was also affected. Due to the entire course being brown and dry the disease did not show up much until after the recent rains. Since the rains the damage is very apparent. Heavy rains in June followed by extremely hot weather is in my opinion responsible for the disease and scald on the fairways.

Hammond Uses Milorganite

By FLOYD HAMMOND, Greenkeeper

I N REPLY to your questionnaire, I will say that we had some trouble from the webworm on three or four greens. We applied arsenate of lead at the rate of six pounds to each one thousand square feet of turf and had very good results from this treatment, although on one green we had to make a second application.

The rest of the greens had a treatment of arsenate of lead in the month of May. This was applied for chickweed and I think this was the reason that the worms did not affect them.

In regards to brown patch, we had an attack of large brown patch about the 28th of June. We used a spray of corrosive sublimate—three ounces to one thousand square feet. This stopped the fungus for a time but we had two more attacks at intervals of about three weeks. We applied the same treatment each time and did not suffer any serious results from it, but we had a case of sun scald. The grass seemed to die out in quite large areas around the outside of the greens. We had to patch some of them.

Later I noticed that the roots of the bent seemed to be nearly all dead. The grass did not seem to respond to applications of fertilizer and browned up very badly wherever the cups were placed. The greens were very fast on account of this and did not hold pitch shots well. We discarded them with a spiked disc, going over them three or four times and topdressed with sharp sand mixed with our regular topdressing about one-third sand. As a result our greens are back to normal now.

We use Milorganite and sulphate of ammonia for our greens, applying very light doses during July and August. Just enough to keep them from going off color as this is a public course and naturally our play is very heavy during these months. We have to apply some fertilizer to keep the grass from getting worn out.

We use about five pounds of Milorganite and two pounds of sulphate at three-week intervals during this period.

Over-watering or over-feeding may have a bad effect on greens in some cases, but I think the weather conditions have a great deal to do with it. We have used the same methods for four years and have had very little trouble with fungus diseases.

In 1930 we had no trouble at all. Our greens were in perfect condition all year. In 1928-29 we had but very little trouble either, so it would seem that the weather or some other factor influences the fungus quite materially.

Season Caused Gray Hairs

By BERT BARROWS, Greenkeeper

Kenosha Country Club, Kenosha, Wisconsin

W I T H O U T a doubt this season has caused greenkeepers of this country plenty of grey hairs. I know my best friend, Mr. F. T. Neff, Green committee chairman, and myself received our share.

As to your questions on webworm and turf problems, I am answering them as follows:

Our greens were affected more or less with the webworm. We applied five pounds of arsenate of lead to one thousand square feet, using the barrel, following with a light topdressing using no organic fertilizer, but good soil and one part sharp sand. In case the green was damaged we use a small part of Milorganite for quick recovery.

We had no sun scald this summer as the greens were watered all night sometimes up to ten A. M., just removing sprinklers long enough to mow, cutting every day.
In regard to a green being overfed, no doubt that will hasten brown patch during the hot, muggy nights such as we had this season. Small brown patch has been the most troublesome this year, appearing after each warm rain and sultry nights. We tried every so-called brown patch remedy but found Calomel to be the best and quickest for complete recovery. Where clubs are able to use it every two weeks, using three ounces to fifty gallons of water per thousand square feet, it will keep brown patch in check.

During the summer months (the hottest) we treated our greens with a very little topdressing using no organic fertilizer, applying a light dressing of good soil and one part sharp sand. If greens were run down at night add small amount of good compost.

Referring to your last question of various diseases on greens that have been dried out and lack water—we have a practice putting green that has been neglected, so to speak, being topdressed twice a year, watered twice a week and cut three times a week. There is very little brown patch, but it was the hardest hit with the sod webworm.

Scald Hits Cincinnati

By TAYLOR BOYD, Greenkeeper
Kenwood Country Club, Inc., Cincinnati, Ohio

I will try to answer the five questions to the best of my knowledge.

1. My turf was very lightly infected—not seriously and I used one to two pounds of arsenate of lead per one thousand square feet every ten days and did not wet down but very, very lightly. Apparently, I completely stopped the webworms. Total damage was not noticeable.

2. Out of thirty-six greens I had large patch on thirty greens. I used only one-half to one and one-half pounds of sulphate of ammonia per thousand square feet as a fertilizer with the mercury and at times not that.

3. I do omit entirely using organic fertilizers during the summer months.

4. I do not think over-feeding and over-watering are the causes of fungus—nor do they hasten it—but I have found that either or both cause a weak water growth that might cause grass to be more easily damaged by any of the many turf troubles.