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# Up-to-Date Machinery Instead of Hand Labor

By C. A. TREGILLUS

T is a far call back to the days when the essential factors of course construction and maintenance consisted of shore winds and grazing sheep and perhaps a man with a scythe. With the advent of the rotary mower, a comparatively recent development, the whole aspect of golf and golf course methods has undergone a tremendous change; in fact, it might be said that, with due consideration to the changes in design and construction of balls and clubs, the development of the game and certainly its spreading popularity is more closely related to the advance in the science of greenkeeping than any other factor.

It is very true that modern greenkeeping owes a great deal to the development of machines and implements that not only cut down the amount of hand labor but are able to do the same work to a finer degree of accuracy. This is of importance since the care of the up to date putting green necessitates an evenness of finish that cannot be attained by means of pure and simple hand methods.

### Machinery Replacing Labor

We are becoming more and more dependent upon mechanical appliances as the older hands, skilled in the arts of hand methods, are passing on. Scythe men, turf layers, ditchers and hedgers of today do not compare except in rare instances with the men of a generation ago; their work is now done more cheaply and more effectively by some machine specially devised for the purpose. The semi-skilled type of labor employed today on the course can run and care for these machines. The extent to which well designed machinery and proper equipment can serve the greenkeeper, by improving both the quality of the work and the cost of it, does not seem to be fully appreciated. Taking the average of the clubs throughout the country, there seems to be a surprising indifference towards this sort of expenditure. It is an oft told story how a greenkeeper can manage to get a fairly substantial labor appropriation passed by the committee but fail absolutely to secure support for the purchase of labor saving devices that eventually would reduce his gross budget and simplify his work.

#### Schedule All Work

The ability to balance the virtues of hand labor with machinery requires a nice discernment between the effectiveness of each. It is only logical that the maintenance staff be kept to as low a figure as can be managed, commensurate with expeditious accomplishment of the actual work upon the fairgreen. It is neither good form or economical management to have a large force at work on the course when there are many players out. The daily grooming of the greens and tees should, like similar work in the clubhouse, be done when the majority of the golfers are away. This requires careful planning of the work, in which the proper selection of machinery plays an important part.

Whether it be mowing the tees or the fairways, or the greens, or the rough; the watering of these features; the preparation and application of compost or fertilizers, either in solid form or in solution; combatting pests or disease; construction or reconstruction, there are appliances made to suit the peculiar needs of each, and no matter if they are purchased through the supply house or made up by a handy man, they are essential factors in modern greenkeeping.

Time is money on the golf course alteration program. The season is short and the work must be done in the shortest possible time, and secondly, the sodding or planting material used in resurfacing the new work has a better chance for a quick recovery when there is no delay between nursery and permanent location.

### Eliminate Unnecessary Equipment

One can run through the whole range of greenkeeping tracing the closest relation and connection between modern equipment and each operation in servicing the course. It is a matter, as said before, that requires good judgment on the part of the greenkeeper and the green committee to decide the value of an appliance and whether the money to be spent on it is a wise investment. It is quite possible that a club may contract a buying fever and surround itself with a mass of machinery beyond or unsuited to its needs. At the end of a few seasons a heavy write-off of non-effective equipment must be made. Make Repairs Yourself

There is one department of course maintenance equipment that is deserving of attention, and that is the repair shop. It is not unusual to see some thousands of dollars worth of machinery around a club and only a few odd wrenches with which to do minor repairs and perhaps not even a decent place to work in. Golf machinery is in a class by itself, and outside of the shops that make a speciality of such repairs and overhauls, there are very few really qualified to do this kind of work.

The average machine shop or garage is not familiar with golf course equipment nor does it carry the spare parts for quick repairs. The club is the logical place for such work to be done. A well planned workshop, with plenty of bench space, and room to work around the larger units comfortably, might be called a necessity. It should be provided with a full line of bench tools for dismantling and assembling any part of the equipment and be warm enough to permit working during the closed season.

Whether power or power tools should be included is a matter governed by individual conditions. Power to run the regrinding stand is a great help, and so is a lathe and drill press if competent skilled labor is employed that can use machine tools to advantage. Usually, with a full line of course machinery, a pumping station, and a large clubhouse with complete mechanical equipment, there is enough work to keep an all round mechanic and fitter busy a full twelve months of the year.

### Control the Gallery with a Painted Line

TOURNAMENT galleries are more easily controlled today than a few years ago. In the main, the spectators are familiar with the etiquette of the game, respect the orders of the voluntary police, and refrain from crowding too closely upon the contestants.

