



Exterior view of Virginia C. C., where unused rubbish room was transformed into de luxe lounging space.

26 ins. in width, are 6 ft. high and have safe deposit boxes in them which can only be opened with a master key. They also have space for several pairs of shoes, lots of hangers and wee corners for ginger ale and whatnot. The shower rooms are just a step away and the boys can sing as loud as they please in the lounge room without being heard in the locker room proper. What a place for a party. It's the finest corner I ever saw in any of the 300 club-

houses I've been in during the past 25 years. And an old, discarded room at that!

Have you such a room in your clubhouse? If you do have and if you happen to have a Ted Cashman as your manager and a bunch of real sports like this oil bunch of good fellows, you can also transform your rubbish room, which pays you no rent, into a wee paradise like the one at the aggressive Virginia Country Club.

## Cash Payment Returning to Good Grace at Clubs

**R**EPORTS FROM several metropolitan districts indicate that cash payment for charges incurred at country clubs is due for popularity in 1932. Idea is that people in these times dislike running charge accounts. One side of the case is that cash payment may discourage volume but those in favor of cash say an alternative of cash or charge will bring the canny ones out to the clubs.

## Golf's 1931 Season Advance Is Contrast with Baseball

**A**LTHOUGH unusually prolonged hot weather knocked down golf play figures for the 1931 season under the record year of 1930, the game has no cause for complaint about its patronage. Public course figures in many cases show husky growth over last year.

Compared with baseball's slipping, golf activity for the year has been remarkable progress. Newspaper circulation figures indicate the old reliable world series has weakened seriously as a factor of public

interest. Reduced patronage at baseball parks during the year has major league magnates figuring salary cuts for 1932.

Night baseball, which had hypodermic effect last year, practically passed out as an element figuring in maintaining good gates. Leagues in the south which presented night ball saw no boost in attendance and took heavy operating losses for night games this year.

## Dividends May Replace Dues at This Pennsylvania Club

**D**UES AND assessments may be a thing of the past for the Corey Creek Golf club, according to word from H. G. Peterson, green-chairman of this Mansfield, Penna., layout.

"We have just completed a deal with a gas company," Peterson writes, "to drill a well on a part of our course where it will not interfere in any way with play. If this well comes in as a producer, we may be paying dividends instead of charging dues."

Please fill in and return the GOLFDOM questionnaire you received a few days ago.

# Greens Grief Shows Need of Revision in Architecture

By B. R. LEACH

**M**ANY A GREENKEEPER here in the east awoke about two a. m. on a hot-as-the-hinges-of-hell August night last summer and listened to the big drops of a heavy thunder shower beating a tattoo on the tin roof—and then went back to the nocturnal bliss of pounding his ear. At the end of the following steaming day he found anywhere from one to eighteen of his greens “scalded” down the middles.

This so-called “scald” (one of my green-keeping acquaintances calls it the *Chinese rot*) is a very interesting subject for study by anyone engaged in the theory or practice of modern greenkeeping; in fact, the presence or absence of scald on greens may be taken as a pretty reliable indication of correct or incorrect greens construction and maintenance practice.

Early last September I spent an entire day examining a set of greens near New York of which 14 had scalded badly during the latter part of August. That they were a tragic and sorry spectacle goes without saying but I was more interested in noting the lessons one could learn by a modicum of close observation.

On all of these 14 greens the scalded areas were confined to the low, dished-in spots where surface drainage does not function rapidly or to those *ravine-like* areas into which the rainfall from both halves of the green flows—said ravine running from back to front of the green and down the middle, discharging the water from the green onto the approach. All other portions of the greens, which due to contouring were able to rid themselves quickly of the surface water during a rainfall, were free from scald and the grass was growing normally. One would be reasonably safe in concluding that at least one factor in the consideration of this scald problem was in this inter-relationship of excess rainfall or artificial watering and the contouring of the green.

## Contours Neglected.

Many chapters have been written on this subject of greens contouring principally

by architects who write of contouring as it contributes to the game of golf via the putting route. The importance of contouring as it affects the maintenance problem has never to my knowledge received the degree of attention it deserves.

