## A Serviceable Inexpensive Fairway Sprinkler

By R. S. Ludington, President, Wenatchee (Wash.) Golf and Country Club

Through the courtesy of Mr. W. W. Baker, chairman of the green committee of the Walla Walla Country Club, our club was furnished with a sketch and dimensions of what we are pleased to call our "Walla Walla Sprinkler." Mr. Baker has consented to my presenting to the readers of The Bulerin a description of this very satisfactory and inexpensive sprinkling device, which he worked out to meet his requirements, and which, with his approval, we have abundantly copied, for we now have 18 of these sprinklers in night and day service on our course.


The siminkler consists of 3 twirlers about 6 feet above the ground fed by water through 1 -inch galvanized iron pije supported about 18 inches above ground by 3 old-style automohile wheels (with old casings) and by a $3 / 4$-inch qulvanized-iron-pipe leg on a 12 -foot handle of $3 / 4$-inch pipe extending from the cross at the middle of the stretth of 1 -inch pipe. The center twirler, on a line with the handle, is advanced in front and 6 feet berond the line of the end twirlers to permit the attendants io reach the handle and move the sprinkler about without getting wet. The supply hese can be attarhed at cither end or at the center twirler. We have fomed that a grater reach of sprinkling can be ohtained with the hose attarhed at the end. This arrangement also permits of the us of $3 / 4$-inch pipe in the hande and for the center twirler, whereas otherwise it would be necessary to use 1 -inch pipe for these parts.

The undereramid supply pipes on our course are down the center of our fairways and are provided with risers every 100 feet. Probably risers every 150 feet would be ample, since, with so-pounds pressure and 50 feet of hose, we adually cover a cirele 240 feet in diameter without discomecting the hose, by occasionally moving the sprimkler.

For the axles of the wheds we use $11 / 2$-inch galvamized iron pipe, on either end of which are reducers to 1 inch, which redueers hold the wheels in place. 'The inner wheel is off center, the cross being at the center and the whet to the side of the eross.

The material used in the construction of a single set of sprinklers is as follows:

3 old rimless automobile wheels with old casings and no inner tubes.
$11 / 2$-inch galvanized iron pipe; 3 pieces each long enough to serve as axles for the whetls, extending on each side of hub far enough so that $11 / 2$-inch by 1 -inch reducers may be firmly attached to the ends to hold the wheel in place. $\Lambda$ total of about 17 inches of $11 / 2$-inch pipe is required.

1-inch galvanized iron pipe; 1 piece $191 / 2$ feet long and 1 piece 20 feet long, to serve as connections between the three wheels; 2 pieces each 4 feet long, to serve as extensions beyond the two outside wheels, for the twirlers; total, $471 / 2$ feet.
$3 / 4$-inch galvanized iron pipe; 1 piece 12 feet long, to serve as handle; 1 piece 6 feet long, to serve as extension to supply middle twirler; 3 pieces ach 4 feet long, to serve as risers for the twirlers; 1 piece 10 inches long, to serve as supporting leg for the handle; total, 30 feet and 10 inches.


A battery of fairway sprinklers in operation at the Wenatchee Golf and Country Club.
All pipe fully threaded at both ends.
Galvanized iron fittings as follows: $11 / 2$-inch by 1 -inch reducers, 6 (for holding wheels); 1 -inch by $3 / 4$-inch tees, 2 (for end risers); 1 -inch by $3 / 4$-inch cross, 1 (at center) ; 1 -inch plug, 1 (at end opposite hose connection); 1 -inch to $3 / 4$-inch reducer, 1 (for hose connection); $3 / 4$-inch elbows (or tees with 2 plugs), 2; $3 / 4$-inch mion, 1 (for foot of leg); $3 / 4$-inch plug, 1 (for foot of leg) ; 1 -inch short nipple, 1 (to connect cross and reducer) : $3 / 4$-inch nipple, 1 (for hose connection).

A $3 / 4$-inch cap may be used for the foot of the leg, but we find a plugged union much more satisfactory when it is desired to open the piping in order to drain it.

100 feet of heavy galvanized iron wire for stays.
$3 / 4$-inch twirlers, 3 .
Tools for assembling; 2 pipe wrenches and 1 combination pliers and wire cutter.

In assembling, plenty of axle grease should be put on the axles before the wheels are placed and the reducers screwed up, as the axles are not easily oiled and the sprinkler is much more easily moved with the axles well lubricated.

With our higher western prices, our sprinklers cost us complete on
the course about $\$ 15$ each. Where freight rates and other items are not so high the price should be very much less. The 2 pipe wrenches, and the pliers for the guy wire, are the only tools nceded in assembling the sprinkler. The first sprinkler we built had specially made iron wheels for 1-inch axles, each of which cost us $\$ 3$ or $\$ 4$ here; but this cost of wheels we practically eliminated by using old Ford wheels with old casings costing us next to nothing. The substitution of Ford for iron wheels is our modification of the sprinkler.

When not in use, the sprinklers can be run off in the rough, and should a ball stop under one it is not difficult to pull or push the sprinkler far enough out of the way to permit the ball to be played. Likewise should a ball stop under a sprinkler in use on the fairway, the sprinkler can be moved to permit playing the ball without cutting off the water or getting wet.

The advantages of this sprinkler are simplicity of design, cheapness of construction, ease of moving, large area watered at each setting, ease of keeping in order and repair, and the fact that less frequent comnections of the hose have to be made, or shutting off of the water, since with each connection of the hose the sprinkler can be moved from six to ten times, depending on the width of the fairway, before it is necessary to make another connection. This saves the time of greenkecpers and the wear on valves and hose, and permits the maximum use of water, and also enables one man to look after the watering of more fairways than dons any other device within our means that has come to our attention.

## Twenty-Eighth Women's Amateur Golf Championship of the United States

The competition for the Women's Amateur Golf Championship of the United States, open to all women amateur golfers belonging to clubs which are members of the United States Golf Association, and to those foreigners visiting this country who may be invited by the Expecutive Committee of the Association, will be played on the course of the Rhode Island Country Club, Providence, R. I., commencing on Monday, September 1, when the Robert Cox Cup and four medals will be competed for under the Rules of the United States Golf Association. The winner of the competition shall be the Champion Woman Amateur Golfer for the year and the Robert Cox Cup shall be held for that year by the club from which the winner shall have entered.

The winner shall receive a gold medal, the runner-up a silver medal, and the other semi-finalists bronze medals.

Competitors shall enter for the championship through the secretaries of their respective clubs. An entrance fee of $\$ 5$ must accompiny each entry and must be received not later than $5 \mathrm{p} . \mathrm{m}$. on Wednesday, Augist 20, at 110 East $42 d$ Street, New York City, checks to be drawn to the order of the United States Golf Association.

In addition to the present qualifications, entries will be received only from women players having handicaps of 1 to 8 . Any player whose name does not appear on the present Women's Sectional Handicap Lists and who desires to compete in the championship, must submit to Mrs. II. Arnold Jackson, Patterson Avenue, Greenwich, Conn., before August 16th, 1924, five best seores made during the current playing season over her club's course, duly certificd to by the president or secretary of her club,

