

Nursery Rows of Creeping Bent

The accompanying illustrations show rows of creeping bent runners developed in nurseries. The rows in each illustration were grown from runners planted end to end in May of this year, and the growth shown in the illustrations had developed by the latter part of August, at which time the photographs were made. A much greater development would have resulted had the runners been set out in the nurseries in the fall of last year, and indeed it is recommended that the best results are obtained if the runners are set out in the fall and allowed a full year's growth when the planting of greens by the vegetative method is contemplated. The illustration on the reader's left is furnished us by Mr. Richard Paul, of the Interlachen Country Club, Hopkins, Minn.; the mass of runners has been lifted from the nursery bed preparatory to chopping up and use in planting a green. The illustration on the reader's right is furnished by Prof. C. J. Willard, of Ohio State University, Columbus, and is a view of a portion of the creeping bent nursery established at that institution for planting the athletic field of their stadium.

Three Years' Work of the Green Section

The Green Section is now three years old and has issued a BULLETIN every month beginning with February, 1921. The three volumes of THE BULLETIN thus far issued make up the most valuable literature in existence pertaining to golf courses. That it is highly appreciated by those interested in the building and upkeep of golf courses, hundreds of enthusiastic letters testify. The Green Section has taught golf clubs to do the right things and to discard expensive and disappointing methods. In this way it has been a source of great satisfaction and incidentally has saved the clubs much money. It is generally recognized that the formation of the Green Section was the greatest forward step ever taken to promote American golf.

At this time it seems appropriate that some of the specific accomplishments of the Green Section be reviewed, rendering, as it were, an account of its services to the clubs from which it derives its support.

The Green Section as a Counselor.—It may be pardonable to refer to the number of letters received and answered daily. Most of these letters ask advice, and they cover every imaginable problem that concerns the physical welfare of a golf course. If it were not for the fact that the same question is presented over and over again it would require a corps of supermen to answer them. It is hoped and believed that these letters are helpful. One of our oldest and most ardent golfers tells us, "The Green Section is such a great comfort"—a sentiment which we hope is generally felt.

Worm Eradication.—One of the subjects early investigated by the Green Section was commercial worm eradicators. Samples of the different brands which could be found on the market were purchased, analyzed, and tested for their effectiveness. Experiments with a number of chemicals not commonly used in commercial worm eradicators were also tried. The common commercial eradicators were found to owe their worm-killing properties to one of two materials-mowrah meal and corrosive sublimate. The former was most commonly used. Some of the mowrah-meal eradicators carried 20 to 60 per cent sand, while others were pure products. The prices charged were unreasonably high, ranging around \$175 a ton. After some experimenting it was demonstrated that pure corrosive sublimate was a most effective eradicator and could be bought at a price which reduced the cost of worming greens 85 per cent. Pure mowrah meal has been selling this past season as low as \$45 a ton. A statistician may be able to estimate what this saving means to the golf clubs of the country.

Red Fescue.—This grass has long held a high reputation for fine turf, perhaps justified by its behavior in other countries. Under exceptional circumstances good fescue putting greens are found in the United States, but they are very rare. After extensive experiments the conclusion has been forced upon us that red fescue has no great merit as a putting grass in America. Our former fairly high regard for this grass can no longer be justified, and hence for over a year we have advised against its use. Perhaps this has had something to do with the reduced price of the seed, which is now less than half its former price.

Commercial Humus.—This substance, due to its fine texture and intense blackness looks very alluring as a fertilizer. Its apparent richness however belies its real character. Not only is the fertilizing value of commercial humus low but in many cases it has proved positively harmful. Many instances have been noted where very poor turf resulted from a layer of humus just beneath the surface. Those who have endeavored to keep up their turf solely by top-dressing with commercial humus have secured poor results at best. The price of the product is entirely out of proportion to any value it might possess. Because of the advice given by the Green Section to use for top-dressings good rich soil reinforced with stable manure, it has been reported that the sales to golf clubs of commercial humus have fallen off more than half. This not only represents a saving in the cost of the material, but in most cases a still larger saving in the

Dec. 15, 1923 UNITED STATES GOLF ASSOCIATION

future in not having to reconstruct the green to overcome the detrimental effects of the humus,

Layer-Cake Greens.—Building a green by making soil layers of different materials is as unwise a disregard of nature's way of doing things as one can imagine. But there have been scores of putting greens built after this manner, mostly with disastrous results both as regards the club's treasury and the growing of turf. The pathetic part of the whole business is that no one knows how to grow good turf on such greens without rebuilding them. The Green Section has kept some clubs from making this mistake, while others have had to learn from experience.

Seeding on Old Turf.—Prior to the organization of the Green Section it was customary to reseed putting greens and fairways every year. Some reseeded spring and fall, no matter how good or how bad the turf. There was plenty of evidence available that scattering more seed on old turf was largely a waste of money. By constantly stressing this point a large number of clubs have been induced to give up the practice entirely, making individual savings in some cases of from \$1,000 to \$5,000 a year.

The Vegetative Method of Planting Grass.—One of the outstanding achievements of the Green Section has been in connection with the vegetative planting of creeping bent. The preliminary work with this method had been performed by the United States Department of Agriculture before the Green Section was organized; but without the publicity given by THE BULLETIN directly to golfers, it would no doubt have taken a long time to come into general use. There had been five or six greens planted by this method prior to 1922. In the fall of that year about 125 greens had been planted vegetatively to creeping bent, and in 1923 over 600 have been planted. The discovery of the Atlanta strain of Bermuda grass and its propagation by vegetative methods, is greatly improving Southern putting greens.

Cooperation.—Much of the old mystery and secretiveness of greenkeeping has been overcome. Instead of each man feeling that he has to guard his knowledge with as much care as his pocketbook, there is now a spirit of cooperation and mutual helpfulness among greenkeepers, which means a great deal to the profession. The greenkeeper with a little pet stock of secret formulas is having a lonesome time.

So, too, is the quack turf expert. It would be impossible to carry on work of this kind without creating some antagonism. It is, however, a source of much gratification that most dealers in golf supplies have been sympathetic with the work of the Green Section and that it is making for better understanding and more cordial relations.

Future Work.—In regard to the ends to be achieved, the work of the Green Section has but fairly begun. It is perhaps true that some of the major problems have been solved; but there are still enormous gaps in our knowledge. There is no likelihood that in the near future all the puzzles of turf growing will be cleared up. The task of educating golfers to follow proved ideas and to avoid untried or unsatisfactory methods is at best slow, and a continuing program of education is of the utmost importance. Some ideas must be emphasized many times before some men can be induced to give them consideration.

How far the Green Section has been a success is for its supporters to judge. This judgment will be the main basis for its continued support and, we hope, for its material enlargement. At present it is not possible to afford nearly all the help urgently requested.