

Golf Course Maintenance

By GRANGE ALVES, Pro-Greenkeeper
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GRANGE ALVES

ers who go there to better their knowledge of how to raise their children generally come out about just as wise as they went in.

GOLF course maintenance has been a subject of importance for the past decade. You hear of what Bill does in New York and what John does in Pittsburgh and after reading all there has to be said about everything being done this and that way, it reminds you of a mother's dispensary where the topic is, "what is the best way to bring up babies." Some declare that for constipation the best thing to use is castor oil and the next one will swear by Castoria and so on down the line; so that most of the moth-

I have personally taken a great interest in not only golf course maintenance but also golf course construction. I have also attended pretty nearly every convention pertaining to the wonderful advancements for better turf, heard everything discussed pro and con and actually have come back to my own responsibilities like the green mother who went to the dispensary with her baby—not a bit wiser. I have also read every article by the many leading agronomists for the past 8 years on grasses, fertility and turf diseases and I know not of anything that has been said or written that can be concrete. About four or five years ago I attended a convention and about that time the Washington strain of creeping bent stolons was the popular putting green turf. Its quality and reputation was said to be absolutely immune from brown patch and those who have observed any kind of stolon bent putting greens the past season have seen some of the worst brown patch areas they ever put their eyes on.

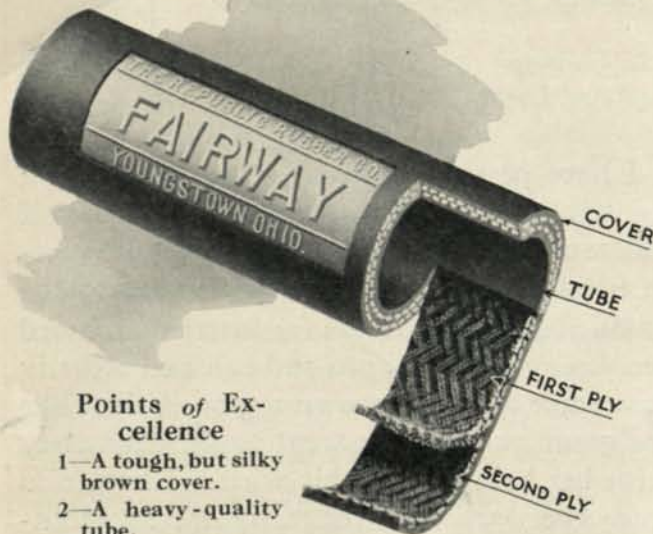
To golfers who know a true putting surface, they know these vegetative greens are impossible to figure and to the greenkeeper they are more worry and more expensive to main-

LOOKING ACROSS ACACIA'S BROAD ACRES

This scene taken soon after the course was completed shows how interested the members were in the work



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tain than a seeded green ever was. Many courses in the Cleveland district that have maintained every conceivable kind of bent stol-on greens have gone through the worst siege of brown patch ever known in this country. When the seeded greens old and young were blighted with it and were given the proper treatment they came back in a week. But the former type of green, many of them, never did respond to the same treatment.

This point I want to bring out rather than make a long story out of the many things pertaining to the upkeep of a golf course. There is nothing that I have ever seen that will stand the test of being concrete or prove to be right or wrong. To find his out for yourself map out a number of golf courses here and there to visit and bring your problems to this one and that one, and you will be lucky if you get one to agree with you. There is not a greenkeeper who is up and doing who cannot break down most any kind of an argument on what Mr. Smith says is right or Mr. Jones.

I read an interesting article by Mr. Tracey on evolution in which he said many of the findings of the scientists who study it, dreamt and read their findings of which about one per cent came true; the rest you could discard.

So it goes with all the theoretical and practical experts we have in existence preaching golf course maintenance. You have to be broadminded, use your own common sense of what you observe, analyze what you read and the golf courses you visit, study the soil conditions and their form of treatments. If it compares with your own, go back to your own course taking the worst part of a green and put it to the test before plunging into a lot of expensive experimenting.

There are many very able men who are to-day giving advice who have had nothing more than a theoretical training on golf turf and who have learned and had their minds broadened from the so-called practical greenkeeper with no theoretical training, and some have in fairness to the greenkeeper admitted so.

