

cured six 50-gallon barrels and knocked the heads out and used them for dissolving, putting 100 pounds of iron sulphate in each, dissolving with sufficient water. Three of the barrels are enough for a load in a 200-gallon tank. The other three barrels are dissolving while the load is being emptied on the course; when the men return, these three are pumped into the tank. Every time three barrels are emptied, the material is put in for the next load. I use a portable double-action suction pump for pumping the solution into the tank, using a 2-inch suction and a 2-inch outlet hose.

After two years' experimenting we purchased a Fordson tractor. This was the first time results really began to show, as I found the rough could be sprayed in a week, and that five successive sprayings two weeks apart would kill 98 per cent of the dandelions. The only ones left were some of the very largest, which were very easily destroyed with a weed stinger and gasoline.

The success of this treatment is evidenced by the fact that the treated areas are free from dandelions.

Good Fairways Need Correct Initial Construction

By C. M. MELVILLE

FOR the benefit of those who may wish some general instructions concerning the establishment of fairways, it should be stated that high culture is as necessary in the construction of golf courses as it is in any professional line.

It is the fine pulverizing of the top two inches of the soil that counts most. Whether to plough deep or shallow must be controlled entirely by the type and condition of the soil—as far as fertility is concerned. Drainage and tillage are indispensable.

The next important item to be taken into consideration is the proper mechanical condition of the soil. Possibly this is the most important of all in the attainment of future success. It is not necessary in this article to indicate in detail the peculiarities of soil of different types, but to point out that grass needs, for its most perfect development, nitrogenous fertilizers from natural sources, organic products like humus, stable or sheep manure.

There is a valuable quality peculiar to stable manure of the right kind in its full



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"... In spite of this, however, we have the most beautiful greens in the history of the club. This is due entirely, I believe, to the use of Ammonium Sulphate (Sulphate of Ammonia)."—Thomas P. Hinman, Druid Hills G. C., Atlanta, Ga.

"In our practice we strongly recommend and use Ammonium Sulphate, not only as a fertilizer for use on golf courses, but also as a means of making soil on putting greens sour enough to discourage the growth of weeds, particularly white clover."—Devereux Emmet, Golf and Landscape Architect.

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strength that exactly suits the requirements of the soil for the growth of grass. The difficulty, however, is to get such manure. All too frequently it is either burned out, due to neglect on the farmer's part to stir it up at the proper intervals, or it is mixed with an excessive amount of straw. It is very hard to buy manure from a farmer; he needs all he can get for his own crops.

It is a good idea to make the proper kind of storage space for all kinds of organic matter as well as manure and treat it with water, stir, turn over and drain it in order to preserve its strength for future use.

Nature has always accomplished better work than man and a good top dressing to use on fairways is virgin soil if it can possibly be obtained—for example, the top three inches of the soil taken from a field that has produced a good crop. This type of soil will contain 60 to 70 per cent humus and the ammonia content will be almost as high as that contained in the same bulk of manure. There will also be a phosphoric acid and potash content which will vary, depending on the type of decomposed vegetables that goes to make up the soil particles.

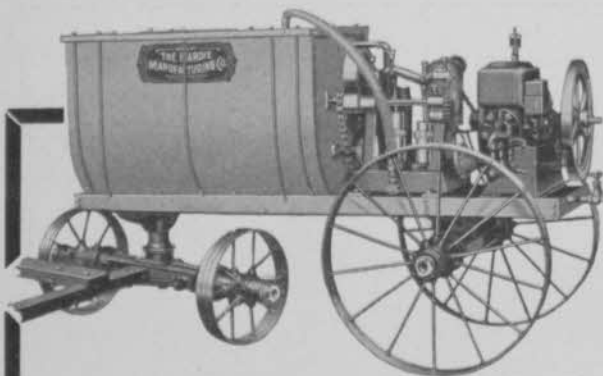
It must be borne in mind that the top dressing of fairways must vary. Where one fairway would need an application of muck, another may need sand.

