CONSIDERABLE number of golf courses are found in towns with a small population. It would be erroneous to imagine that very many of these courses are still in the cowpasture stage. A few, it is true, have sand greens and perhaps charge an annual fee of $10.00 or $15.00, but as a rule, small courses are not operated very long before several grass greens are installed. Eventually the sand is replaced entirely by grass.

Cost studies are of little value in this period of change, but it may be said that during the past few years many small 9-hole clubs have been providing bent grass greens and fairly good playing conditions with some clubhouse facilities for dues of about $25.00 or $30.00 per year. Wherever the maintenance is on a somewhat higher level or where the clubhouse facilities are more elaborate this figure may be doubled.

Satisfactory golfing facilities may be secured for a very modest sum in the small community, but very often the clubhouse facilities prove excessively costly for the small golf club. There are many clubs which would have larger memberships today and be in better financial condition if they had maintained good greens and fairways and had spent less on high priced crystal and chinaware. If this be true, perhaps the greenkeepers have been too retiring and too modest in their demands for the good of not only themselves but their clubs.

Cost Analysis

Regardless of the accounting system used by the club officials, the greenkeeper should use a simple cost analysis system of his own. An individual account should be kept for each green and a record should be made of the date of each treatment such as fertilization or topdressing, together with the amount of material used. An estimate of labor cost is useful also and a standard time can be determined and used for each treatment. This will be accurate enough for all practical purposes. Fairway costs can be treated in the same manner.

Where such records have been kept, the variation in the cost of maintenance of the different greens has often been marked. A green with faulty construction is likely to prove expensive in some items, such as fungicides and in the removal and replacement of turf. Thus when a green should be taken out and rebuilt, the greenkeeper has something definite to support the facts presented to his committee. The personal records of the greenkeeper put the facts about the operation of the course in their true light, while the accounts of the club officials are usually too generalized to do this.

Layout and Maintenance

The small town golf course is apt to have defects in construction which interfere with the growing of good turf. A few common examples may be cited: Sharp rolls in the surface contour of the green necessitate continued cutting from a certain angle. Steep, rough backs or sides of greens cause difficulty with the use of any kind of mower and may require much hard work with a scythe. Certain types of terraced greens and some freak designs in vogue a few years ago have proven unsatisfactory and are being taken out. Greens with rolls placed without due regard to the surface drainage have given endless trouble with scald and brownpatch. There are courses on which the surface water from a long slope runs across the green, or where the seepage from surrounding hills keeps the soil soggy.

Oversized Greens Costly

Oversized greens on smaller golf courses increase the cost of labor, power, fertilizer, fungicides and every other item of maintenance expense. Greens of over 6,000 sq. ft. are apt to be regretted by the small club. A green need not appear small, but it certainly will do so if it is given a very irregular outline with large sand traps on the approaches. A wide untrapped approach from the front or from one side will help to make the small green playable for the relatively unskilled players who predominate in most clubs.

The situation is quite the reverse with tees. They are often not large enough on
the average small course and require much repairing and returfing.

Sand traps and water hazards are often sadly neglected on the smaller courses. Where they have been put in, an effort should be made to maintain them. Probably clubs will be less hasty in placing them over the course in the future.

The Grass Problem

Taken as a whole, the smaller golf clubs of Iowa have made many serious mistakes in the selection of putting green grasses. The vast majority of the greens are in some sort of bent. The early seeded greens were sown to mixed South German bent, and under our conditions the various grasses formed small segregated patches which gave the green a spotted appearance. The early experiences with stolonized greens were even more unsuccessful because of the inferior strains which were being sold at that time as Washington bent. Spurious grasses are still on hundreds of greens in our state and, in spite of all the efforts of the greenkeeper, remain coarse, nappy, diseased at times and undesirable in color. The dissatisfied players and club officials often do not realize that a misnamed grass is the one and only source of their troubles.

It is well to keep the greens of a course all in one strain of grass; otherwise one has the bother of growing various sorts of grasses for turf repair. Where there are a number of bents on one course they tend to be carried by the mowers and in time become mixed, causing the greens to take on a spotted appearance. The best place for the trial of new grasses is on the practice putting green and a certain amount of such experimentation is to be encouraged.

Give Greenkeeper Incentive

An interesting development in the status of the greenkeeper is found in Iowa and has attracted some attention locally. It is essentially a contract system which increases the responsibilities of the greenkeeper and allows him to share directly in the economies which he is able to effect in the use of labor and materials.

This arrangement, found at the Green County G. C., a 9-hole course located at Jefferson, Iowa, has worked ideally in practice. The club has just completed its fifth season. Most of the present greens are but 3 years old. They are in Washington bent and are nearly all of a quality worthy of the finest course.

The club pays the greenkeeper, C. B. Whitson, a fixed stipend each year. From this he provides his own salary and the necessary additional labor for course maintenance and a tractor, which is practical in this instance as he also operates a farm. Fertilizer, tools and other materials are furnished by the club. The greenkeeper collects the green-fees and by the provisions of his contract is allowed to retain one fourth of the fee money. As this course does not have a pro, he also operates a concession for the sale of golf merchandise.