However, if the match becomes a close one, the time-honored use of ropes to hold back the excited spectators is necessary. There are defects to this method, for one part of the gallery in its excitement will push forward until it totally obscures the view for many others.

A better method, just coming into vogue is to whitewash a broad line completely around each green, particularly the home green, at a suitable distance back of the clipped surface. It is very easy for the officials to hold a gallery back of the line. People are accustomed to lines and respect them—a rope is too easily pushed forward.

## Food for the Dancers

A S A means of boosting the dining room revenue, it is a good plan to provide a "midnight lunch" after all dances. There are two methods of handling the matter either charge a flat price with no limit on the amount of food each person may eat, or make seperate charges for items ordered.

Of course, with the exception of coffee and tea, all the refreshments are cold, and should consist of sandwiches, doughnuts, pies, and salads.

The food can be prepared earlier in the day and kept cold up to the time of serving. Only one, or at the most two employes need remain to do the serving. Make it truly a lunch—cafeteria style, without "fixings."

In planning parking space for member's automobiles, figure on an acre of ground for every 200 cars.

## Greenkeeping Work as Season's Curtain Falls

A <sup>S</sup> THE windup of the season approaches the clubs north of the Mason and Dixon line and east of the Pacific slope find their greenkeeping schedule jammed with important details. Putting the course away for the winter, in the proper fashion means that a lot of expense will be avoided the following spring and that the "off season" for play may be utilized in taking advantage of Mother Nature's nursing.

Greens departments that are very much on the job have set schedules of work that must be completed before the snow flies. Some of the greenkeepers who are putting their courses in shape for the winter in accordance with teachings of their past experience have told GOLFDOM of their practices.

#### Trester's Work

Harry Trester, greenkeeper at the Highland Country club at Indianapolis, makes a major detail of the autumn work reseeding of his fairways, especially the bare spots. He sees that his tees are put into the best possible shape and given a good top-dressing. Trester's idea is that so much attention always is given to the greens, as a matter of course, that the tees are too frequently given just enough treatment to let them "get by" with the result that when the next season rolls around there is too much play to allow repair of the ravages to which the tees are subjected.

Each year at the same time at the end of summer he puts out a new nursery of bent. He doesn't like two year old bent stolons, and these new nurseries keep him on the safe side in case anything should happen to his greens. Giving the greens a good heavy top-dressing about the time the cold weather sets in is the best thing any greenkeeper can do, says 'Trester. After the season's heavy play is over is a good time for refilling the traps, he points out, as the ground is frozen and hauling involves no risk of damage to the fairways.

One of the big parts of Highland's fall work is cleaning, repairing and painting tools and equipment preparatory to putting them in safe storage for the winter. When this work is done right the greenkeeping force is all set to hop on the job without delay at the dawn of spring. Schrader's Plan

Walter H. Schrader, greenkeeper at the Harlem Golf club, Forest Park, Ill. has one of his busiest periods around the season's closing time. Harlem is a daily fee course with heavy play, so Schrader has to get his course in shape to open early in good condition, or find any oversights sharply reflected in the cash register. He plans his work thoroughly, takes no chances, and gets the jump on the weather

and the profits, on the fairways. Schrader outlines his fall work as follows:

"Bare spots near the greens and the approaches will be lightly top dressed with a good soil and then reseeded. They will also receive their necessary fertilizers, before the snow falls. Have done this during the winter when the snow is on the ground, but tractors with heavy lugs always leave their marks, and to eliminate this I am putting the fertilizer on while the fairways are dry and a lighter tractor for the distribution of same can be used.

"All the drain tile in the fairways and traps will require attention, some needing replacing and other cleaning.

"New work, such as building top greens or adding to the formation, is done now, as it would probably delay the play in the early spring. At the present writing our No. 2 Green is being built up. As soon as the added formation is completed in the rough, the final touches, such as good pulverized topsoil mixed with sand and fertilizer will be spread on to a thickness of three or four inches, and then the bent stolons will be planted. If they get a start of about three weeks they will be fit to survive the winter months, without covering, except for a light top dressing, provided the weather is right, I do not believe in covering a green in this section if the tile and surface drainage are O. K., in order to prevent winterkill.

"The greens will all be top dressed again within the next two weeks, probably for the last time this season. At the present time the greens mowers are set down to take off a shade more of grass than during the summer. This is done to make the grass roots go down further to establish themselves for what might be a trying winter on golf turf grasses.

"Our top dressing is also pulverized at this time, and hauled under cover, for the winter months, in order to have it on hand in the spring as soon as the weather permits the first top dressing.

"The gardener is also very busy at this period enlarging flower beds, and fertilizing old beds after redigging same, getting ready to place the tulip bulbs for the first spring flowers. These flowers are usually in bloom in May and add materially to the beauty of the clubhouse and surroundings.

