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 200gallon 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

OR 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 indespensable.

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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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.

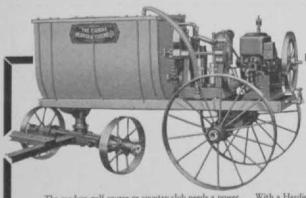
It must be borne in mind that the top dressing of fairways must vary. Where one fairway would need an application of muck, another may need sand.

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 greenskeepr or architect in the construction of a golf course.

R OUGH, 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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