Centers for the multiplication and distribution of the most desirable strains of the bent grasses are also being established. In 1928 we distributed about 20 tons of stolons from the increase plots at the Central Experimental Farm at Ottawa.

Our soil is a sandy clay loam. The work now in progress includes experiments with different fertilizers, comparative tests of strains of creeping bent and velvet bent, comparative tests of seedsmen's mixtures and bent grass seed, and tests of various worm exterminators. As yet no experiments in disease control have been started, nor in heights of cutting. We keep about ½ acre cut at putting green height and ¼ acre at lawn or fairway height.

Turf Experiments at the New Jersey State Station

By Howard B. Sprague

The first definite experimental work on golf turf at the State Agricultural Experiment Station, New Brunswick, was started in August, 1925, with the assistance of the late Dr. C. V. Piper. At that time an area of about 10,000 square feet was planted to stolons of Virginia bent grass and 1,000 square feet to stolons of Metropolitan bent grass. In the early summer of 1926, the area in Virginia bent was laid off in plots 10 by 10 feet in size.

Twelve types of fertilization were selected for study, and each of these was used separately on 8 different plots, thus making 8 series of plots with each series containing all 12 of the treatments. The treatments are as follows: No fertilizer, sulphate of ammonia, nitrate of soda, Ammo-phos, complete fertilizer, alfalfa meal, bone meal, nitrate of ammonia with sulphur at 2 rates (to make the soil acid), and nitrate of ammonia with lime at 2 rates (to make the soil alkaline). The fertilizer was first applied in the summer of 1926, and has since been added at equal rates of nitrogen per plot per season. These plots yield data as to the relative value of these various nitrogenous fertilizers.

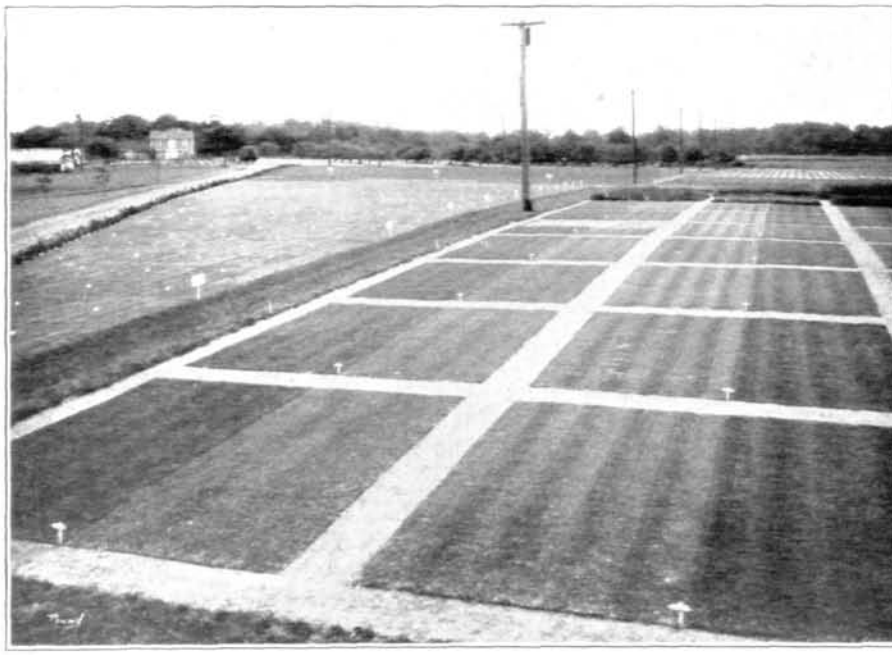
The first 3 of the 8 series of plots noted above are being used to test the effect of different proportions of sand in the top-dressing. Series 4 receives 15 pounds of arsenate of lead per 1,000 square feet during the season, the material being applied in the top-dressing. Series 5 is used for observations on diseases. Series 6, 7, and 8 have been set aside to test the long-time effect of the fertilizers used on soil acidity, abundance of weeds, abundance of clover, annual bluegrass, number of wormcasts, and the vigor and color of the grass.

In addition to the fertilizers listed above, such materials as sewage sludge, Nitrophoska, castor-bean pomace, and sulphate of ammonia in varying amounts are being tested on single plots.

The area in Metropolitan bent is being used to compare urea and cottonseed meal with sulphate of ammonia. All of the fertilizer plots on both Virginia and Metropolitan bent receive top-dressings made up of 2/3 topsoil and 1/3 sand. No organic matter is added, since this would tend to mask the effect of the fertilizers.

An additional area of Virginia bent is being used to compare the relative values of mushroom soil, barnyard manure, peat-humus, sewage sludge, and peat-moss manure as compost materials.

A group of 14 species and strains of grasses are being grown in plots 20 by 20 feet to observe the value of each in this climate. One-half of each plot is cut at putting green length and the other half at fairway length.



Experimental plots at the New Jersey State Station. Photograph taken in June, 1928

The 14 plots at the right of the telephone pole contain the experiment in height of cutting, each plot having a different kind of grass. At the left of the pole are plots of Virginia and Metropolitan bent kept at putting green height. These contain miscellaneous experiments, including comparison of fertilization treatments, use of different proportions of sand and soil in top-dressing, comparison of various compost materials, and the value of arsenate of lead. The plots are 10 by 10 feet in size

A nursery of turf grass selections is maintained which contains a number of strains of bent grass obtained from golf courses, lawns, parks, and pastures throughout the state. Some of these are promising enough to warrant trial under putting green conditions.

The United States Golf Association Green Section is now contributing $600 a year for conducting these experiments; the balance of the cost is borne by the State Agricultural Experiment Station.

Our soil is a heavy silt loam grading into a clay loam at about 2 feet. It is a little below the average in fertility, but is well drained.

A New Experiment Station In Chicago

In September, 1928, a new experimental turf garden was started just north of Chicago. This garden will be under the direction of the United States Golf Association Green Section. It is located near Everett, Ill., on the Mill Road Farm Golf Course, the private course of Mr. A. D. Lasker.