

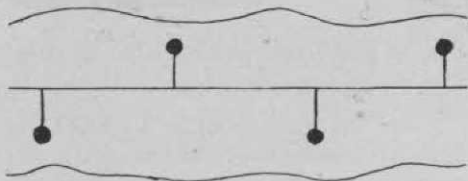
tion can be obtained over the entire green. This arrangement also has advantages in windy situations.

Fairways present similar problems. There are many fairways which have a single line of sprinklers down the center. As with the greens, if enough water is applied to keep the edges of the fairway from drying up, the center strip is badly overwatered and often soggy. With this sort of a system, you have built-in trouble and there isn't much you can do to avoid wet centers and dry edges. This problem is generally not so serious in the humid parts of the country because the rain helps to overcome the lack of uniform water application during irrigations. But even in the humid area, this single line system always gives too much water along the middle of the fairway. In arid areas where one must depend almost entirely on irrigation for moisture, this system should not be used.



(Fig. 19)

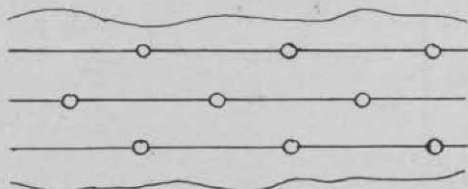
There are several types of layouts which will improve the uniformity of application on fairways. One is to run the center line down the fairway and then tee off short laterals to form a pattern like this.



(Fig. 20)

Instead of having all the sprinklers in a line down the center, this gives an offset arrangement which helps to reach the edges and reduces water in the middle.

Another possibility is to run three lines and space the sprinklers in a staggered pattern along each line as sketched below.



(Fig. 21)

Such a system, of course, costs more money. This three-line system with proper overlap gives good distribution across most of the fairway. It is an excellent system to use in an area where shifting winds are a problem. If the wind is blowing from the top in this sketch, you can operate only the top two lines; if the wind is from the bottom, operate only the two bottom lines. This gives you the flexibility you should have in any good sprinkler installation.

A brief comment about traveler sprinklers may be helpful. This is a very useful type of sprinkler, but the performance characteristics of travelers should be recognized in planning irrigation operations with them. With average nozzling and under typical operation speeds, they apply between .18 and .25 inch of water in a single pass. If the soil is dry, this shallow depth of water will wet a sandy soil only three inches deep, a loam about one and a half inches deep and a clay soil less than one inch. Unless more than one pass is used, the grass is given very little water to grow on, and it is no wonder that it is dry the next day or two thus requiring very frequent irrigations.

By sensible water management, I wish to suggest that we study our own situation and intelligently plan and carry out irrigation practices which will produce good turf at a minimum cost for water and labor. One can easily waste money, waste water and cause many turf problems either by applying too much water or by applying too little water too often.

Let's be sensible in our water management. Avoid drying up the grass if we have water and equipment to prevent it. On the other hand, don't drown it out. Irrigation is carried out for the purpose of supply water to the grass.

### **Canadian Amateur**

The 52nd Canadian Amateur Championship will be played at Edmondton (N. B.) GC Aug. 15-18 with qualifying rounds scheduled for the 13th and 14th. The field will be reduced to 64 qualifiers for the championship which will be at match play.

### **Amputee Tournament**

The eighth annual Amputee Amateur tournament will be played Aug. 24-25 at Lake Shore Yacht and CC, Syracuse, N. Y. Entrants will play 36 holes in six divisions which are based on skill and age. Inquiries about the tournament should be addressed to Dale S. Bourisseau, secy., National Amputee Golf Assn., Solon Center Bldg., Solon, O.