

putting surface of two of our greens was entirely under water. On the advice of the Green Section we took no steps to remove the ice, notwithstanding it remained on the greens for the rest of the winter. It was observed, however, that although a shell of ice remained, the water beneath it had gradually drained away, resulting in the ice eventually cracking and settling down. In the spring these ice-covered spots started growth ahead of the others, and during the entire season have shown no ill effects from their experience."

With satisfactory drainage, little fear need be felt of winter-killing under any winter conditions.

Lippia as a Fairway Turf for the South

Lippia is not a grass, but botanically is closely related to the heliotrope and the verbena. It is a low-growing, thickly matted, spreading plant, with small wedge-shaped leaves. It thrives in the warmer parts of the United States, from Florida across the continent to California. It has the ability to withstand drought and shade, and is especially suited as a sand-binding or embankment grass. It has also merits as a fairway turf. Mr. Jacob H. Rehfuess, chairman of the Green Committee of the Stockton Golf and Country Club, Stockton, Calif., gives his experience with it as follows: "In certain parts of northern California a plant known as lippia has been grown on fairways with most satisfactory results. It requires no irrigation, forms a close low-lying mat, requires little cutting, and furnishes beautiful lies for iron and brassie plays. Divots cut out of it heal rapidly."

The Italian variety of lippia grown in California is much finer than a form native to Florida and Cuba. The latter, however, makes satisfactory turf on many Florida courses, usually as large patches.

Insects Injurious to Deciduous Shade Trees and Their Control

Healthy appearance of the trees on a golf course goes far to making the course attractive. No agency is more potent in marring the appearance of these trees than are insects. A defoliated or otherwise bedraggled tree is not only worse than none at all but, when the injury is due to insect attacks, the tree is a menace to the health or life of similar trees near by. Practical ways of controlling most of the injurious shade-tree insects are known. The control of insects injurious to deciduous trees is fully discussed in two bulletins which may be obtained free upon application to the Office of Publications, Department of Agriculture, Washington, D. C., namely, Farmers' Bulletin 1169, "Insects Injurious to Deciduous Shade Trees and Their Control," and Farmers' Bulletin 845, "The Gypsy Moth and the Brown-Tail Moth and Their Control." In the former bulletin are discussed leaf-chewing insects, bark, wood, and twig-boring and girdling insects, sap-sucking insects, and gall-making insects and mites. The making and application of sprays are discussed; also the fertilizing of trees, treatment of tree wounds, filling tree cavities, and tree banding. Burning cuttings and fallen twigs and leaves from infected trees will help much in controlling many of the injurious tree insects.