Hence, we find the country dotted with courses boasting the possession of a set of 18 “sporty” greens; a set of greens that are not so easy to putt on as they seem; 18-hole combinations of dished greens, terraced greens—one plateau above the other, grand canyon greens with a ravine down the middle, all designed to make putting a sporting proposition.

There can be no quarrel with this fundamental idea of sportiness in the designing and contouring of greens because it is and must be paramount. Nevertheless unless the designers of these sporty greens give a bit of thought to the problem of maintenance there will be occasions when such greens will go bad. They may travel along okay for years but the right combination of warm weather will tie them up in a knot with scald.

## Terrace Green Drainage.

Such a possibility is entirely unnecessary since contouring to insure sportiness and contouring to insure immediate surface drainage can be readily combined. Not long ago I visited a club on Long Island and among the greens was one comprised of two terraces, the design and surface construction of which was sufficiently unique to merit close study.

On most of these terraced greens the upper terrace is contoured to the center so that all the water during a heavy rainfall converges to this point. From there it flows down to the lower terrace and runs down the middle where it meets the run off from the entire area of this lower terrace level and then flows onto the approach. To make matters worse there is often a low, dished-in spot in the front centers of these two terraces which holds back the water and prevents a clean, quick runoff. Such a green is very susceptible

to scald when weather conditions are just right.

The terraced green I speak of on this Long Island course was unique in that the upper terrace was so contoured that even with a very heavy rainfall the lower terrace got practically no surface water from the upper terrace. The excess surface water on the upper terrace all drained away rapidly by means of two sweetly contoured undercuts, one on each side of the green so that all the water drained away to the sides of the upper terrace instead of flowing down onto the lower terrace. The lower terrace in turn did not contour entirely to the center but was so arranged that the surface water had two mild channels by which to escape. Only the most flagrant mismanagement of such a green could produce scald because there is no portion of such a green where the soil condition necessary for the development of scald could readily be secured.

### Avoid "Dead Spots"

In a nutshell, the main idea in building a scald-proof green is to contour the green so there are no "dead spots" where surface water can collect and can escape only by seepage into the soil; secondly, to contour so all the excess surface water does not converge and flow off in one relatively narrow channel. Terraced greens can be contoured as described above. Greens sloping from back to front and not terraced should be so contoured that a ravine down the center is avoided. So-called dish greens are the worst of the lot and with a low spot in the center they are hell; but much can be done to ease the situation by side cutting to reduce as far as possible the flow of surface water down the middle of the green.

All of which is interesting but nevertheless does not greatly aid the greenkeeper in charge of 18 greens, 14 of which may be relatively lousy as regards their surface contouring and any one of them are apt to go bad on him during a spell of slimy weather. How can a greenkeeper handle such a set of greens so as to reduce the possibilities of scald to the minimum?

In order to consider this side of the problem in an adequate fashion it is again necessary to mention the flow of excess surface water as it escapes from the surface of the green. This water itself does not cause scald. It has nothing whatever to do directly with the occurrence of scald, it is simply an indirect contribut-

### LEACH SAYS:

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"... all portions of greens able to rid themselves quickly of surface water during a rainfall were free from scald."

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"... green contouring to insure sportiness and contouring to insure immediate surface drainage can be readily combined."

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"... scald results from an excess of water, organics, inorganics, heat and humidity at a given spot on a green."

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"... with plenty of spare sod on hand, a case of scald is not such a dire calamity."

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ing agent to the formation of scald. If excess water alone were involved in this problem the worst condition of affairs that could develop on the low spots or ravines would be a sogginess of the soil with a tendency to thin, unhealthy turf at those points. More than this is required to produce a case of scald.

