sound information on course maintenance. We divided the work into two parts, one having to do with turf culture and the other with machinery and equipment. When any problem was presented on either of these questions and there was not sufficient information on file to take care of it, the secretary would call up one or more of our committee for additional information. If we needed still more facts, we did not hesitate to telephone, telegraph, or write letters. All the time information and experience was accumulating, until now our secretary is able to take care of practically all inquiries that come in, on almost any subject.

In conclusion, the Philadelphia Green Section and its Service Bureau want to acknowledge the fine co-operation and help always extended to us by the United States Golf Association Green Section. It would be difficult to overestimate the value of the experimental and research work carried on at Washington. Without the assistance of this agency, any bureau such as ours could not hope to operate with the greatest efficiency. Here again, the Bureau enjoys a big advantage over an individual club; we have the problems and answers which develop with all our clubs gathered together at one source.

I can visualize the future, when bureaus like those maintained at Cleveland and Philadelphia will be scattered throughout the United States, and indeed other countries, at all principal golf centers. These bureaus can constantly exchange the information which each develops, to increase the value and efficiency of each separate bureau. Such an organization receiving the valuable and absolutely essential advice from the parent body, the United States Golf Association Green Section, is bound to bring about not only better playing conditions but a tremendous saving in operating costs.

Red Fescue As a Fairway Grass

Several golf clubs have had very unsatisfactory results with red fescue as a fairway grass even where all the conditions were favorable. The trouble is that during the first year or so this grass grows in small bunches, allowing weeds to occupy the spaces between the tufts. This result emphasizes the principle that a thick stand of grass is the best insurance against weeds. Even where such weeds as plantain and dandelion do not occupy the bare spaces between the tufts, the latter are very slow in spreading so as to make a complete turf. The conclusion forced by these results is that red fescue alone should never be used for fairways; and its use in a mixture is dubious. In practically every case where red fescue has been used, bluegrass and redtop would with little doubt have given better results. Where some bent seed has been included, it nearly always is helpful.

Trapping Moles

Several different methods of killing moles have been recommended which have doubtless met with success under certain conditions. These include the use of strychnine (The Bulletin, August, 1923, page 207, second paragraph), and paradichlorbenzine (The Bulletin, November, 1923, page 295), and stamping over the mole with the heel, or thrusting a sharp metal instrument into it, when its presence is indicated by the movement of the earth along the burrow (The Bulletin, February, 1922,
page 47). The only method, however, that seems to have met with universal success is the use of the mole trap. For success with the mole trap some care must be taken in choosing the location for placing the trap and in setting the trap properly in the burrow. The use of the mole trap is fully described in Farmers' Bulletin 1247, issued free by the United States Department of Agriculture. This bulletin describes the habits of the mole, where to set the trap, when to set the trap, kinds of traps, and how to set traps, and also the utilizing of moleskins, including skinning moles, preparing the pelts, and marketing the skins. A dozen to twenty moles may be taken in the course of a few weeks with a single trap, if properly used, by resetting it day after day at a favorable location.

Controlling Crab Grass

By Hugh I. Wilson, Merion Cricket Club, Haverford, Pa.*

In THE BULLETIN, Vol. III (1923), page 89, is described and illustrated a sweeper for collecting crab grass seed. We have used this sweeper for three years on both our East and West courses and are quite sure that the elimination of crab grass is due largely to its use. The sweeper is similar to a hand lawn cleaner, but it is made into a gang of three sweeping units, and in this way covers an area equal to that covered by a triplex mower. We are trying to get the manufacturers to put the sweeper on the market, as we consider it of value to golf courses where crab grass is a nuisance.

Our practice for the first two years was to run the sweeper over the fairway, follow with a cutting unit, and then repeat with a sweeper to gather the seed. During the past year, however, we have found that a chain harrow gives better results than the sweeper in making the crab grass plants stand up so that they can be cut easily. It may be that some other device much better than the harrow will be found that will pull the crab grass up so that it can be cut easily. We followed the harrow up with a tractor to which was hitched the cutting unit, and behind that the sweeper.

There is, however, one point which we want to emphasize very strongly, and that is, that sweeping alone will not eliminate crab grass. Where there are badly infested areas they should be seeded and top-dressed spring and fall, and fall especially, in order to assist the good grass in getting a start. One naturally can not expect grass to grow where there are no grass plants. Therefore, in using this sweeper it must be borne in mind that the growth of the good grass must be stimulated by top-dressing and fertilizing, and that seed must be applied to areas which are badly infested.

Leaf mold.—This is a splendid material to use in a compost mixture, and that is the way it should be utilized. Mix it with top soil and well-rotted manure. The longer this compost pile is allowed to stand, the better; but even if it stands only a few weeks it will give you good material for top-dressing.

*This article was prepared by Mr. Wilson in the fall of 1924 for publication in a spring number of The Bulletin.