Facts We Do Not Know

ECONOMY starts with construction and the best expert advice that can be obtained is by far the cheapest in the end. I have

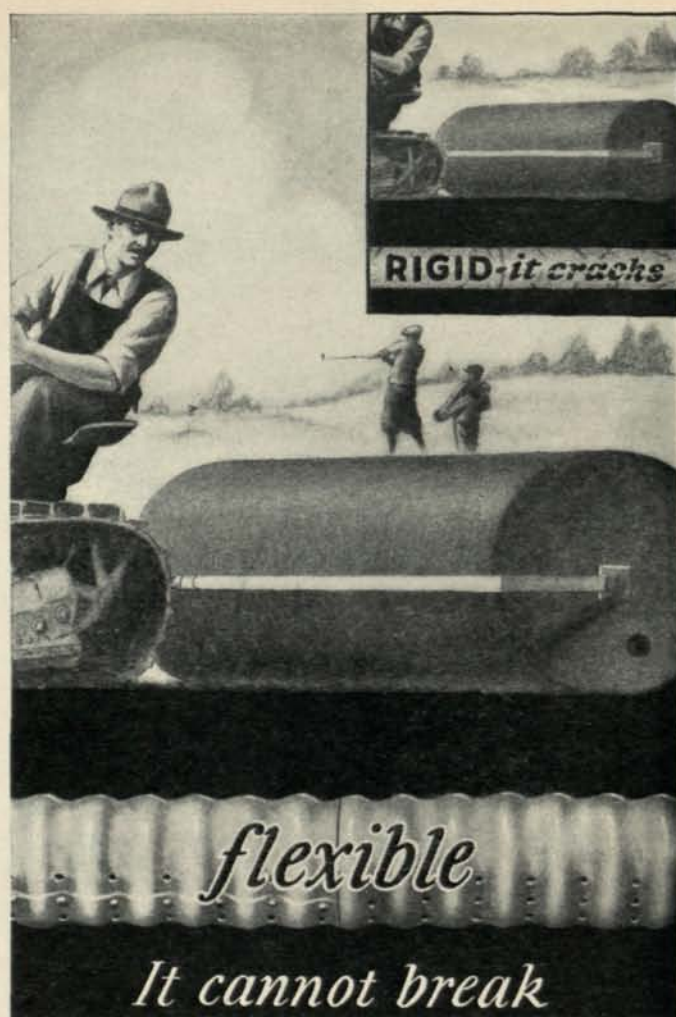
seen so many golf courses built from the top down that can never be corrected. To undo the damage would cost three times as much as the first cost. There is a right and a wrong way to everything and to build from the bottom up means success in obtaining best results.

The soil at the Acacia Country Club is clay and in order to bring about the proper aeration, drain tile was installed twenty-five feet apart with six rows laid on every fairway. Cinders were put on the top of the tile about eight inches deep and the ditches back filled with the natural soil. The fairways were then ploughed six inches deep, disced, harrowed and levelled, then from twenty-eight to thirty tons of rotted manure spread to the acre and disced thoroughly into the soil, with five hundred pounds of bone meal to finish off with: then seeded to fescue, blue grass and redtop.

Greens Construction

THE top soil was removed and composted with rotted manure and sand, and these compost piles turned over every month until the greens were framed drained and the sub grade formed. The sub grade was ploughed and coarse gravel disked thoroughly into the sub-soil then one foot of screened top soil applied to the finish with thirty ton of sharp sand and compost mixed completing the seed bed. They were then seeded down to German creeping bent. The results obtained were remarkable and the course is gradually rounding itself into one of the best turfed in the district.

In maintaining the course I have always felt that a great deal of trouble arose from compost. Compost in most cases at many clubs I have seen has to be used while too green, never being allowed the chance to ferment and be turned over enough to be properly prepared for use. Last year, reading of a commercial fertilizer and its wonderful qualities for turf nourishment I discarded my green compost pile and have dressed with this and sharp sand with wonderful results. The turf grew finer and weeds less troublesome. The results have been so satisfactory that for 1929 the same formula of operation will be carried out. Compost preparation is a big item and with the same success in results for the 1929 season, compost will be off my list.



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I use tobacco and charcoal and sulphate of ammonia also on our greens and have my own general opinion when such operations should be applied. This year I have used arsenate of lead to see what results could be obtained, but so far I am not ready to form any conclusive opinion until further trial.

Watering Important

I DO not believe in heavy watering. Our operation in watering is six greens and six tees each night from four to six hours, the larger greens getting the six hours. I have seen greens drowned and a lot of coarse matter brought about from too much watering.

Before concluding I want to say that I have practiced a great many things against the laws imparted of today and when I say that, where results could not be had with sulphate of ammonia and other plant foods I have used hydrated lime and although contrary to the "book", have had marvelous results. And results to me or to anybody are like the old saying, the eating of the pudding is the proof of it and after all it's results that count.

In closing there has been remarkable progress made in the past ten years on golf turf. And to our fathers Piper, Oakley and Carrier who paved the way for others to follow after in the great research work for better golf turf, the greenkeepers and Green committee chairmen owe a great deal of thanks. No matter what the outcome of their dreams were, (some of them have been good, and some not so good,) but with their constructive, everlasting and untiring efforts, they have broadened the minds of many who have gained all knowledge from their grand work. As a result every golfer enjoys today the results of the combined teaching of these men and the experience and untiring efforts of our greenkeepers in bringing about better golf turf.