Sand versus Peat for Ameliorating Clay Putting Greens

There is perhaps little difference in opinion as to what should be the ideal texture of the soil of a putting green, albeit there is difficulty in stating this condition in words. Clay is more or less like paste when wet, and somewhat akin to brick when dry; sand has no springiness whether wet or dry; peat is always spongy. Rolling either sand or peat as firmly as possible does not materially change them. There is pretty general agreement that a loamy soil is best for putting green purposes; but this must necessarily be firm enough so that no heel prints will be made. A mixture of clay and sand, or of clay and peat, will give a texture approaching that of a true loam. The true loam, however, is most desirable, particularly as it will produce better turf. Even on a true loam soil much of the consistency or "feel" of a putting green is due to the turf. It is perhaps not an overstatement to say that a clay putting green carpeted with good turf is preferable to a loam putting green covered with thin turf. In short, the springiness, consistency, "feel," or whatever one may choose to call it, is due quite as much to the turf as to the soil. Good turf or good loamy soil is probably as near to the ideal as we shall ever approach.

All of the above is preliminary to answering the question "Is peat or sand preferable to modify the texture of clay soil on a putting green?" The answer at the present time would be emphatically in favor of sand. Peat, thoroughly mixed with clay soil, certainly modifies its texture; but it also very often increases the difficulty of growing good turf. If a club has a peat deposit on the course, but no sand, it could perhaps afford to experiment with the peat. No club, however, can afford to buy "commercial humus," as the price is far above any possible benefit; often, indeed, the results are distinctly harmful.

To sum up present conclusions, either peat or "commercial humus" has exceedingly little value as a fertilizer. While both will modify the texture of the soil, they also make the growing of good turf more difficult. Sand is the best substance to ameliorate the texture of clay soils. Coke-breeze is also excellent, but usually not as cheap.

Portable Pump for Watering Greens

The use of a portable pump for supplying water to greens where the existing piping system is inadequate was tried out successfully during the season of 1923 at the Tuxedo Golf Club, Tuxedo Park, New York. Mr. Griswold Lorillard, Chairman of the Greens Committee of the club, writes that the pipes of their sprinkling system, installed as long ago as 1897, are inadequate, having become somewhat clogged. There is a stream of good size running through the club's property, and Mr. Lorillard conceived the idea of using a portable pump so as to obtain water from the stream at points where needed. With this in view the club purchased a portable fire pump, such as is on the market for use in fire-protection of forests, lumber camps, mills, country clubs, etc. The experiment with the portable pump at the Tuxedo course has been highly successful. During the dry spell of the summer, while neighboring courses were suffering from lack of water, at the Tuxedo course the pump was carried about on an ordinary motor truck to points on the stream near the respective greens, and the turf on greens and tees kept
in excellent condition. The pump is very inexpensive to operate. Although the initial cost was rather high ($450), Mr. Lorillard considers that the pump was worth its cost during this first season of its operation alone. He states that the important things to watch are keeping the strainer and suction hose from becoming clogged, and the engine from heating. When kept oiled and greased, the cylinder will remain cool after running steadily for several hours. The pump weighs under 85 pounds, and has a capacity of 20 gallons per minute.

Desirable Trees for Golf Courses

By F. L. Mulford, Horticulturist, U. S. Department of Agriculture.

On many golf courses the planting of trees is desirable for adding to the beauty of the landscape. In any particular region some trees are more desirable than others, either because they grow better or are more attractive. Some trees are undesirable on golf courses, especially near putting greens, as they make too much litter. All trees and shrubs that produce berries are useful for attracting birds, which are not only of great interest in themselves but very efficient in destroying insects.

To simplify the discussion of kinds of trees likely to prove satisfactory, we are arbitrarily dividing the United States, on the accompanying map, into 13 regions. An effort has been made to make each division cover an area having similar growing conditions throughout, so that the trees suggested for the division will be likely to thrive in all its parts.

Outline map of the United States, showing the regions within which essentially similar conditions for tree growth exist.

Region 1 comprises the mild humid portion of the northern Pacific coast east to the Cascade Mountains, including the western third of Washington and Oregon and a portion of northern California. The trees