At the start, this greenkeeper was a farmer in the vicinity who took over the job without any previous experience or knowledge of turf culture. By obtaining information from every source and by hard work he has secured unusually good playing conditions.

There are some good features to such a contract system, although the organization would have to vary according to local conditions. Perhaps it is time to get rid of the idea that a greenkeeper is simply another laborer at so many dollars per week or month and strive to effect arrangements whereby he is able, in addition to his fixed salary, to share in the economies which his management secures. Good greens mean an increase in new members who are attracted by the fine playing conditions on the course. The attraction of non-resident players is also becoming the financial salvation of many clubs.

Other types and extremes of organization are found also. There are small courses which do not have a greenkeeper in the true sense of the word. The greenchairman, usually a retired business man with some leisure, spends considerable time on the course and directs the labor. While the budget of such a course may show a very low labor cost, the best playing conditions are not apt to result.

Golf Course Management

There is a faster way to pull a weed, topdress a green, or route a fairway mower than most of us are using. A great many useful methods which would make for cheaper and quicker maintenance have never been collected and organized and must be learned from experience or from personal contact with the greenkeepers who are the leaders in their professions. At the points where greenkeeping touches the sciences of pathology, entomology, agronomy, and a dozen others, much information is available. The whole subject is expanding so rapidly that textbooks on greenkeeping soon get out of date.

The men who have charge of the smaller golf courses have sometimes been too isolated to keep in touch with the best information in greenkeeping. The educational work of the various greenkeepers' organizations, the USGA Green Section, GOLFDOM and the specialized short courses given at a number of the colleges undoubtedly is leading to great improvement in the average standard of golf course maintenance.

What About Labor?

Very little has been said about the selection and handling of laborers, but the sub-
ject is worthy of consideration regardless of the size of the course. Machinery and golf turf are both too expensive to trust to any kind of worker, and possibly the higher type of laborer could be used with real economy. A different situation exists in every club. Greenkeepers differ widely in the methods which they use and in the response which they can get from their men. Definite working rules are useful in some cases.

Learn to Plan

It will be more of a problem than ever to maintain a contented, interested and loyal working force after a series of pay cuts during these times. Yet it can be done. Men will work wholeheartedly under adverse conditions if they feel that they are treated fairly and that their efforts are appreciated. Much of the responsibility for the working force rests on the greenkeeper. Usually he must be a hard worker himself if the others are to have the right attitude, and yet who has not seen the foreman who is so engrossed in the work he himself is doing at the moment that the labor force is wondering what to do half of the time. At any rate, he must plan his work or lose much time.

Improved machinery made it possible for some clubs to keep up normal maintenance last summer. Others practically abandoned topdressing and fertilization throughout the season. While the grass held up remarkably well, a day of reckoning will probably come if such a practice is continued. Radical changes in such operations as topdressing enabled certain clubs to get along fairly well in spite of a reduced labor force. Some clubs are handling topdressing soil in sacks, which eliminates some shoveling, and are using one of the newer types of topdressing distributors. These enable the work to be done in a fraction of the time that the work formerly took by hand and the application is much evener. In this and other cases, the money spent by some clubs for equipment of this type is proving to be a far-sighted economy.

There are great opportunities for the extension of golf in the smaller communities of the country. The small town golf clubs are playing an important part in the social and recreational life of the community. Those responsible for keeping the smaller courses should aim high. Already many small town greenkeepers have demonstrated that the large clubs have no monopoly on good layouts.

Greenkeeping Progress Through Self Education

By JAMES G. MOORE*
Dept. Horticulture, Univ. of Wisc.

There is nothing in golf more important or vital than greenkeeping. It has had more to do with the development of the game and the amazing strides it has made than anything else, until today there are more than two million players in this country. Very few play for exercise, and were it not for the pleasure connected with the game, it never would have attained its present popularity which is rapidly increasing every year.

To the greenkeeper is primarily due the responsibility of making courses playable and attractive. The more he makes them so, the more players the game attracts and the greater the appeal to all classes of people.

If links are in a condition which leads only to complaint and irritation, some other means of recreation will be sought as players today not only want, but demand, almost perfect putting greens, and fairways. When links which receive little attention, or are neglected, are contrasted with those in charge of a competent greenkeeper, then his great value to the game is realized. His work has led to more than 5,000 links and clubhouses in this country, the municipal courses which are being constructed everywhere, the daily fee courses which are becoming so popular, and hundreds of millions of dollars invested in the supplies and accessories of the game. It is no exaggeration to say that over one billion dollars is invested in some way in the playing of golf.

The Forgotten Man

The greenkeeper, however, has not received the appreciation and gratitude from golfers to which he is entitled. They keep in touch with the professional

*Digest of Greens Convention address.