### Excess Water Loaded with Trouble.

In support of this statement let us follow the drops of water as they fall onto a green during a heavy rainfall until they come together in a thin sheet of water and flow off the lower portions of the green. As long as the soil of the green is capable of soaking up this rainfall everything is o. k. but as soon as the soil becomes saturated with water and can no longer take up the rain as it falls the excess water begins to seek its level and flows down to the lower portions of the green. Let the rainfall be heavy and of sufficient duration and what happens? The excess water (generally spoken of as the *run-off*) ceases to be simply water. It changes to a mixture of water and everything on the surface of the soil which is capable of floating or suspension in water.

Consequently when this run-off reaches the lower portion of the green it is carrying a heavy load of fine silt, particles of organic material such as manure, humus, etc., and wherever the rapid flow of this run-off has a tendency to be checked the water, at these points, dumps its load. So that, as a second step in this consideration of the causes of scald, we have this debris which the run-off drops on spots where surface drainage is retarded.

Wonders never cease however, because this silt and particles of organic matter also *carry a load* which contributes to the causation of scald in a badly drained area of a green. The fine silt and organic matter is loaded to the gun-wales with nitrogen, phosphates and potash to say nothing of mercury compounds, all of which may have been applied to the greens during the practice of the routine maintenance.

Under the circumstances we have arrived at the point in this discussion where we may say that a badly drained spot in a green following a heavy rainfall will be carrying an excess of water, silt, organic matter, nitrates, phosphates, and potash as well as mercury compounds. Whether these latter have anything to do with scald I cannot say, although I have my doubts.

### What Causes Scald.

But even this combination of three factors is not sufficient to cause scald. One other factor is essential, a match to light the fire, in the shape of a spell of hot, humid weather. Therefore, the four factors essential for the causation of scald on a given spot on the green are:

1. An excess of soil water.
2. An excess of organic matter.
3. An excess of nitrates and other fertilizing materials.
4. An excess of heat and humidity.

With all four excesses present, rapid chemical decomposition in the surface soil results in the quick release of too much soluble plant food and the grass on these spots scalds just as though you had applied hot water. Scald throughout apparently results from the presence of too much of everything at a given spot. I have never known it to happen where the surface drainage was right except in those rare instances where those in charge of the greens had thrown discretion to the winds and applied slathers of fertilizer and what not to the turf during the hotter portion of the year.

Since scald is a condition arising from excess it is fairly obvious that the best course to pursue in avoiding scald is to avoid excess in maintenance. We cannot always avoid an excess of water nor of heat and humidity. The other two contributing factors can be very largely controlled. Topdressing greens susceptible to scald during June, July and August with a mixture rich in organic matter is a ques-

tionable procedure, since heavy showers flood this organic matter into the low spots. Organic fertilizers can also be well avoided during these three months for the same reason. If the greens go off color apply soluble nitrogen, preferably in solution in water or if applied dry thoroughly watered in, so that later the low spots will not get an overdose due to a heavy shower.

### Repairing Scalded Areas.

I have seen cases of scald when the damage was not severe, snap out of it if the weather turned cool immediately following an attack. The sod would be painfully thin at these spots but nevertheless you could get by until seeding time.

However, when the scald is severe practically everything passes out on the affected spots. Many a greenkeeper loses his customary sound judgment under such trying circumstances and makes matters worse by doctoring the affected spots with everything under the sun from powdered charcoal to ground tobacco. The more dope you put on the worse the spot becomes. Lay off all the medicine and try to get the soil of the scalded area free from sog-giness. Forking with the tines of a manure fork helps. In fact, anything to get rid of the excess water is helpful.

Seeding such scalded area is a tough and uncertain proposition, especially if the rainfall is plentiful, because the very condition which has caused the scald also proves too much for the tender grass seedlings and they have a tendency to die due to excess soil water and plant food.

Any greenkeeper managing a set of tricky greens susceptible to scald can best protect himself and his job by developing a sufficient area of spare sod maintained just the same as the greens. With plenty of surplus sod on hand a case of scald is not such a dire calamity since the affected spots can be cut out, recontoured as much as possible so as to insure a quick runoff and then resodded with healthy sod. This gets the green back into play and keeps the members from climbing up on the greenkeeper's neck. In resodding these spots it pays to take out several inches of soil as well as the dead sod and replace with fresh soil before applying the new sod as the soil directly under the dead sod is frequently heavy with soluble plant food, often to such a degree that the healthy sod fails to take hold.