"The trees are also given attention, as all dead wood is cut out, and dead stock replaced. Transplanting trees is also taken care of at the proper period.

"I might say that these are some of my fall requirements to place the course in shape for early spring play. When the snowy season starts then we are ready to overhaul all green and fairway mowers, trucks and tractors, and do other work such as accumulates around a golf course."

## P. G. A. War Relief Fund Is Solid

A LEX PIRIE, president of the Professional Golfers' Association of America, in a recent address called attention to the substantial balance in the P. G. A. War Relief Fund. This fund was established during the war by the income from exhibitions in which many of the leading professionals took part.

Several thousand dollars remain in the fund for the aid of professionals who served in the allied armies and who now may be incapacitated as the result of war service. Administration of this fund was cited as evidence of the thoughtful combination of good business judgment and sentiment in the professionals' handling of their organization's affairs.

### Door Man Increases Welcome

I F YOUR club makes any pretense toward the social side of club life, it is well worth while to detail some employee as door-man, particularly on the week ends. A cherry smile and a word of welcome or good-night, particularly if the door-man can call the member by name, is always appreciated and helps to make the day and evening just a little more enjoyable to the members,

## How Much Money Is Spent for Golf?

CO-OPERATION of every club president in the United States is being earnestly solicited by GOLFDOM in our effort to determine how much money is being spent for golf annually in the United States, and the amount invested in golf club real estate, buildings and equipment.

Each golf club president has been mailed a return postcard asking for figures that will be as nearly accurate as convenient. From the returns, GOLFDOM will compile and publish in an early issue, the first, fairly definite financial survey of the golf field in the United States. We wish to thank the head of every golf club for his co-operation in supplying us promptly with data concerning his club.

The postcards asked for the following details:

Number of holes.

Number of members (or if fee or public course, approximate number of rounds played in 1927).

Approximate annual income (dues, initiation fees, greens fees, house accounts, etc.).

Approximate annual course maintenance expense.

Approximate amount invested in maintenance equipment.

Approximate annual expenditure for house operation.

Approximate annual business done by pro shop.

Approximate present value of club's land and clubhouse (furnished).

If you, as the president of a golf club, have failed to receive one of these postcards, write for one, or better yet, forward the information on your own letterhead. Thank you.

## Arch Supporters Good Shop Item

A WELL selected stock of arch supporters, to fit the average sizes of shoes, makes a good line to carry in a pro shop. Prominent display makes the turn-over rapid, they have a good profit that is just so much "velvet" for the pro, and the product is one that is of great value to lots of the members, particularly the heavy males, and the women who suffer from the change from a high-heeled shoe to a golf shoe.

## Winter School Is a Business Gamble



Bob Macdonald's Year 'Round Golf School at Chicago,

N the northern and central states, when the season draws near its close, a majority of the professionals find themselves looking toward the coming winter with uncertainty. Some will be fortunate enough to hook up with southern or California clubs for the winter season. In this respect there is an ever increasing demand for winter-season professionals due to the many new courses constructed in the past few years in those districts where "summer spends the winter" and to the greatly increased volume of transient golf trade which is helping to support these projects. Clubs having their big season during the winter can pretty well take their pick of the professional field for there are more than enough pros available and anxious to get winter locations.

As a result, many of the northern professionals are compelled to open winter schools even though past experience with winter schools conducted by professionals has not been anything too delightful. The What about the winter school? Not very many pros can tell of profitable and pleasant experiences with these-indoor propositions in the "off" season and we advise the pro who contemplates such an enterprise to stop, look and listen before proceeding. The picture is brighter when there is enough space for an indoor putting course, but even then the expense, hard labor, responsibility and necessity for attractive and continuous solicitation of business is such that it's out of line with the usual profit.

pro finds himself with far more overhead than he is accustomed to carrying, he is forced to go out to get patronage, and on every hand he must contend with business problems that bewilder and baffle him. The result is that the great majority of pro indoor schools are fortunate to break even.

Despite the many discouraging experiences with winter schools, there have been plenty that have provided professionals with substantial incomes during the off season. The reason for success is simple and thorough business management, starting with energy, persistence and resourcefulness in the solicitation of business.

#### Choose a Convenient Location

Naturally the location of the school is paramount. In the larger cities locations near popular luncheon places, neighborhood centers and parks having municipal courses have demonstrated their value. Short term leases (usually on space that has been vacant for some time) are attractive to real estate men because the indoor school, if properly run, attracts the best class of retail trade, and is therefore a desirable feature for any good business center.