The practice of top-dressing fairways may seem to involve considerable expense, but it is worth it for the establishment of a good turf. In the construction of new fairways, if the foundations are not well laid by drainage, cultivation and the proper fertilization, it is useless to sow grass seed.

These principles of soil treatment for fairways must be applied in the initial construction to give the membership the benefit of the knowledge and skill displayed by the greenskeeper or architect in the construction of a golf course.

ROUGH, handled with skill, is an interesting feature of the well-maintained course. Neglected, it is an eyesore and a sorry loss of a potential asset to the charm of the course.

Milwaukee, Wis.—Dick Ryerson, Wisconsin's golf course equipment dealer, now is located at 2439 Center St., Milwaukee. He handles the Ideal mower line and other maintenance and construction equipment.



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The modern golf course or country club needs a power sprayer today more than any other item of maintenance equipment. Spray the greens for brown patch. Spray the sand traps for weeds. Spray for worms. Spray your trees. The course is the most valuable and important part of your property. To keep it perfect you must spray it frequently and thoroughly.

With a Hardie Sprayer you can make free and economical use of soluble fertilizers, insecticides, fungicides, worm eradicators and all solutions which must be used to save and improve the course and grounds. Ask your equipment dealer or write for the Hardie Catalog showing many large and small models for every requirement.

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What Makes the Perfect Clubhouse?

By HENRY HAL POPPE
Manager, Club Rio Del Mar

HAVE you ever seen the ideal clubhouse? I am afraid I am going to start something, but my statement is, that I have never yet seen one which in my opinion is meeting all the requirements of a modern clubhouse to the fullest extent.

I have looked through all the available literature in search for a perfect clubhouse.

Amongst all the pictures, floor-plans and blue prints I have seen, there was none I dare recommend. Thus, I think it would do us all a lot of good, if GOLFDOM



Henry Hal Poppe

could start something in the form of a friendly competition, without being a contest, for the submission and reproduction of clubhouse plans, in order to make its readers familiar with the most modern and practical ideas about clubhouses.

The pro of a club which intends to put up a modest lodge, asked me what I think is lacking in most clubhouses. He was shocked when I found an answer. Here are the faults I find:

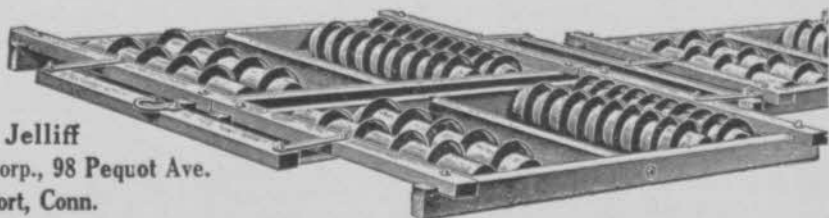
1. Important space lost in locker-rooms that are too large.
2. Locker-rooms too far

"Massage" the Fairway Bald Spots with a MEEKER Discing Machine

Let the sharp wheels of the Meeker separate what roots remain, stimulating growth of new blades and opening up the soil to allow air, moisture, fertilizer and seed to bring new, live grass.

The Meeker Discing Machine was especially designed for repair and improvement of fairways and

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from dining-room or grill.

3. Too much space devoted to lounge or lobby.

4. Dining-room too small or wrongly placed in relation with first tee or last green.

5. Pantry too large, too far from kitchen, store-room or refrigeration.

6. Kitchen too small, too far from dining-room, store-room or help's quarters.

7. Insufficient store-rooms or larders.

8. Inefficient refrigeration.

9. Inadequate and wrongly placed living-quarters for help.

10. Poor fire protection.

11. Lack of guest rooms, or entirely missing.

12. Insufficient rooms for lady members.

13. Manager's office wrongly placed.

14. Basements lacking or missing.

Why the Errors

Why? Here is my answer:

1. Many clubs think too far into the future by making their locker-rooms too large in the hope of a large membership, while additional locker-rooms could be added to the caddie house in case of need.

