# Fairway Watering Operation to Give You What You Pay For

By ROBERT DUGUID\* Evanston (III.) Golf Club

A GREENKEEPER cannot be expected to model his sprinkling methods after the plan followed on some other course any more than he can copy another greenkeeper's fertilizing program. Soil chemicals on courses in the same district can vary to a surprising extent. So, too, drainage and soil texture varies to a degree which requires the individual greenkeeper to work out his own formulas as to quantity and frequency of watering.

As soon as a fairway sprinkling system is put in operation, the greenkeeper should endeavor to arrive at a systematic method of watering. Whether the hose type or the fixed sprinkler outlet type is used, observations should be made as to how long sprinklers ought to be left at a setting to insure adequate penetration and how frequently each fairway should be watered to maintain the proper moisture content.

It is seldom that all fairways of an 18hole course can be covered properly in one night's sprinkling, so that a division of the course is necessary in two or not more than three parts to be watered on successive nights. Particularly on courses using hose lines from outlets at the edges of fairways it is desirable to make this division with a view to time-saving in transporting equipment from one section to the next. As full time is usually required to sprinkle at night, hose and sprinklers must of necessity be moved by the day force, so that the haul should be as short as possible in order to have the men required for this task available as quickly as possible for other duty.

### Don't Pass Watering Dividends

Occasionally, during protracted droughts, it is necessary to supplement night sprinkling with day-time watering. As this naturally causes an appreciable increase in the cost of irrigation it should be kept down to a minimum. However, considerations of economy alone, or even conve-

by the greenkeeper as an excuse for permitting fairways to dry up too much. Practically all club officials and members will make concessions when matters are explained properly. 'A fairway watering system represents a heavy investment, and dry fairways on a supposedly watered course is equivalent to a passed dividend. In other words, the members who paid for the system are failing to derive any benefit from their investment; there are times when that investment can only be protected by an additional outlay for more water than had been estimated originally.

nience of member players cannot be used

Greenkeepers will usually find that a standard routine of time and frequency application cannot be maintained on the entire course. There is usually a definite difference in the reception and retention of water on different fairways, due to variance of soil texture and surface and subsoil drainage; accordingly, each fairway has to be considered separately to avoid undesirable conditions resulting from the assumption that uniform watering will produce a uniform effect on all fairways, Watering may have to be increased on some and decreased on others. This can only be determined by intelligent observation.

### Cheapness May Gyp You

Purchase and maintenance of good equipment are important in economical operation, bearing in mind that an economy may become a total loss when measured in terms of fairway condition. As in many other businesses, it is a mistake to assume that one is saving money on an originally low-priced article. High grade hose may cost several cents more per foot than second grade hose, but if you have to buy a second length of low-priced hose while the first length of better hose is still serviceable, the saving becomes rather more than dubious.

With fixed sprinkler outlets on fairways, complete coverage cannot be ob-

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tained if sprinklers and valve heads are kept in operation indefinitely without either overhauling or replacement. This system depends for its success on a certain amount of water at a certain pressure being delivered over a definite area, each outlet being so spaced with relation to the others that the entire fairway is covered. Extensive use eventually causes wear of the sprinkler and valve heads, resulting in failure of the sprinkler to deliver the proper amount of water to the full extent of the area originally calculated. This becomes evident in the shape of dry, brown triangles, diamonds and strips all over the fairway where no water was delivered.

The greenkeeper may choose to blame this on errors in engineering calculations or installation, for which he cannot be held responsible, but this should not be considered until every other possibility has been canvassed.

#### Check Installation Periodically

Periodical inspection will frequently save the greenkeeper needless grief, and also the men who do the sprinkling should be instructed to turn in any sprinkler or unit which shows any variance in performance from the others. Tests can be made in the daytime to determine the seat of the trouble and changes or replacement effected. In this connection, green-chairmen should realize that satisfactory performance requires a certain amount of replacement of equipment, and that it is sometimes necessary to discard some item which is not actually broken or quite wornout, but which is failing to do its full share in the system, and so is a liability.

It may be said here that a good deal of success in irrigation depends on the men who actually do the work. Men should be selected to specialize in this work and be held responsible for its proper operation. It has been noted on my course that when other men were temporarily drafted for this work, although only for a few days, errors in watering showed up to a marked extent. Accordingly, when the men you assign do the job properly, let them know it; vocal appreciation of their work usually results in their taking a personal pride in the appearance or greens and fairways.

I may be permitted here to compare briefly certain aspects of the hose and hoseless systems without giving preference to either. When the hoseless type fails to cover a fairway properly, perhaps because of excessively high winds, it is usually difficult and troublesome to remedy

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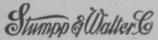
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132-138 CHURCH STREET (Corner Warren Street) NEW YORK the defect by hauling out greens hose and sprinklers during the day. With the hose system, the missed spots can be easily seen the following morning and as the equipment is already there, it is a simple matter to cover the dry areas. Where I am concerned, this does not interfere with play, as I use a type of sprinkler which rotates slowly and one can easily walk up to it and hold it stationary without getting a drop of water on one's person. The caddies here are all instructed in the handling of the sprinklers and players are enabled to play their ball from its proper lie without inconvenience.

### GENERAL CHEMICAL SHOWS COURSE MATERIALS

New York City—V C Fairway Fertilizer, is now distributed exclusively by the General Chemical Co., 40 Rector St., under a sales policy which invites direct purchase on the part of golf clubs through any one of the nationwide chain of sales offices of that company. Together with this change in sales policy there is an entirely new

schedule of prices.

The Fairway product is made with the base of granulated tobacco stems impregnated with the plant food elements in liquefied form. The product is then dried and comes to the user as a dry, granular prod-uct which is unaffected by atmospheric moisture and remains loose and friable. It contains 6 units of nitrogen, 6 units of liquid phosphoric acid, and 4 units of potash, all absorbed into an organic humus forming material. Each ton of Fairway contains 1,200 lbs. of granular tobacco stems which have the power of absorbing three times their weight in moisture for gradual release as the grass roots require it to promote growth. When this organic material content has decomposed into humus it increases the water holding capacity.

The large tobacco stem content is repellent to angleworms, grubs and other soil insects. Fairway cannot contain weed seeds or the spores of plant disease. Due to the form of its plant food elements and the large percentage of natural organics, it is practically free from caustic characteristics. Two lbs. of Fairway fertilizer is the normal heavy top dressing for spring application and later applications can be made at half that amount.

Together with V C Fairway at the Greenkeepers' Show the manufacturer had a display of insecticide and fungicide materials. Orchard Brand arsenate of lead was presented as a standard material.

To round out a line of materials for golf course use this manufacturer is packaging a line of mercurials.