Stymied!

... but not by Brown Patch

When a player is stymied by an opponent's ball, that can't be helped. But when he's stymied by Brown Patch, that can be helped. Barbak 211 can prevent that.

Barbak 211 is the safe, economical, labor-saving way of insuring velvety greens, free from deadly Brown Patch. And it's so easy to apply. It doesn't cake in the can. It can be watered in or may be applied with your top dressing. In neither case will it burn the turf.

As a preventive or as a cure for Brown Patch, it not only checks the fungus growth immediately, but also quickly brings back a normal stand of turf.

Check up these Barbak advantages on your own course. If your golf supply house doesn't have Barbak, write us for the name of the nearest distributor.

AMERICAN CYANAMID SALES Co., Inc.
535 Fifth Avenue
New York City

Barbak
TWO 211 ELEVEN
TURF DISINFECTANT
Memberships go up—
Greens fees pour in
where
the turf
is good

BEetter greens and fairways attract more golfers to public courses—more greens fees per season—more applications for private clubs—higher membership values. The finest quality turf can be grown only from fine quality seed. That is why Dickinson’s Grass Seeds for golf courses pay big dividends. Every bag of Dickinson’s Seeds cleaned and re-cleaned—tested for purity and germination—a certificate of test with every bag. Less weeding expense. High germination means better results—less waste.

It pays to specify

Dickinson’s
Certified Grass Seeds for Golf Courses
The Albert Dickinson Co., CHICAGO
Fall Fertilized Fairways

COME TO LIFE SOONER IN THE SPRING

WHEN the ground first thaws in spring, it is too cold to produce enough nitrate nitrogen to give grass a quick start. A fall application of Armour’s Special Turf Fertilizer puts a supply of plant food in the ground for grass to draw on just as soon as spring opens up. A few warm days and the fairways will be green. Two blades of grass will appear where one grew before.

Fertilize with Armour’s Special Turf Fertilizer this fall!

You’ll have a golf course that’s ready for the early spring players. You’ll have satisfied golfers—more play—greater revenue. Twenty-one conveniently located plants insure prompt delivery.

Write for the booklet, “Solving the Turf Problem.” It will tell you how to improve your course through a systematic feeding program.

Armour Fertilizer Works

General Offices

111 West Jackson Boulevard

Chicago, U. S. A.
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Have Better Greens and Fairways

Golf clubs the country over have found KEMP Power Soil Shredders a most profitable investment. KEMP Shredders not only save in first cost, but in labor, fertilizer and upkeep as well. Write today for the facts.

The KEMP is a complete machine, shredding and sifting in one operation. Powered either with gas engine or electric motor, or without power for operation with a tractor, this compact machine is easily moved from place to place.

Decide now to have better greens and fairways—at a real saving. Send for catalog and complete details. KEMP MANUFACTURING CO., Dept. C, 2001 Peach St., Erie, Pa.

KEMP POWER SOIL SHREDDERS

Grass Seed Prices Are Low

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Fey. Rec. Red Top  Colonial Bent
Chewings Fescue  Rye Grass Seed  Seaside Bent

MILORGANITE  ARMOUR'S 10-8-6  SWIFT'S 12-6-4
KOPPER'S SULPHATE OF AMMONIA

MAINTENANCE EQUIPMENT

TORO EQUIPMENT  STANDARD MFG. CO. EQUIPMENT
NU-GREEN  SEMESAN  CALO-CLOR  CALO-GREEN

ARSENATE OF LEAD

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MORGAN-HURON-SUPERIOR STS.  (Phones: Monroe 6580-1-2-3)  CHICAGO

The Greens Brush is quickly and easily attached to the Ideal Power Greens Mower, and it has several important functions.

Certain strains of creeping Bent and Bermuda Grass have a decided tendency to become matted and form a nap that makes an uneven putting surface. Light brushing straightens up the grass so the mower can cut it evenly, giving a fine, smooth putting surface.

