## OUR LETTER BOX

The Green Section receives numerous inquiries concerning local turf problems and is always glad to reply to them. With the hope that some of these questions and answers may be helpful to others besides the original correspondent, a few of them will be published. While most of the answers will have a general application, it should be remembered that each recommendation is intended for the locality designated at the end of the question.

A pitch shot will not stick on the green .--- Our greens were raised a little too much when they were first built and it is very difficult to supply them with sufficient moisture. The stand of Bermuda grass is very good, however, and the putting surface is fairly good. Our trouble lies in the fact that it is impossible to make even a high pitch shot stick on the green. In other words, there is not enough of a mat or the mat is too hard to allow the ball to grab when it hits the putting surface. Is it possible to force something like peat moss into the green with a spiked roller? Can you offer another suggestion that might solve our problem? (Georgia.)

ANSWER. — Peat moss worked into the top soil of a putting green tends to make the surface somewhat softer. It is possible to work some of it into the soil by spreading it over the surface and running a spike roller back and forth over it. The most satisfactory method, however, is to mix the peat moss thoroughly with some top soil and apply this mixture in heavy topdressings.

It may be that the more liberal use of fertilizers would encourage a stronger growth of Bermuda grass, which would provide a better mat to hold pitched shots. A heavier growth of grass will usually have much more of a beneficial effect on the holding of pitched shots than will soil improvement by the addition of material such as peat moss.

\* \* :

Tiling of greens.—We have three greens that are in a location close to a creek in which water flows continuously, yet they are sufficiently high above the water in the creek to permit good drainage if they were tiled. In late spring and summer the ground on these greens becomes sour, and we are of the opinion that this results from the fact that the water does not get away fast enough. Is fall the proper time of year for tiling? (Illinois.)

ANSWER.—Fall and early winter are good times to install drainage systems. The freezing and thawing of the soil will open up channels to the drains so that by next spring they should function properly. It might be well for you also to check up on the air drainage over your three greens to make sure that no underbrush and trees are interfering with the proper air circulation.

\* \* \*

Variations in color on greens.— Our greens are constructed of heavy clay and sand, but there are places where there has been very little sand worked through the heavy clay. When hard frosts come our greens are left spotted in color. Has soil texture anything to do with the way our greens take on this spotted appearance? (Ohio.)

ANSWER.—The difference in the color of the patches of grass in your greens is probably due to differences in the individual grasses rather than in the soil. Some individual plants are more quickly checked by cold weather than are other plants. Those which continue to grow after the others have become semidormant give the green a spotted appearance.

There are times when a single

strain of grass shows these irregularities. This is no doubt due to some soil condition but as yet no one has determined just what these peculiar soil conditions may be. This condition in a single variety is most likely to occur in a heavy poorly drained soil, although it often occurs on an open - textured soil that is well drained.

Are there different strains of Bermuda grass?—The contention is made that the Bermuda grass growing wild in Virginia is quite different from the plants developed from seed obtained in the Southwest, particularly from the state of Arizona. The stolons of the latter are said to be shorter and do not develop the long internodes so undesirable on lawns and fairways. Is this contention correct? (Virginia.)

ANSWER.—Variations in Bermuda grass may be due to individual differences or to treatment. The fact that the Virginia grass is coarser may be due to the fact that the coarser plants survive the winter better, but it is also due in part to the lack of competition in spring by reason of the winter killing of some of the grass. Arizona seed represents a conglomeration of strains, both coarse and fine. In the seedling stage all Bermuda grass tends to be much finer than it is when well established. As a result the seedlings of Arizona Bermuda grass appear finer regardless of how much of the coarser stock there may be in it.

\* \* \*

Best bents for northern sections.— To assist our club in reaching a decision as to the best type of grass for the greens, I am writing to find out what information and advice you can give me in respect to the three different types that are under consideration. The grasses in question are New Brunswick bent, Washington bent and Metropolitan bent. (Ontario.)

ANSWER.---New Brunswick bent is a seaside creeping bent, seed of which is produced in New Brunswick. Washington and Metropolitan bents are both creeping bents and are propagated by stolons. Any of these three grasses should give you satisfactory turf for putting greens. The seaside bent is much more susceptible to snowmold than most of the other common bents used for putting green turf. The Washington and Metropolitan bents, although they are subject to attacks of snowmold fungus under certain conditions, are very resistant to the disease and ordinarily are not seriously damaged by it. Since you are in a region where the snowmold disease may be very troublesome it would perhaps be wise for you to use some grass other than the New Brunswick bent. Either the Washington or the Metropolitan should be satisfactory. The Washington is a little finer than the Metropolitan bent but it has the objection that it becomes discolored during cool weather. This discoloration, however, does not affect its putting qualities.

Pearlwort.—We are sending to you today a piece of sod infested with a weed. Will you kindly tell us if this weed is pearlwort and what is the best method of extermination? What can we do to prevent it from coming into our sod another year? (New York.)

ANSWER .- The weed you sent was pearlwort. Although under certain conditions this weed may grow in turf that is kept fairly dry, as a rule it is most troublesome in poorly drained or overwatered turf. We therefore suggest that you immediately check up on the possibility of poor drainage, especially seepage water coming into the area from hillsides. If the drainage is adequate we suggest that you try watering less. One of the best remedies for pearlwort is to sprinkle sulfate of ammonia on the spots in much the same way as you treat for clover.

