How I Cut Costs and Kept Course Standard High

By WILHELM J. PETERS

T THE time I started supervising Mission Hills a lot of the members thought we should get the course in first class condition in a short time. This was impossible. Mission Hills, in existence about 18 years, has been trying to grow good greens and in all these years they've made very little headway. I so often hear a member ask "Why haven't we good greens like so and so?" If the greens had been built correctly it would be quite easy to keep them in good condition. There is a considerable amount of clover in our greens; we are killing this clover slowly with Tonagren. If we don't do this we would have to rebuild the greens at a big cost and then eventually clover would creep in.

When the ground has a fahrenheit temperature of 75, no grass will grow. Then the hot nights with high humidity will turn the grass yellow and may kill it. At times a whole green is lost because of one night's heat. There's nothing to do for it

I've heard members say when we put water on the greens during hot days, "They're scalding the grass!" This is not so. When the sun shines so hot on the green, the grass would be burned if we didn't water them. Often we water greens 2 or 3 times in a day because it cools and refreshes them.

Brownpatch is always a danger. If we don't spray the greens at the right time with a correct mixture of chemicals we stand to lose some parts of the greens.

The last two years we have had to contend with webworms. In 1931 six of my green were damaged by this pest. Last year we sprayed the greens in time to save them from the webworms.

We have some water-logged greens. This happens when a green is not built the proper way. When the greens are sprinkled, the water stays on the greens and doesn't sink into the subsoil. Then the hot sun scalds the grass. Then we have to take spike rollers and open up the greens to allow the water to seep down into the subsoil and permit air to reach the roots.

Where we use city water we have what is termed "gassed greens." In the summer Kansas City uses a great deal of chlorine and lime in its water and these chemicals are bad for the greens. If this chlorine goes in the ground and can not escape it will injure the grass. To rem-

MISSION HILLS COUN			
MAINTENANCE EXPENSES FOR	THE YEARS	S 1930-33.	
1930	1931	1932	1933
Labor\$10,947.00	\$ 9,954.70	\$ 8,862.33	\$ 7.104.88
Repairs, renewals 2,505.65	1,287,44	419.25	281.12
Miscellaneous	191,60	869.73	542.45
Fertilizer, seed, chemicals, sand 1,893.74	1.348.89	405.05	895.39
Improvements	399.30	607.85	761.34
Salaries 3,814.80	3,520.80	3,225.00	3,060,00
Equipment 356.09	1,017.82	449.69	277.03
Board 484.50	498.00	358.00	362.00
Insurance	210.87	259.23	250.00
(B) 15 11 (B)	1,500.00	1,409,41	1,500.00
		38.20	
Electric	40.00		55.00
Telephone 48.00	48.00		
Laundry		57.13	22.59
Extra Help		25.98	
Pay Asst. Caddy Master			52.50
Water 587.04	435.84	583.88	559.06
Total\$22,544.43	\$20,413.26	\$17,571.73	\$15,743.74

edy this we have to spikeroll greens to let the gas escape.

Overwatering greens makes them stale. There is more damage done by indiscreet watering of greens than any other thing done. The correct watering of grass is the heart of a golf course.

There are three essential things a superintendent has to know: the correct feeding of greens, how to mow them, and the knowledge of correct chemicals, how much to use and when to use to prevent the many different grass diseases. If the above mentioned requisites are used there is little fear of losing greens.

When I was given supervision of Mission Hills CC in January, 1932, my biggest task was improving the condition of the course with less expenditure than formerly. In looking the grounds and greens over I realized that it took too many men to water the greens and tees. I immediately extended all water lines closer to the greens and tees. This required 3,500 feet of pipe and cost about \$450. After doing this I required one man less on the a force; he would have drawn about \$825 in one year's salary. This was a saving of \$375 the first year, and \$825 thereafter.

Much time had been wasted in cutting tees by hand. It took 4 men every week abouth 60 hours. I installed one man and a tractor, which completes the same work in about 5 hours weekly.

We now have a better sprinkling system. Formerly it took 7 to 8 settings to a green; I use 4 to 5. This means the man has to walk around the course 3 to 4 times less, which saves time and money.

We water greens and tees at night to save time and it is much better for the grass. We water 9 greens one night and the other 9 the next.

I use one man and one tractor to cut the fairways, roughs and tees. Formerly it took 2½ men to do the same amount of work, and I use ½ the amount of gas and oil. Wherever possible, we always try to use a machine because it is cheaper and faster than hand labor.

In spike-rolling the old way they used 2 men to pull the roller and it took about ½ an hour to do one green. I built my own roller which is pulled by gasoline and it requires one man 10 minutes to spike a green. This is not hard on the man either. I could mention many other ways of using machines and shortening the labor. Because of this policy I am able to run my course with 8 men where

formerly it took 18.

Before my time the greens were full of wormcasts in the spring and fall, causing great inconvenience to the players. It took a man 5 hours a day on the greens to make them playable. I use a certain chemical to kill these worms and there were no wormcasts last year. On this alone I saved at least \$250 in labor, besides making the greens playable at all times.

My policy is "For every dollar spent there must be a dollar's return." This is my secret of running a course in good condition on so little.

Oakley CC Slates Sectional Intercollegiate Tourney

OAKLEY CC, Watertown, Mass., has written the athletic directors of 28 colleges in New England inviting the colleges to enter teams and individuals in a tournament to be played at Oakley, May 2. State handicap cards will be accepted or handicaps worked out at the tee in the handicap event.

Team prize is the Oakley Intercollegiate trophy, a \$600 cup presented by Frank Whitcher, an Oakley member. It will be competed for on a gross basis and will be held for one year by the winning team.

The idea is one that does credit to the Oakley club and which should be widely adopted by other clubs aware of the wisdom and sportsmanship associated with energetic promotion of intercollegiate and interscholastic golf.

Iowa Greensmen to Meet at Course Under Construction

OWA Greenkeepers' assn. will hold its April meeting at Waveland G. Cse., Des Moines, April 17. What makes the meeting unusual is the fact that this course is only partially built and those who attend will have an opportunity to see and discuss the latest methods of construction and planting.

According to C. G. Yarn, secy. of the assn., Iowa is looking forward to a great golfing year and the greenkeepers of that state are planning frequent meetings to keep posted on all advances in course maintenance. Members of the organization have been asked to bring someone else interested in turf culture to each of the various meetings to be held during the season.