COURSE MODERNIZATION By GEOFFREY S. CORNISH Golf Course Architect

Keeping pace with the extensive con-struction of new courses an un struction of new courses, an unprecedented number of established layouts are being altered. It is therefore worthwhile to review the objectives of these renovation programs, and at the same time list important factors to be considered in the program.

FOUR MAJOR OBJECTIVES

These are as follows:

- 1. To upgrade the playing standards of the course to a level commensurate with improvements in course conditioning, the individual player's game and in playing equipment. These improvements over the last decades are discussed by Mr. Robert Tyre Jones 1 in "Golf Is My Game."
- To assist the course superintendent in raising maintenance standards by eliminating or modifying features that are exorbitant to maintain. This may also include streamlining the course for machine maintenance.
- 3. To increase the beauty of the layout and the pleasure derived from playing it.
- 4. To assure safety, in so far as possible, for both players and abutters. Because of greatly increased play many hitherto safe areas have become danger spots. One club with an area where several tees and greens are crowded together has named this the "shooting gallery." Another club describes a fairway where balls from two adjoining holes frequently land as "suicide Hazards can also abound for abutters. A course designed decades ago may have then been bordered by fields and woods. Today these vacant areas have often been converted to building lots and roadways, making out-of-bounds shots hazardous to neighbors and passersby.

FACTORS TO BE CONSIDERED

Any change must be made with the overriding policy of making the layout interesting for the low handicap player

and yet not too severe for the high. To achieve the four objectives described above major surgery in the form of an entirely new layout may be required; or more frequently reconstruction of certain features may achieve the purpose.

But whatever the extent of the renovation program at least ten factors as follows require consideration.

- 1. Increasing overall strength and length and in particular getting more par 4s over 400 yards in length. So much of the inherent strength of a course lies in these long par 4s. Strength of finishing holes too must be considered, and the overall balance between holes with different playing values.
- 2. Increasing size and length of tees to facilitate maintenance and to provide greater flexibility in placement of tee
- 3. Re-arranging fairway bunkers. Bunkers ideally situated a few decades ago are no trouble today to the low handicap player but are making playing conditions miserable for the type of player who has enough troubles without them. In general, but subject to several obvious factors, we find bunkers placed 240 yards from the middle of the tee on the hook side and 220-230 on the slice side with 40 yards of unobstructed fairway between, function in the desired manner. That is, they catch the erratic long but do not trouble the short hitter. Modern fairway bunkers are raised above fairway level rather than cut below ground. Thus they are more visible and easier to maintain than the old fashioned pits.
- 4. Construction of new and much larger greens. Modern greens are raised above fairway level and are sculptured and fairly tightly trapped. Moreover they offer a more interesting approach shot, a greater aesthetic appeal and should not be troublesome to maintain. Rebuilding a green implies building it in accordance with the high standards set by the Green Section Staff of the USGA 2 and the in-

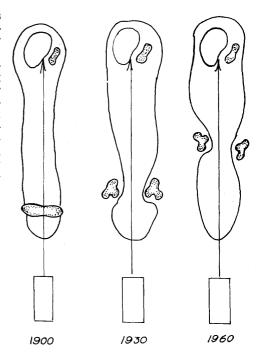
troduction of new and improved strains of grass. The whys and wherefores of rebuilding greens have been covered fully by A. M. Radko. 3

- 5. Planting of additional trees and removal of others. Four types of planting frequently required are backdrops for greens, shade trees at tees, dividers between fairways and boundary plantings. On the other hand it is very easy to overplant a course, making the superintendents' tasks more difficult. No tree, in my opinion, should be planted closer than 60 feet to a putting surface. Turfgrass problems are undoubtedly compounded by too many trees. Certainly some of these problems can be reduced thinning out existing trees and severely pruning others.
- Addition of water hazards. moderation these increase the playing interest of any course. They also add to the beauty of the landscape and may facilitate drainage and act as reservoirs.
- Reduction of stiff climbs together with removal of steep mounds and banks. Today, with heavy earth moving equipment, mountains can be levelled and depressions filled at far less cost than before the introduction of these mechanical marvels. Heavy equipment has revolutionized golf course construction.
- 8. Creation of more adequate practice areas including practice fairways, chipping greens and larger practice greens.
- Modification for electric cars. This includes charting routes and providing macadamized pathways on all steep slopes and probably in other areas.
- 10. Installation of fairway irrigation, keeping in mind that this may change the character of the course.

PLANNING THE RENOVATION

Some clubs take years to complete the renovation program, while others complete it within a season or two. In either case long range planning is necessary to avoid the phenomenon all too frequently observed of a chairman eliminating a feature one season and his successor putting it back the next. This phenomenon has been aptly described in W. H. Bengeyfield's compilation as the "musical chairs" type of planning. 4

The committee in charge is all important. The ultimate success of the entire program depends upon the ability



This sketch contrasts the placement of fairway bunkers in three eras

and energy of these men. Certainly, too, superintendent and professional should be in on the planning. It is the committee, the professional and the superintendent who possess the reservoir of knowledge of their own golf course.

The role of the architect is to bring in fresh ideas, experience and an unprejudiced outlook.

It would, however, be the path of least resistance for both the committee and architect to accept slavishly all the architect's preliminary ideas on the grounds that " he has had more experience." Without any reflection upon my profession I can state the new layout will be superior if the committee really functions in a critical, contributive and constructive manner.

References:

- Jones, Robert Tyre Jr., Golf is My Game. Chapt. 17. Doubleday and Co., Inc., 1960 USGA Green Section Staff—Specifications for
- a Method of Putting Green Construction. USGA Journal Vol. XIII, No. 5, Sept., 1960
- Radko, A. M.—Renovation vs Rebuilding. USGA Journal, Vol. XII. No. 1, April, 1959 Bengeyfield, W. H.—A Guide for Green Com-mittee Members of Golf Clubs. The USGA.
- Jan., 1961