

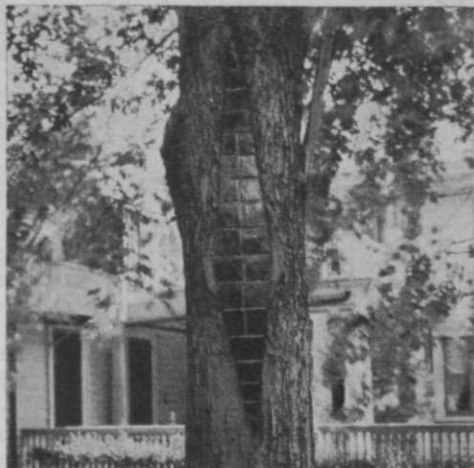
are sure to retard healing. He also must make sure that the bark has not been injured. If it has been bruised or loosened, the sun and air will dry up the cells of the cambium and sapwood which lie below it and they will die. Consequently, if the bark is not just right, the surgeon must go back and reshape the cavity, enlarging it so that the edges can be cut properly.

Reinforcing a Science.

If the cavity opening is comparatively small, a concrete filling alone is sufficient to restore the tree's structural strength. In many cases, however, it is necessary to supplement the filling with reinforcing rods. Sometimes a few horizontal rods are enough; again, both horizontal and vertical rods are essential, depending upon the size and shape of the opening. These rods serve the same purpose as the beams in the framework of a house, uniting the walls and distributing the stresses and strains caused by the wind.

After the reinforcing rods are installed, the tree surgeon carefully paints the walls of the cavity with a strong disinfectant to kill any fungi spores which may have lodged there during the progress of the operation. He next applies a waterproofing solution and when that is on, he is ready to put in the concrete filling.

To be satisfactory, the substance used for filling the cavity must have great mechanical strength to resist the tremendous strains which result when the tree sways back and forth; it must be durable; it must provide a proper surface for callus growth to creep over it; and it must be comparatively inexpensive and easy to install. Concrete, installed in sections separated by a special joint material, has been found to be ideal for the purpose. The sections function in much the same way as the vertebrae of a person's



Another valuable tree saved. Eventually, the filling will be entirely concealed by bark which will grow over it from either side.

backbone, providing strength and yet yielding to twisting and bending.

When the filling is completed, the surface is carefully smoothed off and finished in such a way that the concrete is just level with the wood but not as high as the bark and the original contour of the tree is restored. A preparation is then put on to seal the cavity on the edges.

Within a few months, the bark begins to grow over the filling from the edges and eventually the bark from the sides meet. All traces of the filling are then concealed but it is still there, providing the mechanical strength which will enable the tree to stand for generations to come.

(Editor's Note: This is the fifth of the series of articles on tree care written for GOLFDOM by Martin L. Davey, President of the Davey Tree Expert Company.)

Cite Harlow's Pro Management as Example for Britons

TROUBLES of the P. G. A. of Great Britain in controlling its personnel come out in the open with the case of Henry Cotton. Young Cotton did not want to abide by the British P. G. A. ruling on keeping its Ryder Cup team together in the U. S. instead of permitting the team's members to pick up exhibition money individually. Consequently, his P. G. A. promptly denied him a place on the team.

In commenting on the case, *Golfing Monthly* paid a tribute to Bob Harlow's management of the American tournament players. The British journal said:

" . . . in the management of a team the rules must be definite, and we know that in handling the American team which came to this country Mr. Robert Harlow, one of the sanest and soundest of men, was often confronted with problems which required delicate handling. Therefore, going out as a team and coming back as a team was the British order.