

### Bermuda Grass and Its Strains

Address of P. D. Maxwell, Dornick Hills Country Club, Ardmore, Oklahoma, at the Annual Meeting of the Green Section, January 5.

Mr. Chairman and Gentlemen, it gives me a peculiar pleasure to substitute for as distinguished a gentleman as Dr. Hinman, of Atlanta, who has been as much to our southern golf as some of the other leading lights of the Green Section have been to your northern golf.

I have had a somewhat interesting golf experience. Twenty-seven years ago I had a breakdown in college, and was sent to the semi-arid regions of the west to recover from tuberculosis. At that time, 1897, I went to what is now Oklahoma; it was then Indian Territory. I do not believe there were then five golf courses in America west of the Mississippi River. There were not over 50 east of the Mississippi River, or in the whole country, probably. Surely there were none within 500 miles of our section of the country. It was the last place in the world that any one coming from the home of golf, Scotland, would select for a golf course, because golf is a game played on grass; and Oklahoma is a short-grass country, very short grass, with none of the finer varieties—bluegrass and bents. If you would use those terms on the average golf course in the south today they would think you were talking Russian. But with civilization coming nearer to us all the while, in 1907 we were given statehood and in 1913 the ways of civilized man penetrated into our wilderness, and a few of us, at least, had heard of golf. Reading an article in Scribner's Magazine, written by Mr. H. W. Whigham on the establishment of the National Golf Course near Southampton, Long Island, in this out-of-the-way place in Oklahoma I said I thought golf was just a game for the effete, and I wondered if it was possible to have a golf course in our part of the world. That article was very attractively written, and described the National Golf Course from a landscape standpoint as well as a test of golf. My wife was the artist of the family. It was she who found this article, and she said, "I wonder if that thing could be adapted to this section of the country. We have a beautiful piece of ground out north of our city, and I wonder if it could be adapted to golf?" I do not think either of us had ever seen a golf course before. That was in 1913. Well, I began making inquiries, and they said yes, there were a few golf courses in north Texas. I visited them, and they all had sand greens. I wonder how many of you have ever had the displeasure of playing on a sand green. That was all we had in that part of the country.

I first wrote to the Department of Agriculture at Washington, and at that time we did not have the efficient Green Section that we now have, and it was rather scant information that we got. They said, "We are afraid you are a little too far south for bluegrass and a little too far north for Bermuda." So there we were between the devil and the deep blue sea.

I then made a trip through the southern country, visiting the few Bermuda green courses in the cities of Houston, New Orleans, Atlanta, and in Florida, and I found that was all that we had to go on, that we must have Bermuda grass if we had anything. But there was a dearth of information, as there seems to be all over the country now, in regard to grass. No one seemed to know much about it. They would tell me how to plant it and how to top-dress it, and how to bring it out, and all this and that, but they were overlooking what I now think is the most important thing with respect to grass, either in the south or in the north, and that is the selection of the particular strain to propagate.

The vegetative method is very old in the south. Until a few years ago that was the only way we did propagate Bermuda grass in our lawns; that is, by taking roots from one yard and transplanting them into another. The matter of seeding Bermuda grass came in only comparatively recently, as seed is now being produced in Arizona and New Mexico, but never in Mississippi or Louisiana or farther eastward. In 1915, as I say, I made this trip through the south, and then came on east. I walked right into Mr. R. C. Watson's office, who was then occupying the position to be held by Mr. Vanderpool, and told him I was just a seeker after knowledge and would like to have the privilege of visiting a few of the eastern golf courses, having no social connections or acquaintances in the east; and he very kindly gave me a letter to a dozen or more of your prominent courses, and I visited them.

At that time I would say to the average greenkeeper I found in the east, "What kind of grass is this?" And he would say, "I don't know what it is." And he did not know what it was. Many of them would just say, "Bluegrass." The idea that I am trying to get over to you is how little they knew about this complex problem, as Dr. Piper has reiterated time and time again, and we are still in the elementary stage. The only way to get these problems solved is by enthusiasm. The information that I have gained has been by traveling over practically all of the southern country.

