

lot of fool questions when the club elects a new green chairman the following year.

I made the statement in last month's article that arsenate of lead could be applied by the silliest jackass a golf club ever had the misfortune to have in its employ. I meant by that statement that it is practically impossible to overdose with this compound. I have grown good grass in soil treated with 100 pounds of arsenate of lead to the thousand square feet of soil surface or 20 times the dose recommended.

When the arsenate of lead has been applied to the surface of the green or tee as described above, take a rake, preferably a short-toothed one, and scratch the chemical into the soil to a depth of one-half inch, no deeper. This 5-pound dosage is based on a mixture with the top half-inch of surface soil. If it is scratched-in deeper, more arsenate of lead will have to be used at the rate of 5 pounds for each additional half-inch of soil depth. Hence, be careful with the rake and don't become imbued with the idea that you are digging potatoes.

Here again let me emphasize the importance of having all contouring completed before applying and scratching-in the arsenate. This is fairly obvious, when one considers that the finished job calls for the upper half-inch soil layer *all over the green* to be impregnated with the poison. If the contouring is done after the application of the arsenate, it means that this layer will be removed in places, leaving places devoid of poison.

Turf Grows Slower

Having scratched-in the chemical as above, the seeding or planting of stolons can now be carried out in the usual way. If stolons are used, they should be covered with the usual *light* covering of unpoisoned soil.

Grass seed and stolons sprout somewhat more slowly in arsenated soil than is the case in untreated soil. The grass shoots are usually from 4 days to a week longer in making their appearance. Furthermore, they grow more slowly during the first two or three weeks. But after that period, the grass catches up rapidly in growth and in 60 days outstrips the grass in unpoisoned soil, not only in growth but in color and vigor.

The slowness of sprouting and growth in arsenated soil during the first few weeks is due to certain chemical changes which

arsenate of lead undergoes in the soil. These changes, which are too technical to be discussed in a practical article of this sort, account for the slowing up in growth. Consequently there is nothing to be alarmed about. As the grass becomes a little older and tougher, it reacts to the arsenate of lead in exactly the opposite fashion. Instead of slowing up the grass growth, the arsenate stimulates it. In fact, it would seem that less fertilizer is necessary for grass growing in arsenated soil. Part or all of this stimulation may be attributed to the action of arsenate of lead in discouraging certain soil bacteria and fungi which are detrimental to the growth of fine turf grasses.

As the grass of the newly planted green, grubproofed as above, continues to grow, the time comes when it is ready for the first topdressing. In order to maintain the grub-proof nature of the turf, all topdressing applied must contain arsenate of lead in the proper proportion so that as the surface of the green is built up a sixteenth of an inch at a time by each topdressing. If this is not done, the original half-inch of poisoned soil will ultimately be buried under a constantly thickening layer of unpoisoned soil and in the course of time, this unpoisoned soil will become sufficiently thick so that grubs can feed in it without ever getting down to the original half-inch of poisoned soil. The green will no longer be grub-proof. The system of grubproofing topdressing will be discussed in next month's article, along with a discussion of methods to be followed in grubproofing established greens and tees.

Tell Us What You've Done with Bent Fairways

BENT is beginning to get a good inning for fairways. We know of several clubs that have recently planted or contemplated planting bent fairways. There is a lively interest in the subject and GOLFDOM would like to learn the experience of greenkeepers and green-chairmen with bent fairways, either stolon or seed, so we could pass along some good advice from fellows who "have been there."

Philadelphia, Pa. — Philadelphia will stage its "National Golf and Country Club Exposition" at the Penn Athletic club, April 16-21. Jesse C. Long is promoter of the event which is planned for annual appearance.