All these measures are of course simply palliatives, a means of getting by for the

time being, although many a greenkeeper has to put up with such conditions year after year. Any green with a pronounced tendency to scald had best be remodeled with one eye on sporty putting and the other on surface drainage.

### Silver Lining to Trouble.

The past summer, according to all accounts, has been pretty tough for greens and greenkeepers—and a very good thing it has been tough. The welfare of the greenkeeping profession demands that at least one year in each five be real tough, so tough that budget-shaving golf clubs won't get the idea that an ex-railroad section hand can run the course without any trouble. Other things being equal, the tougher a greenkeeper's job looks the more jack he can demand for his services. Let greenkeeping become too easy and greenkeepers will be working for 40 cents an hour.

In this connection I pass on to you a crack made by Bruce Barton, one of the highest paid lads in the writing racket:

"Never complain," says Barton, "about your problems. They are responsible for the greater part of your income. Whenever I think I am having a tough time I remember that jobs with no worries carry small pay. It's because I have larger worries that I draw a larger income."

### Michiganders Put Pep in Annual Greens Meeting

**M**EMBERS OF the Western Michigan Greenkeepers' association, headed by President M. F. Webber of Lansing, and the Detroit and Border Cities Greenkeepers' organization, marshalled by their chief, Herb Shave of Oakland Hills, assembled at the Country Club of Lansing for the liveliest joint business session and tournament the groups ever held. Almost 100 men were in attendance. Al Sherwood won the golf championship. Andy Peck, Battle Creek supt., started more than 70 players around the perfectly groomed course that Henry Chisholm had ready to defy the divoteers. Eight prizes put up by the association, equipment houses and Lansing business men, encouraged some smart competition.

Competition was not so close when the boys sat down to pack away the luncheon with the Country Club as host. John Phelps went around a championship plate

in seven under par with a knife and fork to beat out Floyd Hammond, runner-up, by six biscuits and the greater part of a cow's carcass. The greenkeepers paid high tribute to the manner in which the club's manager and chef teamed with their pal Chisholm in making the Lansing plant a model of operation.

Each of the Michigan sections meets every two weeks in its own territory and



H. E. Shave



M. F. Webber

the annual tournament is the windup of the outdoor season. In December the course superintendents gather at Lansing for the short course at Michigan state college.

The associations hope to have all eligible greenkeepers in the state as members and will welcome inquiries regarding membership from greenkeepers or from clubs that would like to have their men and courses profit from the benefits of membership. M. F. Webber, pres. of the western group, is supt. of the 45 holes of Lansing municipal golf, and may be addressed Route 5, Box A, Lansing, Mich. Herbert E. Shave, pres. of the Detroit and Border Cities group, is supt. at Oakland Hills and may be reached at the club, Birmingham, Mich.

The associations cordially invite every greenkeeper to attend their meetings. The organization officials also would like to hear from course superintendent association officials in other states with information about any ideas that have been found especially helpful in putting on well attended and practically valuable meetings.

Professor Mallar of the Michigan State college, W. B. Matthews, supt. of Grand Rapids Masonic C. C., and Herb Shave spoke at the noon business conference.

Motion pictures of the tournament were taken by the Ideal Power Lawn Mower Co., and will be shown at one of the short course sessions this winter.

# Concerted Promotion Needed to Better Field for Sales and Play

By JOE GRAFFIS

**A**PPROXIMATELY 90% of the courses opened during the 1931 season, or on which construction was started during this season, were municipal or daily fee establishments. Today about one of every four courses is in the pay-as-you-play class. Municipal course construction was accelerated this year by the need of finding work for those unemployed who were drawing from civic charity funds. In many instances a municipal golf course meant the transportation of an unsightly piece of public property into recreation facilities that would amortize their cost in from 5 to 10 years. Construction of the municipal courses involved little expense and legal complications when compared with road building and other public works that otherwise might engage services of the communities' temporary wards.

