The Science of Golf Course Construction

OLF-COURSE construction is now a science, and driving eighteen stakes into the ground to indicate the spots for as many teeing grounds and eighteen more stakes to denote where putting greens shall be developed no longer suffices in links architecture. The days of haphazard construction are nearly done, because the clubs are spending large sums of money on their links and they have learned from experience that not to do the thing correctly in the first place, means the expenditure of further large sums to undo what has been done and start afresh.

The young man of to-day who is looking for a vocation will do well to consider golf from the scientific angle appertaining to course construction or from the angle of a man who can combine the knowledge of greenkeeping with that of clerical duties, so that he can take on the secretaryship of a club and apply himself both to directing his forces on the links and those in the running of the clubhouse.

Just for example take the case of Donald Ross, an expert in this line. It was only a few years ago that he resigned as professional of the Oakley Country Club, after a long tenure, to go to the Essex County Club at Manchester, ostensibly as professional, practically to redesign that course and bring about the many and striking alterations which have developed the Essex course from a second-rate test of golf to one of championship quality. It was only during his work at Essex and as a result of being sought in an advisory capacity by officials of other organizations that Ross realized that golf-course construction is an applied science.

CLUBS WILLING TO PAY.

There never was a time when golf and country clubs were more ready to go deep into the exchequer to provide a first-class golf course than is the case to-day. There never was a time, on the other hand, when the club officials and influential members were less inclined to make heavy expenditures blindly and find themselves eventually with a fortune of outlay and a second or third-rate course. They are willing to grant the expert's superior knowledge of what should be done, where hazards should be placed, where trees should be cut down, where rocks should be blasted, but they want to know the whys and wherefores.

That is where the blue-print figures. The expert links architect visits the property on which a course is to be laid out or where there is one needing alterations. He goes over the property and makes a minute study of its configuration from a golfing standpoint. He may spend one day tramping over a piece of property or he may spend several days.

The blue-print should then be laid before the club committee, with all the details and specifications jotted down. The committee can study the plans, see what it likes and does not like; ask the architect why he favors this or that, and specify wherein they may disagree with him. They can post the plans for the study of all the members and get a majority opinion on the desirability of the layout as given. Therein is protection for all hands. If the majority of the members are satisfied with the layout as it appears on the plans, and have some idea of the amount of money to be expended, the committee which has to do more directly with the final steps is relieved of much of the responsibility. The architect, knowing that he is undertaking something which involves a large expenditure, feels much more comfortable if he has given the club a fairly definite idea of how the course will shape up in its finished state and has his ideas approved.

HAPHAZARD CONSTRUCTION COSTLY.

The haphazard laying out of links in years gone by has been exceedingly costly to many a golf and country club in this country. Some of them have the membership and the wealth to undo the damage, but there are others who are obliged to stick by an unsatisfactory layout for lack of funds. There was one such visited by an expert recently. and it was characterized as "hopeless." It was laid out badly at the start, and subsequent changes made the situation worse rather than better. To make this course over into what the expert would consider worthy of his skill would require double what already had been spent. Possibly it could be done in the manner Alec Campbell once suggested as the only way of improving a certain layout, that is, have an earthquake to change the configuration of the land and then use plenty of soil dressing.

There is a course not far from here where thousands of dollars have been wasted because some one, in ignorance of what a good golf hole embodies, put through several fanciful ideas, one of which involved the expenditure of \$12,000 for just one hole, which was played a short time and then abandoned. A large slice of this money was spent on the construction of a teeing ground which now serves as a constant reminder to the Club's green committee of how easy it is to throw away money.

Golf is a game where there is more chance for favorable or unfavorable comparisons of playing conditions than in almost any other sport which can be mentioned. The golfers, especially those who attain sufficient proficiency to make open tournaments an attraction, visit many courses. They soon recognize if their own is inferior to the average, and then begin to criticise or else use their influence to bring about a change. With many a club money is no object, so long as there is a satisfactory return upon the investment, the "return" in this connection meaning a first-class layout. Anywhere from \$50,-000 to \$300,000, or even more, is spent on acquiring property, developing a course and erecting a clubhouse. money invested in golf and country clubs in the United States runs high in the millions; how high would be simply a wild guess.

But the attitude of some men or clubs is reflected in one of the experiences of of a prominent architect. He was sought out on this occasion by a man of wealth who had made up his mind that he would have a golf course on a large tract of summer resort property which he owned. He did not feel like accepting the task, for the reason that he concluded it was more a passing fancy than a real purpose, and that the course would be of inferior nature. hence reflecting little credit upon the architect, if not an actual discredit to his ability. His plan was to rid himself of the commission and at the same time to create no hard feelings by setting what he thought a prohibitive figure for his services. He named the figure and was taken aback when the response was:

"Oh, that's all right, perfectly satisfactory. When can you begin work?"

Subsequently the architect found that it was not an inferior summer course he was to build, but one of thorough up-to-dateness and about as interesting an engineering problem as he ever tackled. The sum of \$100,000 in round figures has been spent on that links up to the present with most pleasing results.

So many links are in course of construction that a great field is open to the course architect, but a field which demands close application and scientific knowledge.—The Evening Post, New York.

"PIZEN"

One of the members was walking over the same course with the chairman of the green committee and he intimated that there was a great deal of trouble to be encountered. Finally they came to an old stone ruin which had been permitted to remain, with sloping grass banks on all sides, and it provided an excellent hazard. The chairman observed that to make it appear more picturesque, vines were to be planted around its crumbled walls.

"Why not make it poison ivy, and give us all the trouble you can?" drily

retorted the other.