2. I deem it very important to have the locker-rooms so arranged as to have them

close to the dining-room, in order to induce players to eat at their clubhouse, instead of sneaking in and out almost unobserved.

3. The lobby, hall or lounge, or whatever it is called, is often too large. Many players come only to play and not to sit around. Social gatherings often prove this, when only a disappointingly small number will participate.

4. Re-seats and the Sunday rush are evidences that many dining-rooms are too small. Higher priced meals could be served if members could enjoy their meals at leisure, without keeping someone waiting for a seat. Every dining-room should be placed as close and as visibly as possible to the first tee and the ninth hole, also to the tenth tee and the last hole. This is important sales-psychology to fill your household funds.

5. Many pantries are too large; at their beginning some clubs had the funny notion that eating is a secondary evil for a golf club, and many players would only snatch a sandwich while their foursome is waiting. The pantry should be adjoining the kitchen, where it cannot escape the jurisdiction of the chef, and should be as

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close to the store room and refrigeration as possible, to avoid steps and waste.

6. For the above reasons kitchens are too small, also because someone thought modern devices could do most of the work and save help. Hot meals, and especially exclusive banquets, are very hard to prepare in a small kitchen. During a rush it becomes congested, and the service gets "stuck" because the help has no working space. Many kitchens are in the basement, where stairs mean a murderous strain on the feet of waiters, also they are too hot and stuffy, often a reason why cooks quit. The help's quarters should be easily reached from their working sphere. It is a very poor sight to observe a perspiring cook or a greasy potwasher sneak up to his room through a gay crowd of well dressed members. In cases I know of, a storeroom was built where a platform could be placed for delivery trucks, yet it is a whole flight of stairs from the kitchen, forcing help to run half a mile for every trifle they need in a hurry. Kitchens, storerooms and pantries should always be on the north side of the building.

7. Where the store-room is too small, sufficient food cannot be bought at the most profitable time, and cannot be stored for emergencies. Furthermore commissaries piled into a crowded place are hard to count, and when something spoils it is easily overlooked.

Refrigeration Important

8. Many clubs spend huge sums on ice, because they are afraid to throw the old ice-box out. When there is much ice in the box, there is no room for food, when the ice makes room, the food spoils. Good refrigeration can prevent all losses of this kind, it also avoids too frequent deliveries where food keeps longer.

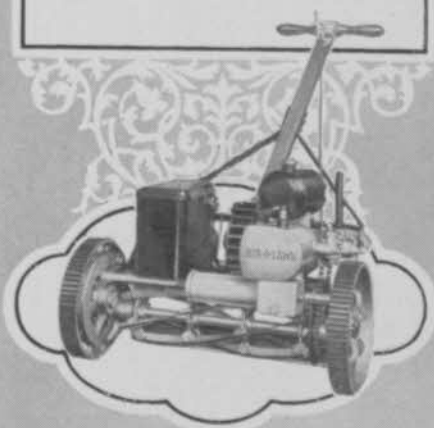
9. Strangely, many clubs make no provisions for their help. It is very hard anyhow to keep help at clubs, they are lonesome places for people without cars. How much worse, if the rooms are poor

"TREES OF HEAVEN"—Ideal for golf landscaping. Quick growing—beautiful foliage—hardy—easy to plant. Six feet high now. Will grow another six feet this year. SPECIAL; delivered during April anywhere in Chicago District, in 50 or 100 lots only, \$1 each. Address "Nursery," care of GOLFDOM, 236 N. Clark St., Chicago, Ill.

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THIS handy, easy-to-guide BOB-A-LAWN cuts the hard spots. Because it is as easy to operate as a hand mower, BOB-A-LAWN is used in the cutting of the "aprons" and the perfect trimming around traps and bunkers. Because it walks right up hills, BOB-A-LAWN is used where power mowers are impossible. While BOB-A-LAWN will cut large expanses, it will care for the trimming, too.



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or employees are crowded together. Their living rooms should be absolutely isolated from parts frequented by members, for reasons stated before.

10. Out in the country, or even in the suburbs, almost every club has to rely on its own fire protection. It is nearly always surprisingly neglected.