This extension of golf playing facilities clearly points to an opportunity for market development that should be given immediate and thoughtful attention by the club and ball manufacturers associations and by the P. G. A. The manufacturers' associations met with definite success in their first market promotion effort, that of the *Golf Club Organizers' Handbook*. Almost 3,000 copies of the book have been distributed in one year and plenty of testimony points to the book prompting construction of a number of golf courses here and abroad.

## Can Make Pro Jobs

Unfortunately for the pros, the public and fee course field has been neglected. Many of these courses have no professionals, and many are operating with hopeful, but unqualified kids. The play at these courses and the need for services of competent pros as instructors, course operators and sales managers of the game, actually should mean some of the best paying pro jobs in the business. Education of these course officials by the P. G. A. should go a long way toward a happy and timely solution of the pro job problem. This phase of pro golf has been a blind spot

that is costing the pros, the course owners and municipalities, and the players, money. It calls for attention by the P. G. A. at that organization's annual meeting.

Manufacturers are seeing what happens to a market when an active development and protection plan is not utilized until dangerously late. They see the very able and lively efforts of Les Mann in the kids' baseball campaign prove to be a last ditch battle for a weakening cause because the inauguration of the work came too late. Golf has the natural advantage of the caddie money angle to assure its future. Further assurance is being provided by the free lesson classes many of the professionals at private clubs are giving for members' children, and at fee courses, for school children. Co-operation between the manufacturers and leading professionals in such enterprises as free class lessons by well known professionals at municipal courses undoubtedly would give an impetus to play. It also would encourage the lesson habit and add to pro income on that account.

## Push Women's Park Play

The U. S. G. A. with its Public Parks championship has been the only national golf organizations to push the progress of this phase of the game. In the very nature of the event, the interests of that big part of the potential and present market shooting "a hundred and some" must be neglected. The public parks male golfers as a class don't get much time for practice and competitive seasoning. It really takes genius, a rare temperament, or—to use the old billiard gag—a misspent youth, to rate as a public parks sharpshooter.

With the women public parks players, the situation is different. They have time to spend on their games. Their interest is so intense that they add to the assurance of continued growth of the golf market. Success of the public parks women's golf championships held sectionally suggests that the next fixture in the national championship calendar be a women's public

parks national event, with an expense allowance arrangement approved by the U. S. G. A.

There is much promotion work to be done on a definitely planned basis by those interested in golf as a sport and as a business. The casual character of the present activities is due for consideration and revision which it is hoped it will get at the next meetings of the U. S. G. A. and P. G. A. and the manufacturers' associations.

## Michigan State Tells of December Short Course

**M**ICHIGAN STATE College of Agriculture and Applied Science at East Lansing, announces a tentative program for its short course in greenkeeping which will be held December 1-4.

The program, as released by C. E. Millar, prof. of soils, features:

### (Tuesday, December 1, 1931)

Grasses for Golf Courses—Dr. Monteith, Green Section, U. S. G. A.

Examination and Identification of Specimens of Grasses and Weeds and Round Table Discussion of Grasses—Dr. Monteith and Dr. Darlington.

### (Wednesday, December 2)

Herbert Shave, Pres. of Detroit and Border Cities Greenkeepers' Ass'n, will serve as chairman.

Planting Design for the Golf Course—Prof. Halligan, Department of Landscape Architecture.

Diseases of Turf Grasses—Dr. Monteith. Round Table Discussion of Turf Diseases—Dr. Monteith and Dr. Nelson.

Physical Properties of Soils—Dr. Tyson, Dept. of Soils.

Examination and Judging of Soils Used by Greenkeepers.

Selecting a Topdressing Soil to Fit the Green—Dr. Monteith.

Round Table Discussion of Soils—Experiences of Attending Greenkeepers.