In the smaller cities the location does not demand the same careful selection as it does in the city, as the establishment may be reached easier by patrons from any part of the community.

It is wise, no matter what size the town, to pay a little more money for rent than to face the utterly hopeless proposition of trying to make a school successful in a cheap, run-down, dark, and otherwise unattractive location.

When the professional decided to open an indoor school, the first thing to do is to get in touch with the members of his club by letter, telephone, or in person. Many members of golf clubs go through the entire golfing "off season" without knowing that their home club pros are conducting winter schools. During the summer, these average golfers are too fond of playing to take much golf instruction and the winter affords them their only acceptable opportunity for golf tutelage. A letter calling their attention to the opportunity the school affords to make proper form a habit will draw business.

#### Letter Offering Free Work Out

Here is one letter, sent out to a list of club members by a pro whose only complaint last winter was that his school kept him too busy from 10 a. m. until almost 11 at night:

### "Dear Mr. Smith:

You and your family and friends are

invited to visit the indoor golf school I have opened at 162.....St., just a few doors from the.....L station.

The indoor golf instruction idea has been demonstrated to be basically sound; it certainly is the most practical and convenient manner in which the average golfer can improve his game. Practice and instruction are one of the best winter ways of keeping fit. In the summer you know how hard it is to practice when the desire is always so keen to get right out and play.

My three nets and interesting little putting course will give you a lot of pleasure and add considerably to your golfing ability. Why not accept my invitation to make use of them this winter.

For ...... club members I am making special rates on 10 lessons and also on use of the nets and putting course by the hour. But before we go any further into detail about these rates I want you to come up and have a little workout "on the house."

Hope that I will see you soon. Sincerely yours,

This letter got a fair volume of business from people who were good boosters for the pro and his establishment. He placed a number of cards around in the lobbies of the neighborhood apartment hotels and spoke before several women's clubs on golf as exercise, as well as a social asset, for women, stressing the reducing value of golf exercise.

#### Attracting Women Patrons

This was one of the most productive business getting stunts he pulled. The women trade filled in the hours of the day when it was almost impossible to get any patronage from men. He started out full of hope that golf would work out as a reducer and found to his joy, as well as that of his women patrons, that steady sessions of pivoting and swinging do a lot of good in reducing the girth. By the way, this particular aspect of golf instruction is far too lightly passed over by pros. It is making many people rich. Reducing is a mania with thousands of women.

#### Lessons for Christmas

Experience of the majority of pros indicates that the indoor school business does not get going at a profitable gait until late in February at the earliest. Several of the more resourceful pros from whom we have received pointers on the successful conduct of indoor schools tell that they started business earlier by advertising courses of

lessons at their schools as Christmas gifts. Window display cards, letters and circulars stuck in the neighborhood mail-boxes, giving details of a Christmas gift lesson deal in one case was directly responsible for 41 series of lessons at \$15 a course. These Christmas gift lessons were followed frequently by supplementary lessons that brought the pupils right into the spring. They also resulted in bringing a number of the pupils' friends into the schools.

#### Don't Work for Landlord

The most general cause of complaint about indoor schools comes from excess rent. Very few pros that GOLFDOM has interviewed on indoor school experience can say they paid a reasonable rent. In most cases, the pro takes for his indoor winter school space that has been lying vacant for some months. He should not be compelled to pay rent as high as that which might properly be paid by a permanent tenant. The indoor school draws a good class of people to the building—people whose trade is desirable to the other tenants of the building. For this reason it has an advertising value that helps to get the building filled with permanent tenants.

The pro should bring these facts to bear in arguing with the landlord about the rent. Rather than run the risk of paying rent that will leave him no profit for his labor during the winter, the pro had better stay out of the indoor school business. He may be able to make some arrangement with the landlord for rent on a percentage of gross business basis, but this takes keen figuring and trading.

#### Tie Up with a Hotel or City Club

Hotels, that usually have plenty of space available and are anxious to increase their restaurant business, offer a good field for winter locations for the pros who will sell the idea of conducting the school at a nominal salary and 100% income from lessons. City athletic and fraternal clubs also have many good berths for pros who are capable and get on the job quick. In a number of cases, the pro must sell the idea to the club, but, when he does get the idea across, his problem of winter placement is very satisfactorily settled.

## Pointers on the Construction and Upkeep of Sand Greens

I N the south, a properly constructed sand green is cheaper to maintain than a turf green. Of course, sand can never be as popular as grass with players in general because of the fundamental weakness that sand greens, after a rain, are hardly in playable condition. A minor objection is that all shots to the pin must be runups; a pitched ball will rarely hold.

