certain; and is due only to the contraction of particles of inorganic earth which the grains of sand may separate. It does not make a desirable home or feeding for our very necessary soil bacteria.

All too frequently, improper selection of soils for top-dressings is made. As a rule a dark, rich-looking earth, taken from a low part of the golf property, is considered good enough for this purpose. Before such a selection is made, assure yourself of the organic content of this soil. A fair test may be made by drying a sample thoroughly and noting carefully its "mellowness," or the ease with which it may be crumbled by pressure in the hand. It must be observed that if there exists "mellowness" due to excess of sand, there still may be deficiency in organic matter.

In our virgin soils, Nature, aside from latent, fixed inorganic feedings, insisted that plant life should be self-sustaining through the life-cycle, death and decay of animal- and vegetable-matter. The tropics, where rapid decay, due to climatic conditions, offers the greatest possible amounts of organic matter for future fertility, give us a profuse development of vegetation. In our latitude, the higher lying slopes, hills and clay lands, before being cleared of vegetation, were extremely productive as virgin soils.

Clearing deprived these soils of proper organic matter for future decay and further impoverished them by facilitating a wash of practically all organic matter to the lower valleys. These valleys became dark in color, porous in texture and of the greatest possible fertility largely at the expense of the higher clay soils. These clay soils, unless scientifically replenished by the direct application of the organic matter or the decayed vegetation resulting from the rotation of proper crops, rarely recover more than a trace of their former fertility.

Improper original green construction has forced a great number of our older courses to rebuild their greens through a series of top-dressings with such mixtures of earth and organic matter as will more nearly imitate the best in modern green-construction. This is a slow and expensive process but has proven the only means of correcting an unfortunate error in the original work. The golf organizations who, in their original construction work, properly cared for the organic content of their soils, were very wise, and many, no doubt, acted more wisely than they knew.

Bent Fairway Planting in Michigan

By Hiram F. Godwin, Greenkeeper, Redford (Mich.) Country Club.

N a recent issue of GOLFDOM there was an inquiry regarding using creeping bent on fairways. I had the opportunity in the Detroit district last year of planting a complete eighteen-hole course, fairways as well as greens, entirely to creeping bent. It has made a wonderful The soil is stony clay, not growth. naturally easy to establish grass on. Grass on the fairways was planted in rows about 12 inches apart and has almost entirely filled in. By June this year, we will have one uniform mat of creeping bent turf, on soil that it would have taken several years to get even a sparse turf, using seed. The cost, considering that an excellent turf has formed in a year's time, has not been materially above seeding.

While there was ample water available, it was not necessary to use same except about five weeks during the hottest part of the summer. We anticipate some fluffiness the first season but experience has shown that after the second winter the turf knits down to the ground better and the objectionably large divots so noticeable in first year turf do not occur.

Announce 1929 Chicago and New York Golf Shows

S PEARMAN LEWIS and A. R. Shaffer, managers of the International Golf Show, announce the first New York edition of the International Golf Show will be held at Grand Central Palace February 18-23, 1929. Two weeks later the fourth Chicago show will be held at Hotel Sherman, March 11-16.

Chicago executive headquarters have been moved to 35 E. Wacker drive.

ON'T kid yourself that you will be able to hurry nature. Making that mistake continues to add to the preventable waste in golf.

GET your greenkeeping force in the habit of using plenty of oil on the equipment. Watch the results in reduced costs and increased efficiency of the machinery.