

# Dripping Dollars

By C. KENT BRADLEY

*"Much water goeth by the mill  
That the Miller knoweth not of."*

— Wm. Shakespeare.

**A**S WEATHER gets colder, water systems, both outdoors and inside are being turned off and made ready for overhauling. By doing the job right this year, paying special attention to faucet leaks, irrigation costs will be lessened, and the money can be used for other maintenance items.

Pipe joint leaks are rarely a problem after the cut iron threads are painted, and drips "rust shut" when new. Conversely, faucets that are water tight when installed, gradually wear and leak. The snap valve type sprinkler connection is the best protection against leaks, and gate valves second choice of shut off. Smaller clubs often use the standard type compression faucets with hose coupling threaded spouts. These, while less in first price than snap or gate valves, can become an accumulative expense item—considerably more than the "saving" over the more efficient hose valves.

Even though the course water system may have proper hose valves, the water waste problem may exist in the clubhouse and service buildings. Sill cocks thru the foundation for 3/4-inch hose irrigation of landscaped grounds, also faucets in kitchen, dining and wash rooms, need regular attention.

## Money Down the Drain

Municipal water experts figure \$4.25 as the average yearly cost of a dripping hot water faucet. Where clubs are isolated from town water lines and have private pumping facilities, the price is substantially higher. A few drops of water is not much waste, but multiply them by dripping time and number of outlets and the figures mount.

There is enough activity and sound about a clubhouse, so that constant drip will not get on one's nerves, but the signs are evident in stained porcelain fixtures that require scouring, ultimately resulting in enamel wear.

Various plumbing supply manufacturers have supplied leakage data that are in-

teresting to compare with water requirements of grasses, as told on page 14, July, 1941, GOLFDOM.

What is considered a slow drip, a small drop per second, is said to leak 456 gallons a year. An average drip wastes 15 gallons daily, 450 a month or about 60 cubic feet. An opening of 1/32-inch consumes 264 gallons in 24 hours, 7,920 gallons in a month. Leaks totaling 1/2-inch aperture, under an average 50-lb. pressure, by-passes 1,827,000 gallons monthly. Should this condition exist within 36 outlets at 18 tees and greens, plus low points of line drains, *a single month's loss exceeds 10 times the turfed acre water gallonage requirements in a normal growing season.*

Due to defense orders, the price of brass has risen, and unless snap or fitted gate valves are installed to eliminate the trouble, the alternative is to repair existing faucets out on the course.

The usual method is to unscrew the stem packing nut (or faucet bonnet) and core assembly, true up washer seat surface with a bibb seat reamer, and put in new fixed fibre washer seals. Bibb seat reamers can be bought in hardware or plumbing stores—an inexpensive one for small jobs can be obtained in 5 and 10 and 25 cent stores, as carded merchandise. Washers and brass retaining screws are cheap, but they do not last long. Constant turning grinds them away, causing first a slight leak which increases as the handle is turned down tighter. Also, water borne grit roughens the washer seat, and the washer can become swollen or distorted, in hot water. Main cost of such repairs is labor time, hardly warranted if the job needs be soon done again.

## Sealers On Market

American inventive genius recognized the need for more permanent repairs, and now on the market are various improved sealers. One of these is the CleValve, a complete core assembly that seals the washer seat with a Neoprene gasket, and

permits a bronze precision metal-to-metal contact shut off.

The Sherman "Water Miser" washer comes in new faucets of that manufacture, and attachments can be bought for installed faucets. This is a monel metal ball-bearing assembly. The No-Pans

washer slips over a special screw head, between which is a free turning brass washer.

The last two devices permit the washer seals to turn freely, and reduce wear, after bibb seat is trued up, since the closing action becomes a straight down shut off.

## Preventing Winter Kill on Greens

By I. R. STROME

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**I**N response to GOLFDOM's request for an outline of our experience in prevention of winter kill on greens at the Rivermead Golf Club, I must begin by asking the reader to bear in mind that the writer's experience in turf culture has been confined to the Ottawa Valley in Eastern Ontario and that the methods described may not be applicable to golf courses located in districts that are not subject to our rigorous winter climate.

The climate in the Ottawa Valley is typical of Eastern Canada and similar to that of the northern New England states. The winters are usually long and severe, with occasional mild spells sometimes accompanied by heavy rainfall. The snow cover varies to a considerable extent but averages from one to three feet in the open areas. The damage done by snow-mold and winter kill is, at times, most extensive and it is no exaggeration to say that in particularly bad years in the past our greens have been almost completely destroyed.

Some 10 years ago our members decided that something should be done to prevent the annual loss of turf due to snow-mold and winter kill and the greens-committee was requested to study the matter.

Starting from scratch and with no particular knowledge of the subject, we were fully determined to master the situation. We tried out various suggestions put forward by the locker-room experts, also a few ideas of our own. We put up snow fences to hold the snow from drifting on the banked greens, scattered brush on the exposed greens to hold snow, covered the greens with a layer of manure to protect the turf from severe frosts, and we even dug forked trenches through the greens in the fall to provide drainage when the snow melted in the spring. After a few

years of this hit and miss treatment we realized that we were not getting results and we became more determined than ever to find a solution to our troubles.

About this time we had the good fortune to meet J. R. Wilson of Toronto, who presently brought Dr. O. J. Noer of Milwaukee for a visit to our course. These two practical turf experts proceeded to take us in hand and give us a course in turf management, which has continued up to the present time. They made a complete inspection of our golf course and questioned us closely in regard to our methods of looking after the greens. Then they sat down and gave us the benefit of their experiences. As a result of several of these visits we gradually changed our methods and formulated a definite plan of procedure which we believed would bring about the desired results. Then we went to our board of directors and secured a free hand to put the plan into operation over a period of five years. We felt that we needed that period of years to protect us from the quite natural criticism that might arise should we meet with a bad year before we had made several basic preparations.

Our plan provided for a year-round program of turf culture that we believed would give us better greens and at the same time prevent the ravages of snow-mold and winter kill.

The first item on our program was to gradually do away with the various types or strains of grass on our greens and adopt one strain of bent grass that would enable us to treat all our greens in exactly the same manner. To this end we put in about one acre of nursery and the change-over was completed in about three years. In transferring the new sod to the greens, we first improved the sur-