is its power of resisting drought. It may go brown when a drought sets in but at the first shower it is the first to get back its strength and color.

In patches *Poa Annua* is undesirable on a putting green, but uniformity all over the green gives an even true put-

ting surface very easily.

In conclusion may I be permitted to say that amongst the finest putting greens in America, if not the best, were greens composed of nothing but pure *Poa Annua*, which had gradually killed out all fine grasses that had been sown.

Let me not be misunderstood in the foregoing in championing Poa Annua in the way I have done, as I have only dealt with it where it has appeared and established itself, as I do not for one minute say or assert that a somewhat better carpet of turf cannot be obtained by using and treating the finer varieties of grasses, but a Poa Annua green may be as fine as desired.

## Autumn Sowing and Renovation of Golf Courses

By L. MACOMBER

THE best time of year to sow down new putting greens, fair greens, tees, lawns, etc., is between about the 15th or 20th of August and the 20th of September. The soil is warm at the end of the Summer season and sufficient rain and dew may be expected which will effect a quick germination and the young grass will become well established before the cold weather arrives. Then weeds are less in evidence in the Autumn than they are in the Spring, but it is always a good policy in sowing down new ground to turn over the soil and do the necessary grading in the Spring or early Summercultivating frequently to destroy any weed growth, so that when the seed bed is prepared, the soil is much cleaner and freer from weed seeds and the surface is consolidated. When work is

done in a hurry, it is generally badly done.

Topdress and renovate all existing turf on a much larger scale in the Autumn than in the Spring, using more seed, sand and compost; and improve parts of the fair greens that cannot be artificially watered.

We have had a very wet Spring and many courses especially on clay soil, have been in a very sticky, muddy condition most of the season. The excessive rain and dampness has no doubt caused sourness, and this should be corrected this Fall with a dressing of ground limestone on the fair greens, tees, etc., and pulverized charcoal together with previously sweetened composts and sand on the putting greens.

This has been a bad season for clover and water grass, or pearl wort, because of so much rain. Existing turf has thrived but Spring seeding has in many instances not been satisfactory—as heavy rains have caused washouts and uncovered the seed, but in other cases results have been good and it has been fortunate there has been so much rain.

Highly nitrogenous fertilizers should be used this Fall to encourage the grasses and not the clovers. While bone meal is a good fertilizer and best applied in the Autumn, it would not be advisable to use it this season on greens possessing much clover. It will quite often produce a thick crop of clover in a turf apparently free from clover.

The last of August or the first of September, according to the weather, the putting greens, tees, and important parts of the fair greens should be vigorously raked and cross-raked and on large areas tooth-harrow and cross-harrow, so as to open up the surface soil, and in some instances it may be advisable to use pitch forks, spiked boards or spiked rollers to perforate the surface.

Take out all weeds, crab grass and other objectionable growth, at the same time scratch up any clover patches. Then thicken up the existing turf with a special mixture of seed suitable to the soil and local conditions and cover with a quarter-inch dressing of prepared compost or humus, supplemented with a complete artificial fertilizer. the seed and covering soil into the existing turf with birch brooms or the backs of rakes and then roll down. On large areas after tooth-harrowing the ground, it is much better to mix the seed and compost together and apply them at the same time. On heavy soils, include a large percentage of sand and organic matter and on light sandy or gravelly soils, apply dressings rich in humus or organic matter.

The last of September or some time in October, during wet weather, lime any sour parts on the fair greens, tees, etc., and dress the putting greens with sand and pulverized charcoal, using from 200 to 300 pounds of charcoal per green mixed with three or four times its own bulk of sharp sand. Work same into the turf with birch brooms or the backs of rakes.

Then before the cold weather arrives, give the greens another quarterinch dressing of prepared compost, but do not use any quick acting fertilizers. This will serve as a covering for the young grass from the Autumn sowing and the writer has never favored covering the greens with any straw or other material for the Winter, unless it is put on very thinly, so that the turf can be seen through. Grass does not suffer from the cold weather as it does from the hot weather; winter-killing taking place in the early Spring when the surface drainage is not correct and water is lying in the low spots alternately freezing and thawing.

Order your seed and fertilizer requirements early. If you are planning to sow down any new ground—sow the putting greens at the rate of two ounces of seed per square yard and the fair green at the rate of at least eight bushels or 200 pounds per acre. In renovating existing turf use about half these rates.

## A-DREAMING

As jewels are like unto cinders;
As gold may be traded for lead;
So my very worst golf may be likened
To the dream shots I play in my bed.

For everything then is like chaos,
And nothing goes right, so it seems;
May kind heaven defend and preserve
me

From the golf that I shoot in my dreams!

I'm driving sometimes round a corner, Through narrow town-streets, with the flag

At the end of some twisting, dark alley; And the cup in a "Bull Durham" bag.

But often a million spectators

Line a fairway—width, only one yard;

And the driver-shaft, hinged in the middle,

I've got to keep straight, but it's hard.

Invisible hands check my swinging
While two extra thumbs spoil my
grip:

And my snow-shoes get snarled when I'm putting,

But in full-shots my roller-skates slip.

My caddies are gnomes, sometimes ogres;

They make me play just as they will-

Maybe putt a balloon with a razor, Or try a base-viol on a pill.

The bunkers? By Gad, they are awful!
When in one I give up all hope,
For, you see, all I have to get out with
Is an anvil attached to a rope!

And so I play on to the morning, With foozle and swipe, all through Hell:

But why waste all these words to describe it?—

For I guess you have been there, as well.

A. W. T.