

erage green. This application was used once on the 18 greens on the main course and the practice putting green and was followed up again the last week in July by another spraying, using four pounds of Semesan in 50 gallons of water to the average green of 6000 square feet.

The first week in August another application was applied, using three pounds of Semesan to a 6000 square foot green. This time we mixed nine pounds of Semesan with 100 gallons of water and sprayed three greens of approximately 18,000 square feet of putting surface. We used a very fine spray in applying.

I am very fortunate with the labor situation here; it is very convenient for all concerned. We have a large room in our implement barn which is equipped with electric lights, gas, bath, and 12 dormitory cots where the men sleep and eat. The only men that leave the place at night are my foreman and gardener and one tractor man. The fact that the men live on the course is very favorable because there are many times during the year when I need labor at the most unexpected hour and it is nice to know you have 12 men right on the job for these emergencies. This can be done with very little cost to a club and proves a great asset to any greenkeeper if some of his labor can live on the course.

## We Corrected Green Contour With Minimum Play Loss

By DE WITT GALLEHER

*Green, Chairman, Kanawha Country Club*

OUR No. 2 green is rather small, perfectly circular with no undulations and has a diameter of 70 feet. It was built six years ago in the side of a hill, which necessitated a deep cut in the back and a deep fill in front. The fill settled more than we anticipated and the result was that we had 4 feet 7 inches drop from the back of the green to the front of the green, which is equivalent to a 6.8 per cent grade, which anyone will admit is too steep for a fair putting surface.

We laid off a square in the middle of the green 33 feet by 33 feet. The turf was cut using a straight edge 8 inches wide, which was the width of the turf, making them all uniform as to width but not necessarily uniform as to length, some being 8 inches and some a little bit more. For cutting the turf we used a stationary blade from an old lawn mower, after fastening it to a

six foot hickory handle. One man drew the blade while another held it down in the turf. The turf was then shoveled up and placed upon the fairway in the same position relatively it had occupied on the green, so that each piece of turf went back when the job was finished, to its original position.

After removing the turf the area was divided up into three sections, being 11 feet by 33 feet. Into the middle one we shoveled all the six inches of top soil from the outside sections. This permitted us to lift the sub-soil on the portion we were lowering and wheel it around to the section we wanted to raise. We fortunately found that our tile lines were deeper than is usual and it was not necessary to disturb them, and the finished job gave us about 7 inches of soil over the shallowest lines.

After rough grading and rolling the two outside sections, we proceeded to shovel the top soil back onto these two sections, which were properly graded by using grade stakes. At this point we had two outside sections graded but the middle section was not touched. The lower half of the middle section only required a few inches of top soil, which we were compelled to bring in from our top soil supply. The upper half of the middle section necessitated taking the top soil clear off and removing part of the sub-soil. After putting the top soil back on this section our whole square area was properly graded and blended into the four edges of the old green. This left us with a cup space area about 20 by 20 feet, with an incline from the top to the low side of about 4 or 5 inches which made a fairly level putting surface, and which is adequate slope for surface drainage.

The next thing confronting us was to get the turf back on the green. Of course, as the turf was shoveled off the green they varied in thickness running from 2¼ to 3¼ inches in thickness, with irregular bottom surfaces. While the work of remodeling the green was in progress we had one man, equipped with a wooden box, 8 inches by 10 inches, and 2¼ inches deep, and further equipped with an old mower blade, with which he would scrape the bottom of the turf after it had been placed upside down in the wooden box. This gave him all turves of uniform thickness, 2¼ inches. The rich soil which he scraped off of the turf was broadcast on the green just before placing the turf back. Having cut the turf of a uniform width and shaved it uniformly it fitted right in relaying.