Principles of Drainage, Types of Tile, etc.—Prof. Robey, Dept. of Agric. Eng.

### (Thursday, December 3)

M. F. Webber, Pres. of Western Michigan Greenkeepers' Ass'n, will serve as chairman.

Fertilizer Principles—Dr. Tyson, Dept. of Soils.

Fertilizing the Green—Dr. Monteith.

Round Table Discussion of Green Fertilization—Experiences of Attending Greenkeepers.

Shrubs and Hardy Trees for the Golf Course—Prof. Halligan.

Certified Seed—Prof. Rather, Head of Farm Crops Dept.

Insect Control—Prof. Pettit, Dept. of Entomology.

Identification of Insects and Round Table Discussion of Insect Control—Prof. Pettit.

Weed Control on the Green—Dr. Monteith.

Weed Control on the Fairway—Prof. Megee.

Pumps, Fittings, etc., Exhibits and Discussion—Prof. Musselman, Dept. of Agric. Eng.

Watering Systems—Dr. Monteith.

### (Friday, December 4)

Green Construction—Dr. Monteith.

Electric Motors, Lecture and Demonstration—Prof. Gallagher, Dept. of Agric. Eng.

Insect Pests of Trees and Shrubs—Prof. Pettit.

Diseases of Trees and Shrubs—Dr. Nelson.

## Philadelphia District Holds Course Demonstration and Meeting

**P**HILADELPHIA Green section and service bureau, Philadelphia Association of Golf Course Superintendents, and makers and distributors of equipment and supplies co-operated in conducting a successful demonstration and meeting at the Philmont C. C., Sept. 29.

The proceedings were (a) to observe the operation of different makes of machinery under one set of conditions, (b) to acquaint chairmen and other officials with the extent and character of the superintendents' highly technical problem in selecting proper equipment, and (c) to inform club officials about several sources of highly specialized information the superintendent must consult and appraise. This latter subject showed the attending officials that matters of detail in course maintenance were affairs best confined to the superintendent's province.

The demonstrations included tractors, fairway, tee, and hand and power greens-mowers, brown-patch preventive mixing and application, fertilizer mixing and application, and sprinklers.

Steering the sessions were Joseph Ryan, Rolling Green C. C., for the superintendents and R. C. Slotter, Philmont C. C., for the green section and service bureau.

At the evening session, the main topic was co-operation between superintendents and chairmen. Speakers were Dr. John Monteith, Jr., H. K. Reed, O. W. Schaum, R. C. Slotter, T. E. Dougherty and M. E. Farnham.

# Overhead Costs of Equipment Gum Up Budget Accuracy

By PROF. L. S. DICKINSON

**T**OO FREQUENTLY green-chairmen and their greenkeepers figure the operating cost of a piece of equipment and either forget or neglect the overhead cost. They may be partially excused for neglecting the overhead costs because the maintenance appropriations are made for one year, with no "carry-over of a balance" privilege. In fact one can hardly blame them for neglecting to consider the overhead costs under such conditions.

Without the privilege of carrying over a balance, the greenkeeper and his chairman figure on saving on operating costs only, because the operating cost *alone* comes out of *this year's* budget.

When it becomes necessary to purchase a new machine, it is either paid for from *one year's* budget or by a special allotment from the finance committee. If the finance committee pays for it they note the effect upon the whole budget for the *one year* the expenditure was made in, and forget it. As the cost does not come from the golf course maintenance funds, the green-chairman feels he has "stuck them for another piece of equipment" which may lower the cost of maintenance, and thus give the players better golf at apparently lower cost, that is, lower operating cost only. When the payment is made from the budget, why the answer is, "We'll have to cut out this or that because we bought a tractor. Next year we won't have to buy one and we can rebuild the tee or trap or whatever may be asked for at that particular moment."

## Fool Themselves on Figures.

The common practice of not permitting the grounds maintenance division to carry over a balance and then requiring the purchase of equipment from the budget is not good business, is bad for the morale of the greenkeeper and the chairman; it causes them to fool themselves and the finance committee as to the various costs of operations.

