



# FAIRWAY- WATERING

as a

## Greenkeeper Sees It

By EDWARD B. DEARIE

### THE AUTHOR .

Mr. Dearie, veteran engineer, constructor and superintendent of golf courses, reminds that the main reason for fairway watering is not "because everyone's doing it."

The only reason for fairway irrigation is to get grass and hold members satisfied.

Fairway irrigation has been soundly developed to the point where adequate, technically correct systems may be installed in fullest confidence. Nevertheless, there is too much tendency to make weird experiments when designing and installing fairway watering systems.

The major points for determining the need, or the character, of a fairway watering installation are set forth by Dearie.

**M**OST ARTICLES written on the subject of golf course irrigation have been from the viewpoint of the irrigation engineer rather than from the view of a practical greenkeeper with an understanding of the turf culture phases of the subject.

Therefore my desire is to point out to you in this article some of the fundamental problems dealing with the application of water to the soil and grasses from a cultural viewpoint. The comments are based on my observations in the Chicago district and in various other sections that I have visited.

In securing practical information and knowledge of the distinctly different types of fairway watering systems, from make-shift hose systems to the most modern snap-valve systems installed today, and in both humid and arid regions of the country, it was exceedingly interesting to learn why some of the golf clubs with water sources available had not given consideration to fairway irrigation years ago.

There is an unmistakable trend toward fairway irrigation. This is especially true of the golf clubs in the middle western states and I venture to say that a vast number of golf clubs throughout the country will eventually give serious consideration to fairway watering in the very near future. The question of watering the fairway area should be of vital importance to golf clubs of any consequence.

### Away with Baked Fairways!

Golf clubs are rapidly being educated to the necessity of this factor from an investment standpoint in rendering the fullest enjoyment to the membership through giving them uniform playing conditions throughout the season. The area between tee and green, where 50% of the game of golf is played, can no longer be considered just a place to drive your tee shot or play your brassie, spoon or iron.

In long periods of drought all golf course fairways

undergo extreme damage and loss of turf. Weeds increase in great numbers and the result is constant reseeding. Therefore when the cost and value of an irrigation system are weighed together usually the former will seem insignificant.

The cost of irrigation is trivial when compared with the total expenses of the average established club but a great many clubs today, while admitting the desirability of fairway irrigation, refuse to consider it seriously because of the cost. Such a viewpoint usually comes from unfamiliarity with the workings of irrigation and its problems or from misinformation.

The questions that should guide every golf club considering irrigation are: "What is the source of water and the amount available; i. e., river, lake, well or city mains; location of electrical transmission lines, reservoirs or existent pumps; and city water rates."

### Preliminary Survey Vital.

No one can arrive at any comprehensive understanding or attempt to estimate the cost of a fairway system without the above information. In watering turf the object is to imitate nature as closely as possible. Temperature, humidity and length of time since the last rainfall are all influencing factors.

The amount of water necessary to irrigate a golf course depends upon both general and local conditions. Naturally the requirements of different courses vary greatly. These conditions should be studied thoroughly by a competent irrigation engineer and not a sprinkler salesman before any plans are considered by the interested club.

The engineer should report on the entire water project and state specifically what to do and what not to do. This report should also contain the local data necessary to determine the efficiency of the system planned. The climate of the locality is important. Accurate information should be obtained on the maximum and minimum temperatures, maximum and minimum amounts of rainfall and on the mean amount of rainfall for each month for several previous years. Special attention should be paid to the average period of time between rain during the summer and average precipitation during such storms. Local peculiarities such as the existence of wet and dry seasons should be recorded for complete specifications.

The topography of a course is of paramount importance. In considering irriga-

tion, the slopes and valleys of the land may be such that rain and irrigation water flow off without percolating into the soil. In such cases a minimum of benefit can be expected from rains and a similar condition will prevail with the irrigation system. This brings us to the problem of the soil. It is vital that the club know what type of soil it has, whether sand, slit loam, clay, shale rock or adobe, the latter being very common in arid sections of the country. All require study when considering fairway irrigation to determine water holding capacity, and the maximum efficiency expected from the application of water.

### Have Expert Make Survey.

All this preliminary study requires a man of long experience. I cannot lay too much stress on the economy of getting the best advice on fairway irrigation engineering and yet this economy is one which is most frequently disregarded when the club is considering the installation of a water system. Like all other golf course work of importance invariably some member of the club is an engineer and is delegated to solve the watering problem and what is best for the club. It is a disturbing, weighty responsibility. This involves the risk of the job becoming just another experiment and frequently the work has to be done over again. The excuse most clubs make for not getting the best advice is that they cannot afford it. The poorer the club the more important it is that it should not waste its small funds and time on impracticable information. Secure the best irrigation engineers possible after a complete survey of their work in that field and hold them responsible for the results. This is an irrigation engineer's problem and not one for a greenkeeper or member.