Straightening up the grass also keeps the Bent from running, and lets the sun, air and fertilizer work in around the roots of the grass.

Teeth of the Greens Brush are of spring steel. The small link chain attached to the brush is adjustable to regulate the pressure of the brush on the green—it raises the brush from the ground when mower is tipped back for turning—and when brush is not in use the chain holds it up off the green as shown below.

If you are troubled with thickly matted grass, and uneven putting surface we recommend the Greens Brush Attachment on the Ideal Power Greens Mower as a very valuable tool.

When not in use, Greens Brush is held up by chain as shown. Or, Brush can be quickly removed from mower.
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from the proving grounds of experience...

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A complete manual of greenkeeping...

The golf field has waited long for this valuable and practical guide to good greenkeeping. It presents, for the first time, full details of the methods of the country's foremost greenkeepers in simple, usable form. "Golf Course Commonsense" tells you what the most successful greenkeepers and the leading turf scientists do to put and maintain courses in the top-notch condition demanded by exacting players and club officials.

Each chapter of the book is rich in working instructions based on a careful study of the methods employed by leaders in the course construction and maintenance field.

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Innumerable tests have proven that Toncan Iron has greater resistance to solution, hence to rust and corrosion, than any other corrugated culvert metal. Why? Because Toncan Iron is the only alloy of pure iron, copper and molybdenum used in corrugated culverts today. Write for booklet.

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IRON CULVERTS
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When the grass is growing about as fast as you can cut it . . . . and the course is in maximum use, SPEED is a necessity. The fairways must be mowed as often as three times a week and more to keep them in prime condition. The fine dependable materials, and precise quality construction in Roseman Mowers stand the test of punishing SPEED.

Year after year, with bearings spinning and reel blades singing they sweep over fairways in record time . . . . their five blade reels leaving only a fine powder of grass clippings that needs no raking. No other mowers can be driven as fast and not break down.

Roseman owners on the finest golf courses all over the world join in praising Roseman Mowers. They do not fail at critical times, and the year-after-year service is far more economical than frequent repairs and renewals.

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- Timken Tapered Roller Bearings on Cutter.
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- Alemite Forced Feed Lubricators.
- Guaranteed Non-Breakable Malleable Iron Side Frames, Gear Cover, Bed Knife Shoes and Caster Wheel Forks.
- Drop Forged Machine Cut Gears.

*(Our patents give us the exclusive right to all ganging of Roller Type Mowers)*

Roseman Mowers
Skimpy Seeding Practice Robs Till, Turf and Time

By T. H. RIGGS-MILLER

The most costly item for golf courses has been and still is, the production of turf. That should not be, but regardless, there are few clubs that can boast of good turf from the opening of their courses. There must be a fundamental reason for such abject failures. Most club members are lulled into the “kickless class” by that time-worn excuse; “Oh, it takes three to five years to produce good turf.” Thus members of thousands of clubs play in misery on poor turf, with hope beating eternal, that at the end of the allotted time their fairways, by some gift of nature, will be covered with a dense turf of the finest grasses. I know of no greater task, where time, labor and expense is so uselessly wasted, than trying to rehabilitate an unirrigated fairway that has been improperly prepared and insufficiently seeded.

Nevertheless this is the experience of nine out of ten golf courses built. There are many factors entering into the production of turf, such as the preparation of the soil, quantity of seed, time it is sown, etc. But, providing the ground has been properly prepared and the necessary amount of seed sown from August 15 to September 20 there is no reason on earth why a thick healthy turf cannot be ready for play the following spring.

