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Some Observations on Construction and Maintenance Problems

By H. Kendall Read

The article written by me in the October BULLETIN on the reconstruction of an old course brought so many interesting letters and comments that I thought a further discussion along this line might be of some interest.

The first observation I want to make on construction and maintenance is the close relationship which exists between them. You notice "construction" is put first. Have you ever thought that the architect, in making his paper plans and the character of the construction employed in carrying them out, largely determines for all time whether your maintenance expense will be large or small? Each trap and hazard of every description represents a certain annual expense. If our records and accounting systems were accurate enough, we could number each hazard on our course and set opposite each number the annual cost of upkeep. With such a record in our hand, we could then have the questionable pleasure of strolling over our links some day, probably accompanied by our Board of Directors, and pointing to, say hazard No. 23 and consulting our list, be able to state that the thing costs \$100 a year to maintain. In a similar way, we might point to hazard No. 223, large and terrible, but a little expensive we admit; \$250 a year for this one. In each case, would not the questions be raised, "Is it necessary and is it worth the cost?" After such an excursion, I venture to say some reconstruction and elimination would take place.

But why can't these things be given proper consideration in the beginning? I know that by some architects they are. No hazard should ever be created when there is the slightest doubt as to its real necessity. Personally, I know courses where a majority of the artificial hazards are uncalled for, are an unjustifiable expense and a downright disfigurement. I want to repeat here a statement made in my previous article in THE BULLETIN: "It is fortunate that in the elimination of many unnecessary and useless hazards, a most desirable improvement in appearance is obtained. This is true because most of the things which I have in mind are wholly artificial and unnatural and when you take them away, you are taking a long step in the right direction."

However, a reasonable number of artificial hazards may be required to create a proper test of play. But if the future perpetual maintenance cost is constantly kept in mind much can be done in the construction to keep down upkeep expense, especially the hand labor portion. And don't forget that anything you can do to reduce

hand labor is cutting down your largest single expense item. How often do we see a group of small traps where a tractor or horse can not possibly be used. In most cases, they could be combined into one large hazard without loss of value, an improvement in appearance and a big saving in upkeep.

In going over a course, just notice particularly the things that demand the most hand labor. I mean the artificial hazards. You will find that in practically every case, they are the most unnatural, the ugliest, the most intrusive things that spoil what might otherwise be an attractive picture.

It is also sad but true that by far the largest portion of fairway bunkering hits the average player and not the star. I often wonder why. It is a silly mistake. Ask any first-class player after a round on an average course how many fairway traps he was in. Then ask him how many traps at the greens he found. Try this experiment. I am personally convinced that most fairway hazards are constructed and maintained at considerable cost for the benefit of the poor dub who pays the bulk of the cost of his own discomfiture.

Furthermore, I believe that a course of average length and with average sized greens could be constructed without a single fairway hazard, where par could be almost as difficult as you cared to make it. All you would have to do would be to tighten up your greens after properly setting them and provide reasonable rough. In this connection, I want to call attention to the so-called Cape type of hole. To me they hold great value and interest. But the same principle of construction can be used where the hole is straight away, and with an almost infinite variety. By simply twisting the green at different angles and trapping close to the green accordingly, many different problems can be developed. Moreover, this type of hole lends itself beautifully to differences in terrain and makes it possible to take advantage of slopes and levels. Two-shot holes of this character rarely call for more than one fairway bunker and frequently not any.

Assuming that proper ground has been selected, the man who can build a golf course and get his results with the least number of artificial hazards and with a minimum of interference with the natural topography and atmosphere of the land, is on safe ground and his work will stand the test of time. Moreover to maintain such a course properly will not break the club's financial back.

I have used the expression "artificial hazard" a number of times. This is simply to distinguish them from the natural ones that are not man made. But a hazard is poorly constructed in proportion to its artificial appearance. Besides, the things that make it look artificial are almost always the same things that make it expensive to keep up. In a great many places, a grassy hollow or good sheep's fescue rough would be better than a trap. It provides the problem equally well, looks better, and of course costs practically nothing to keep up.

I believe that in the future the interrupted playing areas will be used much more than they have been. You probably all know what I mean by this term. Take a hole of 400 yards in length. The first fairway area might start 100 or 125 yards from the tee and continue to the 300-yard point. The next area might cover the 50 yards in front of the green. These areas should be irregular in shape and

when skilfully formed, can be made to add much to the golf picture. I do not believe that the spaces between should be like the rough, but simply not fertilized or watered like the playing areas. Another chance to save money. This type of fairway also helps to supply an excellent objective for each shot.

Wherever it is at all possible, no tee should ever be built that will not permit cutting with a triplex. This means keep them at ground level, or when necessary to raise be sure the side slopes are drawn out well. The slopes around greens should also be gentle and if they are to be of grass why not see to it that they can be mowed by a triplex and thus economically maintained.

If trees are to be planted insist that varieties are chosen that will keep to a minimum the nuisance and expense of cluttered fairways in the fall.

If traps are built shallow with the sides toward the green rivetted, they are not only better looking, keep dryer and give better visibility, but you can use a chain harrow to keep them in shape and save some more upkeep.

It is amazing to find that on courses built within recent years, some of the faster and thicker growing grasses are used in the rough and on mounds and in hollows. This is not such a common error since the existence of the Green Section. It is now pretty generally understood that sheep's fescue makes an ideal grass for such purposes. It provides a fine contrast to the fairways and greens, is a fair penalty for a wayward shot, balls are not hard to find in it and mowing is not required more than twice a season.

I have endeavored to point out to you the close relationship between construction and maintenance and show at least some ways in which savings may be effected. But I would not have you understand that I am making any sweeping condemnation of all courses. We all know that there are a goodly number of first-class courses which show fine architecture and excellent construction. On the other hand, I believe that most courses have entirely too many traps that are badly placed and poorly constructed; that cost too much money to maintain and that their removal would help the average player, improve appearances, reduce upkeep and practically leave your star players unaffected.

In conclusion, I want to make a plea for greater simplicity both in construction and maintenance. In the effort to meet the demand for perfection, are we not guilty of over-refinement, and is there not danger of the grand old game losing some of the ruggedness that has always been associated with it in the past? Hazards and rough should never be unplayable, but neither should they be so groomed and manicured that a visit constitutes a mere incident instead of an adventure. In an effort to gild the lily, take care lest we kill the plant.

Every individual who has grown crops knows that a soil must contain air as well as water, and the amount of one will vary with that of the other. In other words, the air of a soil occupies that space not occupied by water, and when the proportion of the two is about equal optimum conditions prevail.