

The Arlington Turf Garden

By John Monteith, Jr.

The events leading up to the establishment of the Arlington Turf Garden were recounted by the late Howard F. Whitney, formerly president of the United States Golf Association, in an address of his delivered at a meeting of the Green Section in Washington, July 21, 1921. Mr. Whitney said:

"It appears from authentic records that Dr. W. S. Harban was the first golfer who went to the United States Department of Agriculture for technical assistance in regard to green turf problems. This was in 1906, when he first met Messrs. Piper and Oakley. Two years later, when Mr. Charles B. MacDonald was building the National Links near Southampton, Long Island, he encountered such serious problems in attempting to grow satisfactory turf on the old sand dunes that he applied to the Department of Agriculture for help,



Arlington turf garden as viewed from the air. Photographed in August, 1927

The central portion, 224 by 128 feet, is used for experiments with grasses kept at putting green length. At the right of this area are nursery rows of some of the most important strains of creeping bent, which are propagated for distribution of material to member clubs of the Green Section. At the upper right are rod rows of various selections of grasses. The area at the upper left is now used for lawn experiments.

which was of course accorded. In studying the difficult turf problems at the National Links, the Department scientists came to the realization that the existing knowledge on the subject was very far from adequate and that extensive experimental investigations were necessary. Unfortunately, no funds were available for the purpose; but in cooperation with many golf clubs a considerable amount of investigation was undertaken by the Department men. Much of the information thus garnered formed the basis for a long series of articles in the golf journals by Messrs. Piper and Oakley. The first appeared in January, 1913. These articles were immensely helpful, but in the meantime the needs of the golf clubs for information and advice were increased enormously. In the spring of 1915 the Execu-

tive Committee of the United States Golf Association waited on the then Secretary of Agriculture, Hon. David F. Houston, and requested additional help in solving the problems of greenkeeping. The committee pointed out that about \$10,000,000 a year was being spent on the establishment and maintenance of turf by golf clubs, and it was believed that through ignorance half of the money was wasted. As a result of the appeal, the turf experiments were begun at Arlington, in the spring of 1916, the results of which having already been of the highest value."

The Arlington Turf Garden is located on the Arlington Experiment Farm, which is operated by the Bureau of Plant Industry, United States Department of Agriculture. This farm is located near Washington between the Arlington National Cemetery and the Potomac River. A large part of the funds for the turf garden work is contributed by the United States Golf Association Green Section. In recent years the Arlington turf work has been growing, and there is now an area of nearly 30,000 square feet kept cut at putting green height. The soil is of a clay type, which is unfavorable for turf production, and therefore is typical of the soil found on a great many courses in the East, where difficulty is experienced in producing and maintaining good turf.

The garden is divided into small plots 8 feet by 8 feet, giving the whole area a checkerboard-like appearance. In each of these plots different grasses and chemicals are tested. Most of the early work with stolon plantings of creeping bent was done at this garden, and there still is a large section devoted to various strains of both the creeping and velvet bent planted by the vegetative method. In addition to these tests there are plots of various grasses obtained from seed from different sources. About one-fourth of the turf garden is used for experiments with various fertilizers, particularly on bent grasses. These plots are used for observations as to the effect of the fertilizers on fine turf as well as their influence on common weeds of putting greens. Most of the Green Section experimental work on diseases has been conducted at the Arlington Turf Garden and a large area is still used for this purpose.

One section of the garden serves as a demonstration of different grasses used on putting greens. This area is not used for any experimental work but is maintained as nearly as possible like putting greens on golf courses. It receives top-dressing, fertilizers, disease remedies, and other treatments, as needed, to keep the turf in as good condition as possible throughout the season. On these plots it is possible for a golfer to compare the putting qualities of different grasses as well as the different strains of bent planted vegetatively.

In addition to the turf section there is a nursery section maintained by the Department of Agriculture in which various grasses are grown in rod rows. These offer an interesting comparison of the many grasses used on golf courses as well as in agricultural work. In one section of the nursery there are rows of several strains of bent maintained for distribution. Stolons from these rows have been sent out for several years to golf clubs, experiment stations, or individuals located throughout the United States and many foreign countries.