refined sugar-bearing substance were available, it is possible that for certain soils the application of sugar would become an economically satisfactory treatment. Experiments on this subject might well be carried out in the West Indies.

There are secondary advantages to be expected from sulphuric acid disinfection which may be of considerable importance in some cases. Under appropriate circumstances a larger germination percentage is secured, the number of parasites in the soil is reduced, and the well-known effect of disinfection on fertility results in increased growth. Another valuable effect has proved to be the reduction of weeds owing to the greater susceptibility of their seeds.

In considering the application of the methods to local conditions, it is necessary to emphasize the fact that the results stated have been obtained with the seedlings of a definite group of plants, the conifers. It will be necessary to find by experiment how far they are transferable to the seedlings of unrelated plants. In view of the difference of soils, moreover, such experiments must be carried out in the situation where the seedlings for which it is proposed to adopt the method are raised.

Some hints are given as to the method of handling the acid. It should always be dissolved by pouring it into the water; reversing the process may cause a serious accident. The solution should be made up in wooden or earthen containers and applied with watering cans which have been coated inside with paraffin wax. Boots may be protected by being heavily greased. Wooden containers should be washed out, immediately after use, with water containing washing soda.

W. N.

PROPAGATION OF HEVEA FROM STAKES.

On page 251 of the first volume of the Gardens' Bulletin reference was made to the difficulties experienced in propagating *Hevea brasiliensis* by means of cuttings. Experience in Ceylon and in the Malay Peninsula was quoted; and Mr. Petch's suggestion that Thwaites had been deceived when he claimed it to be easy was cited.

Fresh experiments were then made with cuttings from young twigs, without success; and when it happened, in 1917, that a big wind destroyed many rubber trees in the Economic Garden, stakes were cut from them for supports in the yam beds, so that the misfortune of losing many rubber trees gave the opportunity of trying propagation from branches 1—2 inches in diameter.

These branches were cut diagonally with a sharp knife at the end, thrust into the ground, and wired together at six feet in the way which is seen in Plate VI of the first volume of the Bulletin Nos. 11-12 (opposite p. 394).

Out of a total of 1489 stakes so taken, 18, or 1.21%, took root and produced leaves.

The weather was wet when in January and February the stakes were set in the ground.

I. H. Burkill.