But other than these two defects, sand greens can be made to satisfy the most exacting member, particularly in the south and in arid districts where good turf is difficult to maintain. The two important factors to be watched are careful original construction, and constant, painstaking grooming.

When constructing sand greens, it is most important that a good thick layer of cinders, oyster-shells, or other coarse material be laid down in an excavated area somewhat larger than the contemplated green. This is to assure proper, rapid drainage of the surrounding subsoil. If the green is to be constructed on a slight elevation so that tile may be used effectively, by all means install it. Of course, if there is nothing to drain into, the tile is useless.

Over the cinders, which should be tamped down as level as possible, next goes a layer of clay four to six inches thick up to the level of the surrounding turf. This layer does not extend to the limits of the cinder base, but is the exact size of the contemplated sand surface.

Smooth down the clay until it is as level as a table top. Remember that the sand layer, which goes on top of the clay and forms the putting surface, is very thin and the smoothness of the clay governs the smoothness of the green.

Use beach sand or washed sand for the top layer. Many clubs are in the habit of using "river sand" dug from convenient banks on the club grounds, but river sand generally contains a large percentage of clay and makes the greens sticky and hard to dry out after a rain. Beach sand is generally free from this clay and should be used if available. If not, wash the river sand thorougly when preparing it for the greens.

The sand is, of course, oiled before spreading on the greens. This is universal practice wherever sand greens are used to prevent the wind from blowing it away, but it is not so universally known that the sand should be baked before using, to remove the excess oil and make the sand less sticky underfoot.

This is quite simply accomplished by stirring a gallon of oil into a washtubful of sand until the mixture is uniform and then placing the tub over a fire for two or three hours. This is sufficient to give the sand enough body to resist the action of the wind.

Not more than a third of an inch of sand is needed on the clay base, only enough to give the ball a "bite" and ensure straight putts. Too thick a layer is easily marked by heel prints and accomplishes no good. Practical experiment will soon show how thin a layer can be used.

The cup of a sand green is left in one spot in the center of the green and never moved. It should be of special construction. GOLFDOM, in the July issue described a special sand green cup, developed by a group of western greensmen. It is of double sleeve construction which permits the inner portion to be lifted out and any accumulated sand removed.

Spread and level the sand by dragging cocoa mats over the putting surface, starting first at the cup and working outward to the edges spirally. Because of this accepted method of smoothing the putting surface, sand greens are nearly always round or only slightly oval. It is advisable to weight the mats with a brick or two to make them drag flat.

Traps are inadvisable too near to the edges of sand greens, particularly along the front approaches, where an apron should be left for pitch shots to light on.

Maintaining a sand green is relatively simple. If the course can afford it, three men, assigned the duty of patrolling six holes each, smooth off the sand surface after the players with cocoa mats. A small mat should also be available for players to use in removing minor irregularities from their line of putt.

The only other essential maintenance duty is sprinkling the greens lightly each day to prevent the clay base from drying out and cracking. Experience will show how much water is necessary to keep the clay moist without becoming soggy. After a rain the greens will be unplayable until they have dried out and been resurfaced. Temporary greens should be furnished until this can be done.

The edges of the cup may crumble and be broken away after a few days' play. It takes only a few minutes to remodel these edges with moist clay until the original trimness is obtained.

### Pro as Club Press Agent

BY FORBES LEITH.

Professional, Crystal Lake Country Club. A MONG the numerous set and volunteer duties of the professional there is one generally neglected detail that seems to me to afford great possibilities for service to his club. It is the matter of supplying club publicity to the daily newspapers. Almost every club has a publicity chairman who attends to preliminary announcements of events and to general club news but who usually is so active in club play that he doesn't get time to report results to the newspapers. This activity and the pro's presence on the job all of the time, make the pro's co-operation with the publicity chairman a valuable factor in getting club news into print.

It is a simple matter of a few minutes' time for the pro, or his assistant, to telephone the sport departments of the newspapers in his city, the results of the men's and women's weekly events, trade association or other outside social or business club events played at his course, unusual happenings, such as record scores or acces, or any other items of news. All the writing necessary will be done by the newspaperman at the receiving end of the telephone.

### Move Tee Plates Uniformly

A DOPT a uniform method of moving the tee plates. At many clubs, the workmen taking care of this job are instructed to look around the tee and pick out a good thick belt of grass where the plates have not been for some time.

A much better method particularly if your tees are large enough, is to use only half the width of the tee at a time and starting at the front move the plates back about three feet each time they must be changed. When the back of the teeing ground is reached, start at the front of the other half and work back. This gives plenty of time for the grass to fill in the old divot scars before any portion of the tee must be used again.