An Interesting Letter about Vegetative Greens

"You will recall that in the fore part of September, 1920, you were good enough to forward to me, for use of the Moorestown Field Club, Moorestown, New Jersey, some creeping bent runners to enable us to establish a nursery to supply runners for the construction of putting greens the following year by the use of your then comparatively new vegetative method.

"I have long intended to report to you our degree of success in the new field of work then undertaken under your direction, and to extend to you an expression of our sincere gratitude; but I am sure you will appreciate that the duties of a green committeeman absorb all of the time that can be spared from business and golf.

"The strains of creeping bent runners sent by you can only be identified by reference to your numbers accompanying the shipment; these were 02529 and 02568, respectively. You sent us at the same time some velvet bent runners, numbered 02537 and 02540. These velvet bent runners did not do well in our nursery and no attempt at putting green construction was made with them; they have since been plowed under to make room for creeping bent runners.

"Our creeping bent nursery was planted in rows six feet apart, in accordance with your directions, in the middle of September, and in the following August (1921) our nursery was one complete mass of runners, overlapping between the several rows. A photograph of the nursery taken in August, 1921, will be found in THE BULLETIN, Vol. I (1921), page 181.

"Our green construction from this nursery began early in September of that year. Our method was to plant one half of each of two of the old greens each year—either the right or left half in the line of play—leaving the other half for the use of the players. The following fall the remaining halves of these greens and one half of two additional greens would be planted. In this manner we have interfered with play to no considerable extent, and at this time no one could detect by the closest inspection that the greens have been planted in two sections.

"We found little choice between the two strains of bent sent to us; but our 1921 nursery, planted in the same space which had been occupied by the old one, was planted with your strain 02529,* since we thought we saw a slight preference. We have since maintained the nursery with that strain exclusively, planting a new nursery each fall.

"We now have six greens in vegetative bent, one in South German mixed bent, and the other two (our course has only nine holes) are to be planted in vegetative bent next fall without resorting to the method of doing one half of a green at a time. The players are now quite willing to use temporary greens in anticipation of procuring the new ones sooner.

"I scarcely know how to refer to the quality of our vegetative creeping bent greens with accuracy; to understate their quality would be quite as unpardonable as to overstate. They are certainly all that the human heart can crave; I think no member of our club will say less. I regret that it has not been my privilege to inspect many vegetative

* Strain No. 02529 is Columbia bent, the one to which the famous No. 9 green at Columbia Country Club was planted.

greens at other courses; there well may be others of superior quality. But with the limitations of my knowledge of possibilities I can not see how any putting green sod and grass can be more perfect than ours. Several of the leading seed houses have sent out representatives to inspect all vegetative greens they could find; these men have uniformly told us that they considered ours the best that they have found. Giving liberal allowance for their desire to please, yet we can properly conclude that they think we have obtained excellent results; especially since several have procured runners from our nursery to start nurseries for the seed houses they represent.

"Of course we appreciate that quality includes more than desirable texture, color, and dense and vigorous growth. We can not be certain that our vegetative greens are immune to brown-patch or other diseases. We only know that up to this time no trouble of that nature has appeared on any of our vegetative greens. We use Bordeaux mixture in powder form at times as a precaution when we think it might be needed as a preventive; whether it is needed, we do not know.

"At the risk of tiring you, permit me to refer to our methods of treatment. Our sole treatment is top-dressing; we use no ammonium sulfate or anything else. More and more we become convinced that top-dressing with good compost is the one thing vegetative greens need. This we apply every few weeks during the entire season, and apply it so finely sieved that it does not interfere with play. We can almost hear a green say 'thank you' when it is applied; it greets us at once with a deeper shade of green, and unmistakably rejoices.

"Our composts for top-dressing are alternate layers of sod and manure. Nothing else, except sometimes a layer of muck from a nearby swamp, is used. When any muck is used we give it a coating of lime, of course taking care that the lime does not come in contact with the manure. To this compost, when fully decomposed and repeatedly forked into a complete mixture, we screen and add about one-third sand, nothing else. Perhaps ammonium sulfate would add to its virtue; but we have been inclined to leave good enough alone.

"Our sod is dense, and drifting weed seeds find lodgment difficult. Of course dandelions, crab grass, and clover appear at times; but our policy is to remove them at once either with a weedknife or by plugging. We maintain sod to supply plugs, and our experience is that the cost of weeding can be properly charged to neglect of prompt action.

"Pardon this long letter. It is not intended for publication, but is designed as a much overdue report on the stolons you so graciously supplied us."—*Judge E. B. Leaming, Court of Chancery of New Jersey, Camden, New Jersey.*

(In a subsequent communication, Judge Leaming granted permission to publish his letter, and added):

"I am inclined to think that almost any information or experience pertaining to vegetative bent is at this time much needed. I am amazed to find how many enthusiastic golfers, including many green committees, are utterly ignorant of the process and the excellent results that can be obtained by its use. An impression also seems to exist that it is expensive. My judgment is that if a golf course maintains its own nursery, instead of buying stolons, the expense is very much less than planting German mixed bent seed, and the cost of maintaining a vegetative green is surely

much less after planting than that of sown greens. We find it advisable to reinforce our mixed bent green with a new sowing of seed every fall; this involves labor and cost of seed, from which vegetative greens are exempt. Indeed, to be effective, sowing seed on old sod involves much well-directed labor, since every seed is wasted the roots from which are not given a means to reach the soil below. We find also that our German mixed bent greens require more weeding and other attention than the vegetative greens. This latter feature, I think, is due to the density of the sod and grass on our vegetative greens, rendering it more difficult for weed seeds to find lodgment in the soil."

Planting Vegetative Greens among the Pines in Canada

The accompanying illustrations are interesting in showing the northward advance of the creeping bent putting green and the successful methods which have been worked out for the planting of such greens vegetatively on a large scale. The views are of the new course laid out by the Canadian National Railways at Jasper, Alberta, in the Canadian Rocky Mountains, about 1,200 miles northwest of Winnipeg. In one of the photographs the actual operation in the planting of the stolons is seen, and in the other a view of No. 18 green is given as seen from the tee 300 yards distant. The 18 greens were all planted in August of this year with stolons of the Washington strain of creeping bent.

Planting creeping bent stolons at Jasper, Alberta.

The interest shown by the railroad in transforming a rocky situation of this character into a golf course of real beauty is inspiring especially when it is considered that most of the top soil had to freighted in and hundreds of tons of rock had to be blasted and removed. An adequate water supply has been arranged for by a reservoir built in the mountains, the water being carried through the fairways by a 6-inch main, from