There are three cost headings that should be considered in golf course maintenance:

*I. Operating costs.* These are easy to realize and compute. Labor, fuel, oil, grease, etc. For tractors those four are sufficient.

*II. Overhead costs.* Depreciation, interest on investment, repairs, insurance and taxes. The latter two may properly be eliminated from the greenkeeper's worries if some general fund pays them, but if a slice is taken by the bookkeeper from the greenkeeper's budget, they should be included.

*III. Method of procedure.* Obviously the method of procedure affects the total cost of any operation. The greenkeeper has direct control over this cost as he tells how the work shall be done. To illustrate: He routes the fairway mowers from fairway to fairway, or says that the sod will be cut in squares or rolls. One could write a whole chapter on the method of procedure costs. They are not tangible but greatly affect the total cost.

Table from Which Overhead Costs Can Be Computed.

Based upon an initial cost of \$1,000.

Expected life of equipment in years.	Annual depreciation, add to oper. cost.	Interest at 6% to be added.
2	\$500.00	\$45.00
3	333.00	40.00
4	250.00	37.50
5	200.00	36.00
6	167.00	35.00
7	142.00	34.50
8	125.00	34.00
9	111.00	33.33
10	100.00	33.00
11	90.00	32.70
12	85.00	32.50
13	77.00	32.33
14	72.00	32.10
15	66.00	32.00
16	62.00	31.80
17	59.00	31.70
18	56.00	31.60
19	53.00	31.50
20	50.00	31.50



The tangible costs then, are operating and overhead, and to help to figure correctly the overhead costs the accompanying table has been prepared. It is compiled upon the basis of an initial expenditure of \$1,000. To figure the overhead cost on equipment costing less than \$1,000, simply take the fraction of the thousand. For example equipment costs \$400.00 or 40 per cent of \$1,000.

Repair costs can either be accurately kept or figured as a per cent of the investment. Insurance and taxes can be estimated at about 2 per cent of the investment.

### Showing Actual Cost.

To illustrate how the overhead cost can be quite accurately figured, let us take for example a piece of golf course equipment costing \$550, expected to last five years.

Overhead Cost on "X" Machine.

Purchase price .....\$550.00.

Expected life .....5 years.

Depreciation ...55% of \$200=\$110.00

Interest .....55% of 36= 19.80

Repairs ..... 5% of 550= 27.50

Insurance, taxes. 2% of 550= 11.00

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\$168.30

Consequently \$168.30 should be added each year to the operating cost of the machine to give the correct total cost for the season. The \$110 should be added each year to the credit balance to be applied to the price of the replacement.

Now, \$168.30 is a considerable amount of money. If it represents the annual overhead cost on a machine used three hours daily from April 15 to October 15, or 554 hours. The overhead cost becomes approximately 32c per hour, or 50% of an operating cost of 64c per hour, which is a fair operating cost. The total cost per hour then becomes 96c instead of 64c as the greenkeeper and the chairman thought.

Again comes up the question of why worry about the overhead cost if there is no balance carried over. The answer is this: If you charge no overhead, you should charge the entire price of the machine to the first hour that it works, inasmuch as the cost comes from the immediate budget. But to be more amiable, let's charge the machine cost to the first year (554 hours) and then no depreciation for the remainder of the life of the machine, 4 years. What does the cost then become? Operating and repairs anyway, and if good business methods were used,

interest, taxes and insurance would be added. The result would be the same as if overhead was figured as above.

The maintenance budget pays the bill either way, and it is up to the club to decide whether the bill shall be taken as one dose and the course be sick for a year, or whether the bill is paid in homeopathic doses with no ill feelings.

If the finance committee pays for the equipment the same idea applies, for if it apportions an extra \$550 to the golf course, other claimants for its funds must take the loss in one dose.

I firmly believe that if overhead costs were figured, and properly charged; and if golf course maintenance budgets could be permitted to carry over a balance for purchasing equipment, golf course management would pay better dividends.