Modern turf production as we know it, is only 30 years old. Previous to this time it was the custom to fine down old pasture land. The first course prepared and sown entirely to seed was Sunningdale, England. It was sown down in September, 1900, and was ready for play the following spring. It was a revolution, in turf production. Hitherto 30° to 40 lbs. of seed to an acre had been used, which is ample for pasture. Here at Sunningdale they had used 350 lbs. to acre on fairways and 20 lbs. to the 1,000 square feet on the greens. Thousands went to see what was conceded to be the best turf in England. These quantities became the standard and still are, in Europe. They also became the standard for America. Such courses as Myopia, Brookline, The National, and hundreds of other courses produced wonderful turf in six months. Then came Piper and Oakley’s book “Turf for Golf Courses” recommending 100 to 150 lbs. of seed to the acre. I confidently can say that more mediocre turf has been produced in the states since 1920 from lack of sufficient seed than there was from the time the English seed houses introduced their methods (about 1903) to 1920.

Reverse Soils Order

In agriculture it is necessary to select crops adopted to the soil. In turf production for golf courses, one is forced to use any kind of soil. Unlike agricultural crops,
turf cannot be plowed under, after play has begun. Therefore it is necessary to prepare the ground very thoroughly both mechanically and chemically in order that the seed will not only have a fine bed, but also the ample nourishment so necessary to delicate seedlings.

Rabbits are great breeders. Their powers of reproduction are gauged and proportioned to the dangers that might ordinarily make an end of the species before arriving at maturity. A codfish produces a half million eggs and only two escape to replace the parents. This being true of the prolific breeders in the animal and fish kingdom, one is forced to suppose a parallel exists in the seed and plant world; more especially with grass seed when one considers such grasses as the bents containing 6,000,000 seeds to the pound, bluegrass 2,400,000 seeds to the pound, and fescue, the largest of the fine grass seeds, 500,000 seeds to the pound. It would seem if it were not for the loss, that a pound of each variety would be sufficient to sow a putting green. In practice this quantity is entirely inadequate.

It would be well to recall what actually happens when we are confronted with a problem of sowing down 40 to 50 acres of fairway, 20 to 30 acres of rough and 4 to 5 acres of putting green area in a space of 20 days. It stands to reason that 60 to 80 acres of the seeded area cannot be hand-raked. It is absolutely necessary to use mechanical means in order to finish in the time allotted, even though aided by favorable weather conditions. If we use 150 lbs. of seed to the acre how much actual seed are we getting?

**Hot-house Tests**

The following is an average fairway mixture:

<table>
<thead>
<tr>
<th>Name</th>
<th>Quantity</th>
<th>Germ. Quan.</th>
<th>Germ. Quan.</th>
<th>Hot-house Germ.</th>
<th>Actual Seed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red-top</td>
<td>30 lbs.</td>
<td>94%</td>
<td>94%</td>
<td>26.50 lbs.</td>
<td>109.78 lbs.</td>
</tr>
<tr>
<td>Bluegrass</td>
<td>50</td>
<td>80</td>
<td>80</td>
<td>32.00</td>
<td></td>
</tr>
<tr>
<td>N. Z. Fescue</td>
<td>45</td>
<td>98</td>
<td>80</td>
<td>35.28</td>
<td></td>
</tr>
<tr>
<td>Mixed Bents</td>
<td>25</td>
<td>80</td>
<td>80</td>
<td>16.00</td>
<td></td>
</tr>
</tbody>
</table>

The purity and germination I have shown are above the average, nevertheless the mixture shows a direct loss of 30%. In other words, for every 150 lbs. of seed (gross weight) we actually sow only 109 lbs. of seed that will germinate under hot-house conditions. This in itself ought to be sufficient argument in favor of a greater quantity of seed. But, when we come to sow large areas, it has to be done by machines, and gone over with a mechanically drawn rake, rolled, etc. Now, who is to say what percentage has been buried to a point where it will not germinate; what percentage the birds will eat; what percentage, after it has germinated will die of lack of moisture; or what percentage will be killed from too much water (heavy rains); what percentage will be destroyed from other sources we know not? That some percentage will be destroyed from one or more of these causes must be