

two weeks this new grass was in turn dead due to the feeding of the grubs on the roots and the green remained in that condition (out of play) until the next year. Had it not been for the carbon disulfide emulsion method, three-fourths of the greens on the Riverton course would have been in the same ruined condition and golf would have been out of the question.

### Not All Greens Suffer

Observation of the greens of the Riverton club, and other clubs, during a period of six or seven years, has shown some interesting traits of the Japanese beetle in connection with its egg laying habits. There are some greens on the Riverton course which have never been infested with grubs to any appreciable extent during all those years. Numbers 8, 13 and 14, in or on the edge of the woods, have always escaped grub injury, accountable in all probability to the fact that the beetle is not a shade loving species and prefers to lay its eggs in open, sunny ground. Number 17, on the other hand, entirely in the open sun, has never to my knowledge

had any real grub infestation and I have spent a great deal of time and thought in trying to figure out why that particular green always proved immune but with no tangible results.

I have just recently examined a course on the north side of Philadelphia and grub conditions there today are the same as the Riverton club contended with in 1923. The greens are in good shape due to the use of arsenate of lead during the past year, but the fairways and tees, totaling 60 acres, have been shot to pieces by the grub of the Japanese beetle. It will cost \$6,000 to grubproof and reseed these fairways. One golf course in the Philadelphia area has to date used 18 tons of arsenate of lead in grubproofing their fairways and the turf is in splendid condition in spite of a heavy beetle population in that vicinity.

In next month's article I propose to discuss the habits of the grub in turf and to begin describing the carbon disulfide emulsion method of controlling grubs in fine turf.



## Lightning Strikes Again —No Permanent Damage

IN THE October GOLFDOM there appeared an illustration of a green hit by lightning. Now another case is brought to our attention. The picture given here shows the fourth green on the Homestead course at Virginia Hot Springs which was struck by a bolt of lightning quite recently. The marks, which extended some 20

feet from the center, disappeared in ten days with no apparent permanent damage to the affected turf.

"The extraordinary thing to me," writes Fay Ingalls, president of the Virginia Hot Springs Company, "is that I have always heard that lightning would strike a tree or any elevated object. You will note that this damage occurred approximately 12 or 15 feet from the cup in which the standard was at the time of the storm. This is quite a large green, about 9,000 square feet."