

An Appreciation of Prof. Carrier's Services

Announcement was made in the April number of *THE BULLETIN* with regard to the retirement of Prof. Lyman Carrier from active work as an advisory member of the Green Section. Perhaps no more fitting testimonial to the high value of his service to the Green Section can be presented to our readers than a resolution passed by the Executive Committee of the United States Golf Association at its meeting on April 11. The resolution is as follows:

"Ever since the Green Section started three years ago, Prof. Lyman Carrier, of the United States Department of Agriculture, has rendered it constant and valuable service. This work was all done during extra hours, in addition to his regular duties in the Department of Agriculture, and was done purely on the basis of a volunteer, without the expectation or receipt of any compensation except his knowledge that he was helping to improve the turf conditions of golf courses throughout the United States. Prof. Carrier has now determined to resign from the Department of Agriculture and enter into the commercial growing of bent stolons. This also necessitates his resigning from his position on the Green Section, as no member of the committee may be in any way commercially connected or have a financial interest in materials or supplies for golf or golf courses. He is resolved, therefore, that the Executive Committee of the United States Golf Association hereby extend to Prof. Carrier their great regrets at the loss of his services in future and their very deep appreciation of the extremely valuable and unselfish work which he has done for the Green Section and for the golf courses of America during the past three years."

ERADICATING CHICKWEED WITH ACID-REACTING FERTILIZERS.—One of our New England correspondents, who has made a life-long study of fertilizers, writes as follows: "In 1896 I built a house, seeded my lawn, and (in the spring of 1897, I think) gave the lawn a dressing of wood ashes. Wherever the wood ashes was applied a little heavier than usual, mouse-ear chickweed appeared in considerable abundance. This was true practically all over the lawn. However, by the subsequent use of a fertilizer which was physiologically acid, it gradually disappeared, and I then had a very fine lawn in which the chickweed was no longer noticeable, if indeed present at all. I feel sure that if this soil had been kept even approximately neutral or alkaline, this chickweed would not have disappeared."

Eradication of Moss From Greens and Fairways

There are many kinds of mosses that grow on greens and fairways where the turf is thin and lacking in vigor. Little or no attempt has been made to study the peculiarities or the relations of the various species to their environment. Therefore all species are lumped under the general designation "moss." There has been a very widespread notion that the presence of moss of the kind or kinds that infest greens and fairways is little less than positive proof that the soil is acid or sour and that lime should be used to correct this condition. Writers for years have urged

farmers and others to lime soils upon which are found moss and certain other kinds of plants which are supposed to indicate acid soils.

Recently some experiments were conducted to determine the lime relations of the various common species of moss, to see just how quickly they may be eradicated by the use of lime. Much to the surprise of those who watched the experiments carefully, lime—that is, hydrated lime and also pulverized limestone—failed to check the growth of the moss; in fact, it seemed to encourage it.

In fertilizer tests that are now going into the third year at the Arlington Experimental Farm, Virginia, the plats that have received lime in very liberal applications are the plats most badly infested with moss. In fact, these plats and the check-plats are the only ones of the series in which moss is found. The grass on the plats is Rhode Island bent produced from seed, and it is clearly shown that the plats upon which lime has been applied are not only more badly infested with moss than are the check-plats, to which nothing has been applied, but that they are also more badly infested with other weedy plants and the turf is less vigorous than the untreated turf. For example, the plats that have been treated with ammonium sulfate and compost, are free from moss and practically free from other weeds. In other experiments where moss-infested areas have been treated with various fertilizers and lime, the lime has had no deleterious effect on the moss, while fertilizers such as ammonium sulfate, bone meal, soybean meal, and cottonseed meal have proved very efficacious in eradicating the moss.

In a word then, what is needed to improve mossy areas is not lime but some good grass fertilizer. The all-too-common notion that most soils are sour and need sweetening with lime before they will produce good turf should be relegated to the discard. Certainly, lime has no place in connection with the growing of bent or fescue turf; and it is now fairly well shown that what Kentucky bluegrass needs most to make it thrive is not lime but rich soil, which may be obtained by the proper use of manure or other fertilizers.

Care of the Greens Through the Summer

By F. G. Pickering, Greenkeeper, Myopia Hunt Club

It is very easy to keep a green in good condition. First, it should be swept and cut regularly with a sharp well-adjusted mower equipped with a grass-catcher. It should then be rolled with a light roller. The workmen cutting the greens should be instructed to take out, at all times, all major weeds, such as dandelions, daisies, plantains, chickweed, and pearlwort. This keeps the weeds in check and is a much better system than periodical weeding. The workmen should be instructed to report brown-patch and fairy-rings, so that these conditions can be properly treated. If your greens are in good condition, keep them so by applying a light dressing of good grass food as often as seems desirable during the playing season. Try to avoid cutting the greens when the grass is wet. Grass brushed and cut when wet does not stand up or give as true a putting surface. Remove worms during the muggy days in the spring and fall. There are many good worm-eradicators on the market. Corrosive sublimate is a perfectly reliable worm-killer. It does not injure the soil unless used excessively, and is much cheaper than any commercially ad-