August, 1928

sifters. With this amount of sifted compost the stolons will not be completely covered and many of the stolons will protrude above the surface. It is not wise to bury the stolons deeper. A light roller should then be passed over the planted area. The stolons must be kept damp by frequent watering, using a fine spray.

After the stolons have sent up blades to a height of $1\frac{1}{2}$ to 2 inches they should be mowed down as close as possible with a sharp mower. The clippings from the first cutting should be left on the green, and another top-dressing similar to the one used while planting should be applied. From that time on the new green should be mowed regularly with the blades set at putting green length. The first clippings were left on the green, since where there is a node in any clipping a new shoot is likely to develop; but after the first few mowings of the green the clippings should be removed.



Spreading sifted earth over stolens in the vegetative planting of creeping bent. The superintendent stands nearby to see that the stolens are covered to the proper depth.

When fairways are planted by the vegetative method, the topdressing is usually applied to the stolons with a mechanical soil spreader. However, good results have also been obtained by lightly pressing the stolons into the turf with a disk harrow set so that it will not turn the soil over. In both methods of planting, the rolling, watering, and mowing should follow as with plantings on greens and tees.

SODDING

If the grades on the course are sufficiently easy, seeding may be done on backs of greens, slopes into traps, or grades from tees, but if the grades are steep it will be found that sodding is the quicker method of getting a turf. Also areas frequently wash out, and as it is sometimes very difficult to get a catch of grass from seed on such places, sodding is resorted to. Where dead turf or weedy patches are removed on greens or tees sodding is frequently found to be the quickest manner in which to replace the turf. For this reason it is well to have sod available that has been prepared in advance so that it is fit to replace turf on putting greens, tees, or fairways.

When laying sod the surface soil is prepared as for seeding except that it is made compact enough while dry so that footprints will not be readily made. It has been generally found that sods cut about one inch thick are convenient to lift and lay, and that since the roots spread out and take hold more quickly at that depth the sod will attach itself to its new seed bed much more quickly than when lifted with more earth. Before lifting sod it should be mowed close so that it will not need to be mowed soon after relaying, since it is more difficult to mow immediately after transplanting than before. The sod



Trimming sod to an even thickness by using a cutting box.

should be cut in true squares which will fit together well and should be trimmed to a uniform thickness before being layed. The cutting box is simply a table on which there are two sides or guides of a certain height, generally about 1¼ inches. There is a back of the same height. The sod is laid grass down on the table and a sharp blade, similar to a drawknife, is drawn over the sides of the table or box. As the sod is held by the back stop, the knife will cut through the earth and fine roots and will leave the sod an even thickness. When laying the sods or turfs they should be placed close together but not crowded or bulged. It is well to go over the sodded area and gently pat each sod with the back of a flat spade or shovel. The job should be carefully examined, and if the sods sink at the corners they should be brought level by having some loose soil placed under the low spot. Also bulged or raised corners that will not easily pat down should have sufficient soil removed to enable the sod to lie level. The sod

August, 1928

should then be top-dressed with a sandy loam top-dressing. The dressing need not be heavy, but should be brushed or rubbed to fill in the spaces between the sods. The area should then be sprinkled until the water has gone through the sod into the soil below, followed a day later, or more if necessary, by a comparatively heavy rolling when the sod has commenced to dry out. A roller weighing from 150 to 200 pounds per foot of roller is sufficient. The sod should not be allowed to become dried out for lack of watering before the roots have had a chance to take hold in the soil below.

SPECIAL PROBLEMS OF FAIRWAY AND ROUGH

On fairways there are two areas in particular that require special attention while the course is being constructed. These are the approach area and the area lying between 150 and 250 yards from the tee. On par-5 holes there is also another area, lying between 350 and 450 yards, which receives an increased amount of wear. These areas receiving the bulk of the fairway play should be the first to receive special consideration after the greens and tees. Often during the construction of the green the approach is subject to heavy trampling and the ground becomes puddled. In some cases also the topsoil may even be stripped from the approach in order to improve the green. Turf on all such areas should be provided with a fairly deep and fertile soil, even if suitable soil must be hauled and spread on the areas. The approach should be particularly well graded. It is very disconcerting to a player who intentionally plays to a certain point before the green on his approach shot, to have his ball drop dead one time, bound over the green another time, or kick off to one side, due to uneven, poor turf. Often courses have an abundance of good soil in their rough and many poor approaches almost bare of topsoil. If topsoil is wanted, it is logical to take it from the rough, where it is not needed. By plowing and otherwise working the rough along with the fairways the rough is graded and the topsoil prepared for use during construction. Later, as it is required, it can be hauled away, and on some courses it furnishes an almost inexhaustible supply of soil for compost piles. On holes where the first hundred yards of fairway is to be treated as rough, there is no reason why the topsoil from these areas should not also be used. A rough with a dense, tangled growth is not desirable, and having at least an ounce of pity for the unfortunates who play most of their game there, would it not be a kindness to impoverish the rough so that it will sustain only a sparse, bunchy, open growth? Such a growth gives the required penalty by being difficult to play from, but, being open, the ball can not hide itself with its usual unerring instinct. Clubs also require much topsoil for the construction of greens and tees and for building compost piles for the future maintenance of the course.

Another area frequently neglected though one that does not receive much play, is that area behind and around the sides of the putting green. The rough does not necessarily continue around the sides and back of the putting green. Architects often do not insist on the preparation of this strip of fairway, which should extend around and behind the green for various distances, depending on the length and type of hole. There is no reason why a bold shot that runs over the green should have to be played out of the rough when a weak, overcautious shot short of the green sometimes gets the advantage of a