11. I have found guest-rooms to be a great help to swell the club funds. Many members love to play Saturday afternoons, have dinner, sleep at the club, breakfast early to get a good start, and spend the rest of the Sunday at their club. Rooms bring real money after they have been furnished. The extra meals the member eats through this convenience are double profit. It is one of the striking examples which proves that a clubhouse should be managed on the financial principles of a hotel.

Care for Women

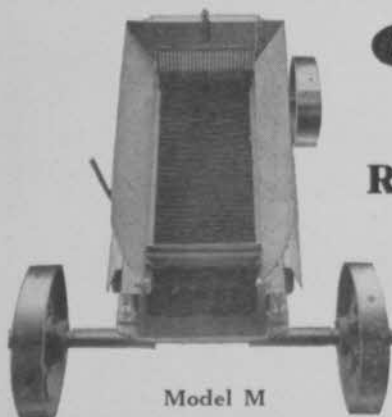
12. Women members should by all means have their drawing room, where they can talk to their heart's delight

while the men go around the course, where they are undisturbed in their peculiar feminine ways and where a dainty and profitable light repast can be served. Women should have something like a playground or a kindergarten to take care of their children. Many women will eat an expensive meal if they do not have to fuss with their children.

13. The office of the manager, steward or whoever is in charge, should be so located as to give complete control over the course of events in kitchen, pantry, store-room and dining-room. It should be reached by errand boys, or "somebody looking for somebody" without undue confusion.

14. Oftentimes the builders of club-houses seem to forget that woodpiles, garbage cans or coal sheds are hard to camouflage. Costly fences are built around the general dumping place, while on the other hand the place could be neat and free from stench and flies, if a spacious basement could hide all those unsightly necessities.

I do not know if the readers of GOLFDOM



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IRRIGATION

DOM agree with me. But I think it mighty interesting to all of us, if we get together and make some architect sift and select our different ideas (if he has enough patience) and let him design the perfect clubhouse.

How Do You Buy? Two Good Buyers Tell Their Way

ONE of the surest signs that golf is setting business principles into operation is evident in the studious interest being given the highly important subject of buying. Not only do the clubs have much to gain, obviously, from informed and through buying operations, but the manufacturers and salesmen of proper equipment and supplies for golf courses are rejoicing; they know that the more thoughtful consideration given to buying means that the unscrupulous salesmen will not continue to victimize golf clubs, as

they have done so frequently in the past.

A. G. Chapman, green-chairman at Audubon Country club, Louisville, Ky., has given a two-year trial to a method that he has found eminently satisfactory. A couple of years ago he began asking every greenkeeper with whom he came in contact, the different kinds of equipment and supplies they used. He found that the judgment of the greenkeepers varied considerably, but he took the majority opinion of those he talked with.

Mr. Chapman says: "If I were in the market today for a fairway mower, for example, and were in doubt as to what to buy, I think I would make inquiry of prominent greenkeepers in a confidential way as to what they are using and what experience they have had. Then, of course, we would study the strong points and the weak points of the several models presented and make our selection.

"Generally speaking, I believe that any golf course is better off by sticking to one



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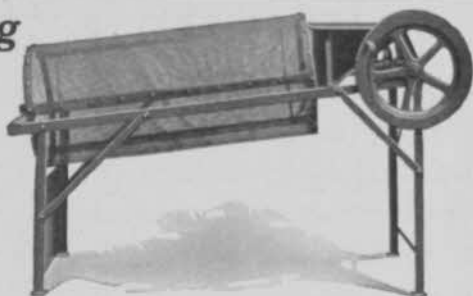
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house for their major equipment. This gives them a little better chance for straight-forward sales talks about their equipment and is much better than going in the open market with every salesman realizing that the sale at hand is the important thing.

"In the beginning I made many inquiries as to the kind of equipment used and took the majority opinion in the purchase of my greens mowers and fairway mowers. I was influenced to some extent by local conditions in purchasing a tractor and as for the minor equipment I took advantage of the services of GOLFDOM, making known my wants to them and they notified a number of dealers, from whom we selected the purchases.