It remained for the Green Section to really point out to us what was the trouble with our southern grass, Bermuda, namely, that there were different strains of it. After visiting practically every golf course in the south, over a period of five or six years, no one ever told me that there were different kinds of Bermuda grass, and I ought to have known it, by looking at my own greens, because by one look at the ones I planted three or four years ago I can now see that they are spotted as much as this rug on which I am standing. I do not believe that 20 per cent of this audience even really appreciate the idea of selective strains—how important it is, what it has done in the last four or five years for the betterment of our greens, and what it will do under the guidance of scientific men such as those in the Green Section. Last evening I scratched down a few remarks, but I do not know whether I should impose them upon you or not. When I re-read my notes this morning, I said, "They sound as if I had copied them or made a stenographic report of Lyman Carrier's remarks here yesterday morning." So I do not think I will impose these remarks upon you.

The main idea I want to get to you, is that of proper selection. In my opinion, the most important thing which has occurred in the development of American golf is the discovery of the vegetative method in the propagation of the bents and the subsequent and continued selection of the finer strains of this variety. I do not believe any considerable part of my audience appreciates the magnitude of this discovery and its effect upon the future of your greens. Bermuda grass is much like bent; it is a creeping grass, and will grow fairly well in almost any soil, but better in sandy loam with clay subsoil, and still better if plenty of manure is mixed with the subsoil. I know the vegetative method is going to revolutionize the development of Bermuda grass, and therefore southern golf; and that is the real object of my remarks.

I have come as a self-appointed representative of the southern section, to express our gratitude for what the Green Section has already done for us, and to ask that you may, if possible, give our southern courses the

same careful attention and study as you have done so notably in the development of the bents (applause).

*(At the conclusion of Mr. Maxwell's address, Dr. Piper furnished the following additional interesting information on strains of Bermuda grass.)*

DR. PIPER.—Mr. Maxwell's paper reminds me of a letter I received a few days ago from a gentleman who had heard about "Atlanta" Bermuda grass. He wrote, "I think you fellows are all off; I have just been down to Atlanta and they don't know anything about it." He added, "Bermuda grass is Bermuda grass." But he wrote me that he had been at the East Lake Club at Atlanta. That is one of the courses I have never had the pleasure of visiting. I wrote back, "If you had gone to any other golf course in Atlanta you would have found out all about Atlanta Bermuda." Now some six years ago we got together about six strains of Bermuda grass and grew them in plots, and they were very, very different indeed. One of them, from Manchuria, China, was the best of the lot, and yet, was not particularly good. Ordinary Bermuda will make pretty nice turf on clay soil, but on sandy soil very poor turf. Later I found that in Atlanta on many putting greens there were two very different strains of Bermuda grass, one immeasurably superior to the other. I called Dr. Hinman's attention to it on his course. As a result his greens are now nearly pure Atlanta Bermuda, which is infinitely better than any other strain I have yet seen. This Atlanta strain of Bermuda grass is a big advance over ordinary Bermuda.

#### DEATH OF JOHN M. INGLIS

It is with regret that we announce the sudden death of Mr. John M. Inglis, the faithful greenkeeper at the Country Club of Virginia, Richmond. Mr. Inglis was well versed in southern turf problems, having been for a long time in charge of the course of the Country Club of Montgomery, Alabama, and later of the Savannah Golf Club. While at the Country Club of Montgomery he developed wonderful Bermuda grass putting greens, which gave him a national reputation. From Savannah he went to the Country Club of Virginia, about three months since. During this short time those in charge of his work at Richmond became wonderfully impressed with the remarkable efficiency he displayed in his chosen work. His death is a loss to American greenkeeping.

#### GREENKEEPERS' REGISTER

The editors of *The Bulletin* will be glad to receive letters from greenkeepers seeking employment and place such men in touch with golf clubs needing services of greenkeepers.

**New Member Clubs of the Green Section.**—Spring Lake Country Club, Waco, Texas; Fargo Country Club, Fargo, N. D.; Arlington Country Club, Arlington Heights, Ill.; Arcola Country Club, Ridgewood, N. J.; Shawnee Country Club, Lima, Ohio; South Shore Country Club, Buffalo, N. Y.; Lynx Club, Milwaukee, Wis.; Round Hill Land Corporation, Greenwich, Conn.; Congress Lake Club, Hartville, Ohio; Cedarhurst Country Club, Wickliffe, Ohio; Taconic Golf Club, Williamstown, Mass.; Greenville Country Club, Greenville, Ohio; Green Valley Country Club, Wheaton, Ill.; Wappoo Country Club, Charleston, S. C.; Minakwa Country Club, Crookston, Minn.; Carroll Country Club, Carroll, Iowa; Rockaway River Country Club, Denville, N. J.; Northampton Country Club, Northampton, Mass.; Fox Hill Country Club, Pittston, Pa.; Topeka Country Club, Topeka, Kans.