

I would like to see more greens designed and constructed which would encourage the playing of the run-up shot, particularly the long run-up, which on many courses is not called for at all. Variety is the salt of life, and it is also an admirable and desirable quality in our golf courses, which at present tend to test the playing of the ball to the green exclusively by the air route, to the exclusion of the run-up and pitch-and-run shots. The ability to play these two shots, when necessary, should form part of the golfing armor of every golfer. The essential qualities in the design and construction of a green that call for a run-up shot (or expressed in another way, make the pitch shot too risky to be worth attempting) can be varied; but the green at least must have a fast surface, and should not be banked up at the back. As it is a run-up or pitch-and-run shot we are trying to encourage, the front or apron to the green can not be bunkered, nor can it be a type of ground which gives any great promise of success if pitched onto. It must therefore be of so undulating a nature that while a ball may be played to run over it with reasonable certainty of a satisfactory result, it will have a tendency to turn anything but a run-up away from the green, possibly into traps guarding its sides. A plateau green preferably on the small side, particularly in length, guarded on the sides in front as I suggest, and surrounded by some form of undesirable country for playing short chips from, could produce a hole where it would be found that pitches even with back spin, did not pay. The construction of such a green, if the green had to be artificially constructed, might prove expensive, but I suggest, if funds are available, the result would justify the outlay and help to retain in the game one of its most skillful shots which is seldom called for nowadays.

Apart then from the best conditions for forming turf, which I am not at present discussing, I suggest that the surface of a perfect putting green should be far from soft or spongy. Mr. Byers, in discussing the ribbed or slotted clubs, expressed the situation admirably when he said, "A player should not go to the professional shop to buy his shot." I suggest that neither should he expect the ground or its condition to assist him unduly in stopping the ball.

Cottonseed-Hull Greens

In the December (1921) number of THE BULLETIN there appeared a brief article describing the use of cottonseed hulls in the making of putting greens. The article was written around the experience of a golf course located in northern Mexico, and, so far as known at the time it was written, no other club had tried cottonseed hulls for the making of a putting surface. Several of the readers of THE BULLETIN became interested in the method, and a few attempts were made to duplicate the results obtained by the course in Mexico. The clubs that made the tests were located in the southeastern part of the United States, and all reported partial or complete failure. The principal difficulty seemed to be due to moisture—in other words, too much rain.

Relatively recently Charles W. Hobbs, president of the San Angelo Country Club, San Angelo, Texas, reported very satisfactory results from cottonseed-hull greens. In a letter to the Green Section, Mr. Hobbs makes the following statements:

"I beg to acknowledge your letter of the 12th making inquiry regarding our experience with cottonseed-hull greens, which seems to have been widely published to the world by the DALLAS DISPATCH, and I take pleasure in saying that we are greatly pleased with our experience so far, and I know no reason why the greens should not prove entirely satisfactory for all times.

"Prior to constructing the cottonseed-hull greens, we were using the sand greens, and owing to the high winds which sometimes prevail in this section of the state, we suffered continual difficulty in keeping the sand on the greens, the high winds sweeping it off. But we have no fault whatever to find with the cottonseed-hull greens in any respect.

"Since constructing the major portion of our greens a few months ago we have had a great deal of rainfall, more than usual for this section of the state, and we find that the greens can be used just as soon as the fairways are in condition to play upon them.

"The method of construction is to excavate about three or four inches for the size of the green that you wish to construct. In this excavation you place crushed rock about three-eighths of an inch in size. Tamp this rock and roll it thoroughly with a good heavy roller. Upon this rock you place your cottonseed hulls from 2½ to 3½ inches in thickness. The hulls should be very evenly distributed, should be pulled apart by hand, and then, when the spreading has been completed, should be wet thoroughly and rolled with a good heavy roller. This rolling should be done daily for several weeks, and especially so if there is very much wet weather. You will then find that the greens have settled and become even and smooth after a period of use, and perhaps in dry weather they may become a little hard and exceptionally fast. We then have another wooden roller, in which nails have been driven evenly about an inch apart. This is used for loosening up the cottonseed on the surface, and after doing so we roll again with a light roller. The expense of construction used for our greens ranged about \$225 for 9 greens.

"There may be some local conditions prevailing in other sections which we would not have to contend with, especially around the edge of the greens where grass perhaps may grow and, in that way, create a lumpy condition. However, this can be guarded against as you find adverse conditions which may prevail.

"We are very much pleased with our greens, and if you require any additional information will be glad to furnish it."

It is thought that there may be many clubs in the drier parts of the country where it is difficult and expensive to maintain grass greens, which will be interested in what Mr. Hobbs has to say relative to cottonseed-hull greens. The Green Section has had no experience with cottonseed-hull greens, but offers the information contained in this article for what it may be worth to those who are seeking a substitute for grass turf.

Sand-Trap Rake Made from a Mowing Machine Knife.

We are indebted to Mr. Ralph C. Martin, greenkeeper at Shannopin Country Club, Pittsburgh, Pa., for the accompanying sketch of an inexpensive and efficient rake he has devised and uses for his sand traps. A 7-foot mowing machine knife is cut in half and a 5-foot iron handle riveted or bolted at a hole drilled in the middle of the knife. Two metal braces are welded to the handle 2½ feet from the knife and riveted or bolted at holes near each end of the knife. The ends of the handle and braces attached to the knife are first heated, bent, and drilled, to permit of fasten-