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## Greens Force Has Its Own Tournament

**J**OHAN MACGREGOR, well known maintenance expert in charge at Chicago Golf club, inaugurated this year a little tournament that other course superintendents can profitably adopt. John had a tournament for his greens force one Monday near the close of the season. The men who were golfers competed for a prize given by MacGregor and others of the staff caddied and otherwise shared in the party.

It's one of Mac's sage and sterling principles that every fellow on the greens staff should get as much as possible of the players' viewpoints. His tournament idea helps a lot.

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## WHIT GOIT AT CHICAGO FOR TORO

Chicago, Ill.—Whitney Goit, formerly Toro representative at Kansas City, Mo., opens at Chicago, Nov. 1, handling Toro sales and service and other well known lines of course accessories and supplies. Goit's showroom, stock, and service branch will be at 4611 North Clark st., where he will have the complete Toro line on display.

Goit will handle seed, fertilizer and other supplies, considerable of which will be in Chicago stock. He also will have extensive stock of repair parts, and with factory machinery and men will be equipped to service the Toro line in the territory handy to Chicago.

# Self-Financing Improvements to Get Non-Golfing Members

By J. W. FULTON  
Club Bureau, Inc.

IT WAS pointed out in the last issue of GOLFDOM that a list of seventeen country clubs operating twenty-four courses on which the conventional number of golfers were accommodated, in addition have an average of 1,350 auxiliary members per club contributing to the cost of club operation.

The survey on which those statements were based indicated that the cost of golf was less than one-half the average annual cost in golf clubs attempting social activities, but limiting their memberships to capacity play on week ends. It was also stated that the dues of non-golfing members averaged \$50.00 per year.

Golfing members, say an average of 350 per course, contribute approximately \$35,000 per year to the annual budget of expenditures, while an average of 1,350 social members contribute nearly double that amount in dues without in any way encroaching on the privilege or perquisites of the former.

Obviously, then, any golf club that is able to augment or adapt its present facilities to the accommodation of auxiliary members is in position to solve the problem of too expensive golf. In effect such clubs are able to correct in a measure the early mistakes of over-expansion, and become country clubs in fact, rather than golf clubs with country club facilities and the consequent burden of high dues and assessments.

Only a few years ago a golf club was essentially a club for men—not for wives, sons and daughters, many of whom today play more golf than does the member. The family demanded—and were justly entitled to—refinements and luxuries that had but scant appeal to men players, and golfing organizations were automatically converted into more or less "family clubs." The sale of auxiliary memberships is simply extending somewhat those features that are responsible for high operation costs and capitalizing them for increased revenues.

A limited number of more exclusive,

"swanky" clubs for men of affluence will always find support. High dues cost and ultimate expense is not a serious consideration. But there is a large group comprising the vast majority of enthusiastic golfers for whom the modern golf club with its over-built clubhouse and attendant expensive cost of operation are rapidly becoming economic impossibilities. And this is not entirely a reflection of general financial conditions; it began to manifest itself while conditions were still normal.

## It's Yearly Cost That Matters

The proof of this statement lies in the very evident change of members' private clubs to pay-as-you-play courses. While a few years ago there was only an occasional fee course, they now comprise nearly twenty-five per cent of the total. Additional evidence is suggested by the fact that membership prices in the metropolitan districts have been reduced to an amount somewhat less than the transfer charge of a few years ago. The initial cost no longer interests the buyer. His attention has been called to the annual expense, and the club requiring additional members is confronted with grave difficulties.

It appears, therefore, that the sort of club we are discussing—the club that has over-invested and whose inadequate membership is probably paying something like 40 per cent of the contribution to general expense for golf, 35 per cent for house facilities and frills, and 25 per cent for interest and amortization charges—can greatly increase its income by making a small investment necessary to accommodate auxiliary members.

This simply means building your business up to your investment instead of permitting over-expansion to ruin your business.

How much capital investment is required for the transition? How many social members should a club take in? What changes are necessary for their entertainment? We don't know. That is the individual club's