Speed, Uniformity and Thrift in Treating Your Greens

By GEORGE CASKEY

MOST AUTHORITIES today recommend the dry method of application for practically all treatments of putting greens. There is less danger of burning and particularly in the case of brown-patch the treatment is not so readily washed down beyond the roots and the value of the treatment lost. Calomel will not dissolve in water, but must remain in suspension, necessitating constant stirring to keep it evenly distributed through the water when applying. Corrosive sublimate dissolves slowly and it is hard to get it all dissolved without using some special means. Both these chemicals, as well as all fertilizers, mix very well with dirt.

In mixing calomel, corrosive sublimate, or any equally fine material with any topsoil preparation, the best method to follow is the one recommended by the Green Section and demonstrated by them at their meetings. It is one with which probably most greenkeepers are familiar. To those who are not, it is as follows: Take the amount of chemicals that you are going to use and mix them thoroughly in a bucket of sand, or topsoil. This mixing may be done in two ways:

Pour the bucket of sand out on a tabletop, bench, or any smooth surface. Spread it out and scatter the chemical evenly over it. Mix thoroughly by hand or preferably with a small garden trowel. This spreads the chemical evenly but does not do a thorough mixing job as the chemicals and topsoil tend to form lumps.

To overcome this, take an old rolling pin, gallon water jug or any cylindrical object and roll the mixture thoroughly. Remix again and you should note an even distribution. Every minute particle of topsoil should have some chemical clinging to it, and there should be absolutely no lumps either of dirt or chemical, or of dirt and chemical.

Dry Topsoil Essential

Above all things, dry topsoil is essential. If you haven't a soil shed, and many of us haven't, keep a barrel or box full of dirt for this purpose in the corner of your tractor shed.

The other, and by far easier method of mixing, is to use a barrel churn. Dump the topsoil and chemicals in the churn and turn for a couple of minutes and you will be astounded at the mix you get. If a regular churn is not available, one is easily made from an old nail keg, or better still, one of the kegs used for dye materials. These kegs are made of smooth material and are tighter than a nail keg and provided with better covers. Now take this pail full of concentrate and mix it with the regular topsoil mixture you intend to use in applying the chemical.

Do not simply dump this pailful on the pile of topsoil and then proceed to shovel it over, but add it gradually as the topsoil is shovelled together, or spread the topsoil out and distribute the concentrate evenly over it in the same manner that the chemical was distributed over the bucketful of topsoil or sand.

Shovel the entire mix over a couple of times or shovel it through a screen and you will have the concentrate thoroughly mixed with the topsoil.

Must Have Even Mixture

Dr. Monteith in all his lectures and talks on the control of brownpatch has stressed even distribution of the chemical used in control, and the same thing applies to all other controls or fertilizers. *Unless you have an even mixture to distribute, you cannot get an even distribution of the chemicals applied over the putting green.*

I usually measure my topsoil out by the pailfuls, and allow so many pailfuls to the green according to the amount of chemicals I intend to apply, dividing the pail of concentrate equally among the total number of pails of topsoil. I am using the word "topsoil" in this article in the sense that it is serving as a carrier for something else —fungicide, fertilizer, etc., and not as topsoil to topdress a green.

For example, let the concentrate contain

5 lbs. or 80 oz. of, let us say, calomel mixture. I usually mix the topsoil to contain from 3 to 5 oz. per pail. At 5 oz. this would call for 16 pails of topsoil; figuring the pailful of concentrate you would actually have 17 pails. I usually disregard this as there is always waste to make up for.

The average green contains approximately 5,000 sq. ft. of putting surface. With a 5 oz. per pail mix, one pail per green gives a 1 oz. treatment, 2 pails a 2 oz., etc. per 1,000 sq. ft.

The difficulty now lies in spreading one pailful of topsoil evenly to 5,000 sq. ft. of putting surface. Most topsoil machines and fertilizer distributors will not spread such a small quantity of dirt evenly over such a large surface, and it requires an expert to spread it evenly by hand. In spreading by hand, it is best to apply more dirt mixing only 3 oz. per pailful. The same rule applies when using topsoil machines and fertilizer spreaders.

Spreading With Seeder

One of the easiest, quickest, and most accurate methods of spreading that I have found, is to use a Cyclone hand grass seeder. These seeders retail at approximately $3.00 each, and while they will not last over two or three seasons when used for spreading these mixtures, the cost of replacement with a new machine is very little. The machine consists of a sack or hopper, of about 10 quart capacity, provided with a shoulder strap to carry it and a board bottom on the under side of which is a fan that is turned by a crank projector. The material to be broadcast drops onto the fan through holes in the board bottom, the size of which can be regulated by a device on the side of the machine to govern the amount of material broadcast.

The machine is listed in all golf supply catalogs. It will hold an 8 qt. pail of dry topsoil and spreads it evenly over an entire 5,000 sq. ft. of green, and in about one-half the time required to spread the same pailful by hand. The machine can be adjusted to spread as thick or as thin as desired, and the adjustment can be further regulated by the operator, increasing or decreasing his pace.

The only requisite is that the topsoil be fine and dry. Topsoil that has been screened through a ⅜ or ¼ inch mesh (preferably ¼) is fine enough, and because of the small quantity of topsoil needed it is easy to keep approximately a yard or two in a corner of the tool house (for those that have no soil shed) where it will be dry and ready for use at all times. A little practice is necessary on the part of the operator before attempting to use the Cyclone seeder for spreading dirt.

