

## Sidelights on California Watering Systems

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(Greenkeepers' Convention Paper)

AT MY course there are 120 acres of fairways, but irrigated. We only have rain in December, January and February, a total of about seven inches, and are confronted with the water problem almost ten months of the year. The water in California is very expensive, and on the courses that are piped during the hot months of the summer it costs around \$1,000 a month for water alone. On my course, we have a thousand valves. We have a snap valve system. Two men are able to cover this course, watering the fairways, greens and tees. Each man has 25 sprinklers, and he waters this 50 or 60 acres in eight hours.

I have a very modern pumping plant with a pump that produces 1,000 gallons a minute. I have to separate the oil and gas in the water, running it into a separation tank of 55,000 gallons. I have a pressure of 85 pounds minimum and 105 pounds maximum, maintaining a pressure on my course at the high points of 80 pounds and the low points of 100 pounds. My mains are graded up to 4 inches. There is only one riser to 1 inch pipe, two risers to 1½ inch pipe, and so on. My risers are carried to the fairways, 74x79 centers, in a diamond shape.

On the course I previously had in California, we had about 90 acres of fairway, and used the hose system. Lines were small and pressure low, therefore we had to use ¾ inch hose. In order to keep the fairways in the good condition demanded, it took five men with 13,000 feet of hose, which was an enormous cost, due the fact that with the number of feet of hose we found that it took so long to take it in that when we got it in it was time to get it out again, and to leave it out in the sun, means heavy replacement.

### Heavy Demand During Seeding.

During the seeding period, when we run water approximately 24 hours a day, we put on 1,000 gallons a minute in one center, the soil being of a crude substance, and if we water all day, half of the water goes down the same path. You can go out

### FEE COURSE OWNERS TO MEET AT CHICAGO

DAILY fee course owners of the U. S. are invited to attend the meeting and dinner sponsored by the Chicago Daily Fee Course Owners association, to be held March 14, 6:30 P. M., at Hotel Sherman, Chicago.

This gathering is to be held during Golf Show Week at Chicago for the purpose of learning the thought of the nation's fee course owners with respect to the formation of a national organization and for a discussion of the pressing problems confronting the pay-as-you-play magnates.

Arthur Ahern, president of the Chicago organization, is issuing the call for the meeting and invites suggestions for the program of discussion. He also desires to learn in advance names of those intending to attend. Mr. Ahern's address is 9140 South Western Ave., Chicago.

after a rain, dig down ten inches, and from then on, you use a crow bar or pick.

Up to the present time, we have spent on our course, including our clubhouse, \$200,000. We have spent on new equipment about \$20,000. The snap valves, so far as I have found on my course, haven't given me one minute's trouble and I believe are necessary to maintain fairway irrigation at a minimum cost. My men put on a sprinkler at the rate of one a minute, and can change them in that time. Therefore, we have a big saving against the hose system, figuring wear and tear of hose, etc.

If you have a low area you want to water and not sufficient rain, your saving in water may minimize your water cost, and give an even distribution of water, and I believe against the system where you had to take the risers you didn't want, this is a big saving. Of course, in California, our upkeep costs are a lot more than for courses in the east.

The average course in California carries about 18 men. With the system I have, and with the equipment I have, I am going to run with about fourteen.