Appoint an irrigation committee to handle this problem and let them decide on the engineers they want and discuss the situation at length with them.

The most important of all the foregoing suggestions is the ultimate economy in getting the best advice in the first instance and making it as reasonably certain as possible that work is of a permanent character and has not to be done over again.

It requires no effort of the imagination to picture the future of fairway irrigation. It will no doubt be a fixed and definite plan in the future construction of golf clubs and an accepted fact by the architect and designers of golf courses. These

installations will be highly mechanical in their design and efficient in the application of water through various types of sprinkler distribution requiring little or no labor to operate.

In conclusion, let me leave you with one thought that if you doubt the value of irrigation, experiment with one fairway. If possible lay temporary water lines on the surface of the ground. Fertilize and water and observe the results.

At the present time irrigation is in very rapid process of development. Experience coupled with scientific study has provided some interesting facts in the effort to determine the most practical installation. There is no longer a mere smattering of detached experiences but fairway irrigation rests upon a substantial scientific foundation of well established facts.

### Cutting, USGA President-Elect, Dies at Chicago

**ROBERT M. CUTTING**, nominee for 1933 presidency of the USGA, which is equivalent to election, died suddenly of heart disease November 20, at Hubbard Woods, Chicago suburb.

He had been secretary, vice-president and president of the Western Golf association and in 1929 first appeared as a committeeman on the USGA official roster. In 1930, 1931 and 1932 he was vice-president of the ruling body. Cutting's home club was Hinsdale.

Cutting was 50 years old at the time of his death. His father, Judge Charles S. Cutting, is one of the prominent figures in midwestern golf. The Judge and Bob were a great team and frequently appeared at the father and son events in the Chicago district.

Bob, according to the unanimous verdict of the thousands of golfers who knew him, was one of the grandest fellows whoever drew a breath. He was an authority on the rules and on several occasions during championships settled heated disputes with a precision, detachment and justice that endeared him even to the fellows against whom he was compelled to rule.

During his student days at the University of Michigan Cutting was a star on the varsity baseball team.

Bob Cutting's death on the eve of his elevation to the highest elective honor in American golf takes one of the finest characters in the game at a particularly untimely moment as the 1933 National Open

and Women's National championships both are to be held in Cutting's territory—the Open at North Shore and the Women's at Exmoor.

The PGA convention, when news of Cutting's death was announced, passed a resolution of condolence. Convention proceedings paused while a silent tribute was paid to the memory of one fine gentleman and sportsman.

### Big Pro, Amateur Entry Expected for Agua Caliente Open

**QUALIFYING** round for the fourth annual Agua Caliente open tournament—January 11 to 14, which carries a \$7,500 prize value, will be played at the Agua Caliente G and C C, December 20 and 21. The dates sandwich in between the Pasadena medal play tournaments, December 16 to 18, and the Santa Monica pro-amateur affair, December 30 to January 1.

Over seventy pros will be exempt from qualifying for the Agua Caliente event and also, for the first time in the history of the tournament, all amateurs with handicaps under 12 will be allowed to play without qualifying. Exemptions are: The 32 qualifiers in the PGA championship, the 30 low scores in the National open, prize winners in all previous Agua Caliente opens, and all foreigners. By "foreigners" is meant players who do not reside in the United States.

### GLYNN IS WINTER PROMOTER FOR HAGEN LINE

Detroit, Mich.—Jerry Glynn, pro at Olympia Fields C. C., world's largest private golf club, starts out December 1st for winter work of a sales service character for the L. A. Young Golf Co., makers of the Walter Hagen products.

Jerry will begin the jaunt at St. Louis, then swing through Missouri, Kansas, Oklahoma, Texas, the Gulf coast, Florida and wind up at Pinehurst during the North and South Open.

Glynn is an outstanding pro merchandiser with a successful background at small and large clubs. His Young Co. job will be to sit in with the fellows he visits and go over the local sales problems in the light of the combined experiences of the host and himself.

The Young organization figures that one with such a close-up timely slant on pro problems coming out from their headquarters will be of considerable assistance to the fellows who want to plan right now for a prosperous New Year.