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-



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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.

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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