Erich Pahl Gets Money's Worth

Erich W. Pahl, greenkeeper at Interlachen Country club, Hopkins, Minn., gives the product submitted to him for purchase a strenuous going-over and subjects the salesman's talk to an exceedingly critical analysis. If he finds, after his able, thorough and hard-boiled consideration, that the product will give the club its money's worth, the deal is closed.

Mr. Pahl tells of the progress in buying methods, and of his practice, in stating:

"In years past, there has been a lot of loose buying which was largely the fault of the greenkeeper. It seemed that any company having anything that might have a little use on a golf course was praised very highly and the greenkeeper, believing it all, would fall for it and place an order. Especially was this true of fertilizers and so-called humus.

"Thank the Green Section for putting us all wise on that subject. We now know what our grass needs in the line of fertilizers, and know what to get in the line of equipment.

"In my buying here, I first want to know all about the equipment being sold. Then, I try to reason it out and find the good qualities and bad of said machine. If there are enough good qualities to make it worth while on a golf course, I then figure the price and if I can get the right amount of value out of it, I may purchase. If it is something new on the market, I must be shown where it is superior to the old in doing the same work and whether it will do it cheaper. Considering the money in-



One of the smaller machines at work.

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vested, I figure out whether it will stand up under the work to get our money's worth out of it and if it will do the work faster and better. If these things cannot be shown clearly to me, I do not want it on the course.

"If all greenkeepers would make a point of looking for and demanding these things, there would be less humbug in equipment."

Educate Members to Report Minor Course Defects

AN EIGHTEEN hole golf course covers a lot of ground. As a result, no matter how alive and observant are the green-keeper and the greenkeeper, certain minor upkeep work develops and is overlooked in the maze of more important duties. We refer to such jobs as filling in gopher holes in fairways, removing stones liable to injure the mowers, spotting clogged drain tiles, and the like.

Somehow the members seem to notice these little matters as soon as they appear. As a rule they notice them day af-

ter day, curse their presence on the course, and yet fail to report the matter to the green-chairman!

The clever chairman will capitalize on this ability of the members to see defects on the course by having a box erected in the locker room where the member may report by note. Put a sign on the box, saying, "If you notice anything wrong with the course today, drop a note in this box and the trouble will be promptly attended to. Thanks, John Saunders, green-chairman."

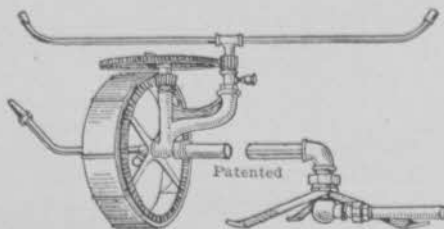
Such wording will be seized upon by would-be wits of the locker room and the chairman will get such notes as "The cups aren't large enough"—or "Too many traps and not enough fairway!" but this opportunity to joke is a good thing. The members will remember the box, and when some real detail of upkeep is noticed they will report promptly.

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Good Fellowship a Means to Club Success

By **HARRY H. MEYER**

Secretary, Elmsford Country Club, Westchester Co., N. Y.

GOOD fellowship, in my judgment, constitutes a vital factor in the success of a golf club.

Good fellowship should reign at the very portals of the club. Its influence should be felt at the threshold. Its warmth should be felt at once, particularly by the new member.

The newcomer, strange as he must feel upon affiliating with a large and selected



Harry H. Meyer

group, should at once be made to realize that he is a stockholder in an enterprise whose life depends upon its membership. He should know that he becomes a part of the machinery that moves the club and that his membership is a contribution to the well-being of the club.

Too often does the new member experience the coldness of those slow to extend the greeting hand. It is this first impression that forms the basis of the new member's estimate of his new affiliation. It should be an impression of warm hospitality and comradeship.

No Discrimination

Within the club the co-operative spirit in all things should prevail. Chosen groups are harmful and should not exist. Officers

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