with several different types of joint. Ordinary laborers easily assemble it. The Prepoured Joint is ready to calk. The Flexible Flanged joint needs only bolting together.

A complete line of fittings is furnished for this pipe, and golf courses everywhere are using it. It is the most economical pipe system you can install.

Write for catalog and prices.

James B. Clow & Sons,
Chicago, Illinois.

National Cast Iron Pipe Company,
Birmingham, Alabama.

Foundries:

Birmingham, Ala.; Newcomertown and
Coshcton, Ohio

Sales offices:

Chicago, New York City, Philadelphia, Boston,
Pittsburgh, Milwaukee, Detroit, Minneapolis,
Salt Lake City, San Francisco, Los Angeles,
Dallas, Kansas City

Golf Courses

Playgrounds

Aviation Fields

THE DORR PACKARD CONSTRUCTION CO.

RHINELANDER, WIS.

Experienced

Efficient

Economical

limestone (not hydrated lime) per 1,000 sq. ft. of green, mixed with the top-dressing. Also, apply 3 lbs. ground limestone per 1,000 sq. ft. with every top-dressing thereafter. The lime should hold the brown-patch during the coming season; but if the lime is not applied, the disease will return as soon as weather conditions are favorable.

B. R. Leach.

K. O. Punch for Grasshoppers in This Bait

GRASSHOPPERS, cut worms or army worms, if they become abundant enough on golf courses to be injurious, may be controlled by using a poison bran mash bait made as follows:

Bran	20-25 pounds
Paris Green or White Arsenic	1 pound
Oranges or Lemons.....	3
Syrup	2 quarts
Water	2½-3 gal.

The bran and poison should be mixed together quite thoroughly while dry. The oranges or lemons should be grated or ground quite thoroughly and with the two quarts of molasses mixed in about 1½ or

2 gallons of water. The bran with poison mixed into it should then be wet with the water containing syrup and oranges or lemons. After thoroughly mixing the liquid and bran the mixture should not be quite wet enough to squeeze water out of the bran when held tight in the hand. It should be just wet enough so as to be crumbly when sown broadcast.

In controlling grasshoppers the poison bran bait should be sown broadcast lightly but evenly so that the 20 to 25 pounds will cover from 4 to 6 acres of ground. The poison bait should be sown at the time of day when the grasshoppers are noticed doing the most feeding. If it is hot and dry, this may be early in the morning or late in the evening. If the weather is not so hot it will be nearer the middle of the day.—Clyde C. Hamilton, N. J. Agricultural Experiment Station.

What's the Policy on Delinquents?

FROM the central states the treasurer of a certain golf club writes GOLFDOM asking what policy most clubs have in force with respect to handling delinquent accounts. About the only reply we were

LECCO—a sane ration for starving turf

A golf green is one of the most intensively cultivated of all crops. Only by luck does the old-fashioned compost pile give it the balanced diet that it needs to keep it luxuriant and healthy. LECCO, the golf turf fertilizer developed after long years of research by the distinguished turf authority, gives fine grasses the sustenance they need without a weakening stimulation. It goes further and lasts longer.

For a certainty of results, proper speed of development, and healthy disease resistant stamina, LECCO application is used and endorsed by an army of successful greenkeepers. Naturally it's displacing the expensive and uncertain antiquated compost pile with its worry of weeds and brown-patch peril.

THESE PRIZE PRODUCTS HAVE CARRIER QUALITY, TOO

COCOOS CREEPING BENT SEED
 Lyman Carrier developed this seed as the greens-maker that is sweeping the country because of its magnificent production of putting surface. There is only one genuine Lyman Carrier Coccos.

WASHINGTON CREEPING BENT STOLONS Lyman Carrier was the originator of this strain. In his own model nursery its purity is carefully preserved, free from weeds, and shipped to the clubs that want the moderated prized strain the majority of good clubs have.

LYMAN CARRIER — Granger, Indiana

