older courses and on many of the new ones can be labeled "poor construction." The reason for this is inexperienced men, attempts to save money, lack of funds, and a great many "do it yourself" jobs. When you remodel, get clear and concise specifications and you will not run into trouble.

Seed and turf mixtures are giving some clubs a great deal of trouble. Get together with your superintendent and the USGA agronomist and discuss the situation and make plans to change to good turf. There is no use maintaining turf not suited to your area.

Bunkers, if designed and constructed properly, can be maintained with a minimum of hard work and cost. A study should be made at your course. Remove bunkers that penalize only the high handicap player. Re-locate bunkers to fit the play of low-handicap players from long tees. Check the work needed to maintain inside slopes of your bunkers. I do not recommend that they be deeper than four feet. Sand should be washed up on all slopes. Faces of bunkers should have a slight over-hang or revetment to require a well played shot for recovery. All bunkers should be either surface or tile drained. All outside slopes should not be steeper than 4:1 ratio.

Dense wooded areas contribute to poor

air circulation and cause a great deal of trouble today. The sad part of this condition is that, in most clubs, to take a tree down requires almost an "Act of Congress"—it makes no difference if the trees are bad trees in need of pruning or repairs, or that they are growing into and spoiling many fine specimen trees. If these bad areas were cleaned out of all underbrush and poor trees, there would be better circulation of air, which in turn would be a great help to the growth of turf in those areas.

Many courses have low areas, pockets and swales which hold water in the spring and fall during storms. These should be corrected either by open swales properly graded or the installation of tile drains.

The above problems are responsible for increasing maintenance costs. I would say, make a study of your course and do something about it. A good plan is for the superintendent to make a list of his problems, the professional to make a list of his suggestions, and the chairman and members of his committee should walk the course—not while playing—and make up their own list. Then decide on a program to follow and go through with it. If there are problems you cannot solve, get professional advice.

Financing the Remodeling Job

BY DR. ANDREW P. VIRTUOSO
President, Whippoorwill Club, Armonk, N. Y.

Very few golf and country clubs have readily available funds for remodeling and reconstruction work.

Yet there are certain necessary improvements on which the membership can be "sold" even when the money is not readily available. Ways can be found to finance badly needed improvements without endangering the stability of the club

To finance a remodeling project properly it is first necessary to make a thorough study and cost analysis. Even the most careful estimate will often undershoot the final accounting. Therefore, allowances should be made for contingencies and unforeseen expenses. Since these

cannot be accurately estimated in the beginning, an allowance should be made which will cover, at least in part, the costs over estimate. Normally 10 to 15 per cent is reasonable allowance for unpredicted expenses.

Correct timing in reconstruction is allimportant, and added expense may result from poor timing. Remodeling should be undertaken at a time when play is least inconvenienced and when best work results can be expected. Projects undertaken during periods of heavy play or unfavorable climatic conditions often lead to delay and extra expense.

It is important to decide, also, whether it would be more advantageous to under-

take the work in one or in several stages. The cost of each method requires careful study, and the program best suited to all requirements should be chosen.

Last year, the Federal Excise Tax Technical Changes Act was passed. This should prove of substantial aid to clubs undertaking improvement projects. In brief, it provides that assessments for the construction or reconstruction of any social, athletic, or sporting facility (or any capital addition thereto) or for the construction or reconstruction of any capital improvement of any such facility are exempt from the 20 per cent dues tax. Therefore, an assessment for remodeling or reconstruction of \$16,000 now will be the equal of \$20,000 in dues, so far as the impact on the membership is concerned.

Other methods of saving or raising money are: (1) short term bank loans, with notes endorsed by at least two responsible members or officers of the club, (2) bonds issued to members (this method has not proved successful at all clubs as the bonds usually bear low interest and are often paid by assessments), (3) assessments, levied for a fixed amount as a monthly charge and labeled in many different ways, such as "new projects", "fertilizing program", "water system" and "caddie service fund."

There are also voluntary assessments, where members are asked to donate for a specific project or fund. Many times those that derive the most benefit do not donate.

Another source of income is a small charge of perhaps 25 cents per round of golf. With a possibility of 13,000 to 20,000 rounds of golf per year on an 18 hole course, this can raise a fair sum. Green

COMING EVENTS

August 4
U.S.D.A. Turf Field Day
Plant Industry Station
Beltsville, Md.
Dr. Felix V. Juska

August 6
Rutgers Turfgrass Field Day
Rutgers University
New Brunswick, N. J.
Dr. Ralph E. Engel

September 17 and 18

28th Annual Golf Course Superintendents'
Turfgrass Field Day
University of Rhode Island
Kingston,, R. I.

fees also can provide a substantial sum for lesser projects such as extension of tees and path and road improvements.

Regardless of the scope of the remodeling projects, the course superintendent and the green committee chairman should cooperate in establishing the agenda for the program. If drastic changes are to be made, consult a golf course architect.

A word of caution: Be most careful in wording letters that refer to assessments, so that they strictly conform with the Excise Tax Technical Changes Act. Many club officials will recall the mixup over the tax on lockers. Some clubs tried to get around the dues tax by reducing the cost of membership but compensating for these clubs today are still paying fines and back taxes because of this attempt to circumvent this tax law.

The club must be certain that it complies strictly with the new tax law, otherwise it may endanger its very existence.

The Time Factor In Remodeling

BY T. T. TAYLOR

Northeastern Agronomist, USGA Green Section

In considering time as a factor in the remodeling of a golf course, it brings to mind two concepts of time, (1) time as it relates to the duration of the project as a whole, or the completion in its entirety of a master plan, and (2) time as it relates to the occurrence of any particular phase of the project, in other words, timing or scheduling.

How duration and timing or scheduling contribute to the success of the master plan is the purpose of this discussion.

The master plan may be divided into several parts such as architectural changes desired, financing, preliminary or investigational phases, and the actual construction and planting. The construction and planting phases of the master