

How Missoula Built a First Class Course

By TIM CLOWES

LAST year we installed on our new golf course at Fort Missoula an irrigation system, consisting of a 20-h. p. Westinghouse motor and a DeLaval centrifugal pump. The pipe lines feeding the fairways consist of 6-inch, 4-inch and 3-inch wooden pipe, furnished by the American Wood Pipe Co. of Tacoma, from which we ran laterals of 2-inch, 1½-inch, 1¼-inch and ¾-inch iron pipe.

Our motor and pump work to entire satisfaction. Pumping direct into mains with 32 outlets open and running at the time we got a pressure running from 72 lbs. to 54 lbs. at the farthest outlet in ¾-inch pipe.

Our greatest mistake was in laying the pipe lines down the middle of the fairways. Beyond a doubt they should be in the rough along the edge of fairway, on the uphill side thereof if contour of ground allows. This will permit, after grass has a fair start, of flood irrigation, a great saving of hose, sprinklers and the labor of moving same.

Taps Too Far Apart

Our next mistake was in spacing our taps for outlets for hose connections, which were made 125 feet apart; this was a serious error, as 50 feet we have found to be the best. This was easily connected in the wooden main, because in five minutes with a 1-inch bit we could bore a hole in the main and screw in a ¾-inch boiler drain cock.

Wooden pipe we found to be excellent for piping, due to low first cost and economy of laying. It can be curved to follow contour of ground like a snake. It also is good in its ease of draining to prevent freezing, ease of correcting mistakes in openings, and the simplicity and ease with which laterals can be run off to care for trees and shrubbery away from hoses is marvelous compared to tapping a 6-inch

Getting grass fairways around Missoula, Ont., is a discouraging job, but the construction committee of the Missoula Country club tackled and solved the problem with a successful watering system.

Details of the Missoula watering system, and other features of the course construction and maintenance are related here by a member of the construction committee.

or 4-inch iron main. We know nothing of the lasting qualities except that the water company here just took up some that had been buried in this soil for twenty years and it looks good for twenty years more.

On one fairway we installed 400 feet of 4-inch iron pipe and

in which we placed only two hose openings. It is going to cost us quite a bit to put in two more openings which we will have to have. Complete planning in advance certainly is needed for a water system.

We are buying 1,000 feet more of 6-inch wooden pipe to run from our fairway lines to our club house grounds of seven acres, on which we are just completing the finest little club house in the state.

We so arranged our intake to avoid pumping any sand and gravel.

The hose we purchased from the U. S. Rubber Company is giving fine satisfaction. The only fault we have to find is that of the 6,000 feet we started with we only have 4,000 feet left in good serviceable condition. The rest has been stolen. The next time we buy hose we are going to have it marked "Missoula Country Club" every fifteen or twenty feet. I am informed they will do this without extra cost in 2,500 foot orders.

Being in Montana of course we have gophers and moles to contend with. The use of Cynogas completely exterminated the gophers, but the moles are harder to bring under control. We have them fairly well in hand on fairways but the rough is still infested with them. They continue to move in on us, but where this spring we had to treat forty to fifty new mole hills daily we have it down to four or five daily, and I firmly believe that in another season Cynogas will have cleared our course of them all. I do not know what we would have done without it.