

tree, the general structure of the bark becomes altered in a conspicuous manner, while in both bark and leaves, the accumulation of starch is most unusual. These features are so characteristic of the disease, and appear so early in its development, that a correct diagnosis may be made through the aid of the microscope, even before the external evidences of disease are pronounced. In the new wood formed after treatment, the bark presents all the features of normal structure, both with reference to tissue and distribution of starch.

We thus note certain important facts as the result of these experiments :

1st. That a specific disease is cured by a certain course of treatment.

2nd. That potash and chlorine are essential to restored functional activity.

3rd. The disease may be regarded as primarily due to deficiency of these elements in the food supply.

But we should also point out that for this disease, any salt of potash will not answer, *i.e.* the sulphate or the phosphate will not be equally efficacious with the muriate, but that does not permit us to infer that diseases of other plants may be similarly cured by the same salt of potash, for on the contrary, the same investigations have shown that for different plants, different salts of potash must be used, so that while in some cases the chloride is best, in others it is the sulphate or nitrate.

We have here, however, a definite fact established, namely, that the nutrition of the plant bears a most important relation to its normal condition, and while we do not wish to rashly assert that all diseases to which plants are subject may be cured in this way, yet we do feel confident that, when the bacteria craze has passed its fever heat, and the pulse of the investigator has once more returned to a normal rate, he will turn his attention more fully to the question of nutrition as affording a rational explanation of many of the vexed problems which now confront him.

Before taking final leave of this part of our subject, I will