This seeder was originally designed for farm usage, to sow timothy, clover, alfalfa, blue grass, etc. In using topsoil a little different method of handling must be used.

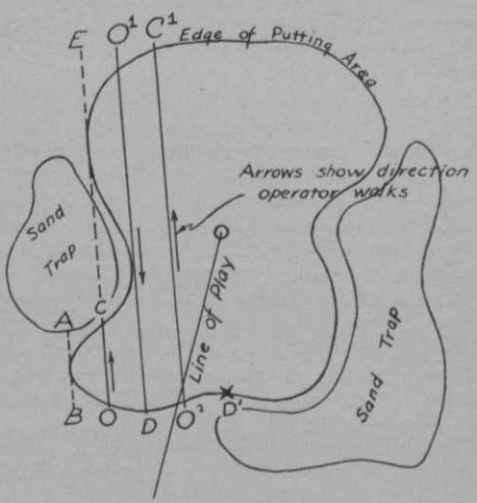
Watch Crank Speed

One tendency is to turn the crank too fast. This causes an uneven spread, throwing more dirt to the center of the spread. The discharge from the wheel spreads out before the operator in a semicircle, and he can tell by eye when he is getting an even spread. The speed at which the operator turns the crank should be constant and not governed by the speed at which he walks. The tendency is to turn the crank faster or slower as the operator increases or decreases his gait. Increasing the speed of the crank does not increase the amount of dirt applied, but tends to spread it over a slightly wider area for a time, and as the speed of the crank is increased makes for an irregular distribution.

The rate of distribution can only be regulated by the gauge on the machine and the gait of the operator.

In actually applying the topsoil to the green to secure a uniform coverage it is wise to follow the method used by farmers in seeding.

The accompanying sketch illustrates the



procedure. The operator walks along a line parallel to AB, starting at O and going to C, spreading topsoil as he walks. The starting place O is three paces from B,

and C is three paces from A. He marks C with a stick, tobacco can or whatever he may have at hand, and taking his position at O, he sets a target at D three paces from O before starting. Having proceeded to C he stops his machine, picks up target C and walks on a straight line to E, steps over six paces, and sets target C at C^1, then back three paces to O^1. This places him exactly in line with target D, three paces from starting point O and on a line parallel to AB. Proceeding to D he steps over six paces, sets target D at D^1, and back three paces to O^2 which places him in line with target at C^1, thence to C^1, etc. and the procedure is repeated until the entire green is covered.

Cuts Application Time

Estimating the green to contain 5,000 sq. ft. of putting surface and an application of 2 oz. of preventive per 1,000 sq. ft. or a total of 10 oz. to the green and a topsoil mixture of 5 oz. per pailful of topsoil; two pails of topsoil will treat the green. By walking in one direction with one pailful and crossing at right angles with the second a perfect distribution is assured, and one man can apply the two pails in ten or fifteen minutes.

The operator holds the machine with his left hand as he walks and turns it with his right. Topsoil has a tendency, especially if it is slightly damp or in humid weather, to cake and not flow steadily as does grass seed. The operator can eliminate this by jerking the machine with his left hand as he walks, a jerk or shake every five or six paces or whenever the flow seems to slow up. With a little practice an even flow is very easy to maintain.

This machine is ideal for spreading such fertilizers as bone meal, lime, any commercial fertilizer, or arsenate of lead, etc.

In applying arsenate of lead, mix it with damp sand. The dampness of the sand causes the lead to stick to it, absorbing all the moisture. When using the machine for applying fertilizers and fungicide mixtures, etc., it is best for the operator to wear a good tight coverall suit. The machine throws against the body of the operator as well as in front, and unless due precautions are taken the operator will be sadly in need of a shower.

By exercising care, such as holding the machine close to the ground, watching where the discharge is falling, it is possible to use the machine when the wind is blowing.

Seattle Clubs Put Brakes on Floaters' Play

PLAY OF FLOATERS, who refuse to join any private club but drift around and ride either free or on nominal green-fees of regular members, is a national problem with which Seattle district private clubs are successfully contending.

C. F. Carskadden, manager of the Erlington GC (Seattle district) was delegated by the Golf Division of the Northwest Federation of City and Country Clubs to work out a reciprocal agreement. Following rules were adopted:

1. *Every club member will have the privilege of playing once per month without green-fee cost at each of the privately owned golf clubs, members of the Federation.*

2. *The secretary of the club to be visited has full control over how many can be accommodated on the day the privilege is requested for.*

3. *Member of a golf club desiring such privilege must make his application to the secretary of his club, who in turn will ascertain from the secretary of the club to be visited whether or not they can accommodate the applicant.*

4. *Season or length of time for this special privilege to continue until further notice—which time is to be determined by the officers of the clubs, members of the Federation.*

5. *Exchange of playing privileges will not be permitted on Saturdays, Sundays, or holidays.*

6. *Clubs that are interchanging privileges are Earlington, Glendale, Inglewood, Olympic, Overlake, Rainier, Sand Point and University.*

The rules were adopted after a test session at Earlington. All clubs subscribing to the agreement were invited to bring 5 foursomes to Earlington to see how the arrangement would work out. The visiting arrangement proved a good revenue producer for the host club. Requests to play other courses are negligible but a friendly spirit of club relations has been developed and the usual number of cruisers who duck membership obligations has been absent.

BURIED WITH Junnosuke Inouye, assassinated Japanese statesman, were his favorite golf club, his golf clothes, writing material and 5 volumes of Chinese classics. Placing of cherished objects in the coffin is a Japanese custom.