but to those clubs less fortunate in finance than the larger ones it has been successful as an emergency measure.

Joseph Ball, Greenkeeper, Chartiers Heights Country Club, Crafton (Pittsburgh), Pa.

Shave Installs Water System

I expect the season of 1930 will stay in our memories a long time as being the driest and hottest we have ever experienced. Around the Detroit district it was very bad, as our summer of 1929 was very dry but not so hot. I'll gamble that I have not had seven days rain all in all from June 15, 1929, to September 11, 1930.

We lost lots of grass on our fairways last year and this year a great deal more. We drilled a well last year that gives us three hundred and fifty gallons per minute for as long as we like to pump it. We were very fortunate to have it as we sure needed lots of water this year.

Our greens and tees have been in as good condition as they have ever been but it sure took lots of water and very judicious and close attention to fer-

BUCKNER SPRINKLERS

Defy Drought!

Old Demon Drought was licked to a frazzle during the past summer wherever Buckner Sprinklers were installed. Tees, greens and fairways were kept gloriously green and club members waxed enthusiastic over constantly perfect playing conditions.

Is your course sprinkled by Buckners? If not, let us tell you why it should be.

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tilizing, just give them enough to keep them slowly coming.

In July our fairways were crisp, hardly a blade of green grass on them. We decided to do some watering and see how our members would like the change. Our main and branch lines to greens and tees were located so nicely that we only bought three thousand feet of pipe and now we can and do water all our fairways.

We use twelve sprinklers with two hundred feet of hose to each one. Each sprinkler covers six thousand square feet and we leave them one and one-half hours in each place. It's certainly a treat to see green fairways again, as our members say after playing courses without water on fairways: "It's like a bit of heaven." This is on the South course; now I am going to put in four thousand feet of pipe on the north course and water the fairways which, especially on the hills, are nearly all dead. I am discing them both ways, fertilizing and seeding, chain harrowing and rolling, and will water beginning Monday, the 22nd, unless we get some rain.

I believe that fairway watering is very good providing that it is done in such a way as to be something like a good rain, that is they should not be watered continuously as it does not rain every day and night. I believe a good soaking once a week is fine and you won't get very much clover in them. I have seen fairways that have been watered every night and sometimes every day and goodness what a nice crop of clover and you could hardly find any grass. It's just as important to water fairways properly as it is greens and tees.

Herbert Shave, Greenkeeper, Oakland Hills Country Club, Birmingham, Mich.

Lakewood Had Plenty Of Water

I HAVE had wonderful success with the Lakewood course this past summer, although we sure had six weeks of hot and very dry weather. Even so we managed to keep the course in first-class playing condition and I didn't do one thing with my greens except to watch the watering of them.

All my watering was done at night during June, July and August. During these three months I didn't use any topdressing but I did use sulphate of ammonia, applying one application each month. It seems to me some of our greenkeepers use too much topdressing during the summer months when the

weather is hot and dry. I believe you can overfeed the grass and make it grow so fast that it naturally smothers itself.

The tees and the fairways were kept in firstclass playing condition through the summer because I could get plenty of water to my fairways and greens. In this respect we were most fortunate.

I hope I will be able to see you all this winter at the Columbus Convention and send my best regards to all.

E. M. Monroe, *Greenkeeper*, Lakewood Country Club, Edgewater, Colorado.

Gumbo Soil Cracks Badly

I am going to try to reply to your letter in regards to this year's drought and how we came through it. As this is the first article of this kind I have ever written, do not expect too much.

Our fairways, the soil of which is pure gumbo, have suffered a great deal. In fact they are so badly cracked in some places that a ball could roll down out of sight. The only fairway we had a chance to put water on was the eleventh. Consequently that is the only fairway on the course in good shape. I think the showing there will convince the members of this club of the advisability of putting in a fairway watering system.

Have experienced no trouble in keeping our greens and tees in shape although it has meant constant watering day and night.

As we have had plenty of rain the last two or three days I expect no more trouble as far as drought is concerned.

> Donald T. Johnston, Greenkeeper, Niakwa Country Club, St. Vital, Winnipeg, Manitoba, Canada.

Golden Valley In Good Shape

I want to contribute a few lines to your magazine and want to state briefly that we have been rather fortunate this summer considering the terrific drought. Having good support from my chairman we have managed to keep Golden Valley a marvelously conditioned course all season.

We have been able to give our greens, tees and fairways plenty of water although at times our water supply was very low. We have a flowing creek from which we pump our water with two centrifugal pumps with a capcity of five hundred gallons per minute. These pumps have been runnings continuously day and night during the dry spell.

We raked our greens about the middle of July and then applied from one hundred to one hundred and twenty-five pounds of Milorganite to a green with a top dressing composed of one-third peat and one-third heavy soil. About three weeks later we sulphated, using about four pounds to a green. The tees were treated the same as the greens.

I cannot say that this process has made our greens immune from brown patch but am pleased to state that I have not been troubled with either brown patch or crab grass.

MIKE SANKO, Greenkeeper, Golden Valley Golf Club, Minneapolis, Minn.

A Lucky Greenkeeper

I "How we maintained our golf course during this summer's drought."

I was one of the lucky ones for our course is equipped with city water and plenty of it. Our greens and tees were in the finest condition all this summer. Of course, the fairways suffered the loss

