Application. The point to be kept before us is not to waste material and do the work thoroughly. There are very many ways of applying the fungicides. We have spraying machines for this purpose. There is the little hand sprayer, the knapsack sprayer, the barrel, and the wagon with gearing. These are the machines we use. The form of nozzle used is of great importance; among the best are the Cyclone, the Vermorel. The latter is a very economical one, making an exceedingly fine spray. It is a little slow but does the work well. The Nixon has a sort of a sieve on the end of it, and throws out a strong spray. The McGowan is one which is very popular to-day. It is so graded that you can bring the spray down to a very fine condition, and there is little waste of material.

When to make the applications. Two before and two after blooming. What I mean by that is, first, in the early spring before the leaves buds swell, apply sulphate of copper in the proportion of one pound to twenty-five gallons of water, that is strong and as there is no foliage on the trees a little goes a long way.

In the case of grapes you may spray your grape-posts and trellis also, for some spores may be upon them. As the sulphate will burn the foliage and destroy it, consequently, after the foliage appears we should apply Bordeaux mixture, which is sulphate of copper and lime. The Bordeaux is applied before and immediately after blooming time, and again about ten days later. In other words, one application before foliage, one after foliage and before bloom, and two after bloom.

I have reached the end of the subject you so kindly asked me to discuss before you; but if there are any here who desire to ask some questions I shall be pleased to answer them as well as I am able. (Applause.)

A. M. SMITH: I would like to ask the Professor if plowing under leaves of a diseased grape would destroy it, or would there be any danger of the disease coming up?

Prof. PANTON: I think that if they were plowed in deep enough the spores would not likely reach the surface to do harm.

WM. ORR: At what time do the winter spores of plum knot fungus mature?

Prof. PANTON: About February.

A MEMBER: When do they propagate?

Prof. PANTON: They propagate in the spring.

A MEMBER: About what time do you assign to the maturity of the summer spores?

Prof. PANTON: About June and July, when the knot has a velvety appearance.

F. G. H. PATTISON: Do spores carry in the air?

Prof. PANTON: Yes; for they are so small that they may be readily carried about by the wind.

A MEMBER: Would there be any advantage in spraying in the fall immediately after the foliage has fallen?

Prof. PANTON: To some extent you may kill spores that are lying about.

A MEMBER: Is it a fact that fungicides have no effect upon spores after they germinate?

Prof. PANTON: I think they can if development is not gone too far so as to place the fungus beyond the reach of the fungicides.

A MEMBER: Do you consider that the black knot of cherry and knot of plum belong to the same species?

Prof. PANTON: Yes.

A MEMBER: Can you tell us anything about peach yellows?

Prof. PANTON: Not beyond that the cause is not known. The subject is now being studied by specialists, and as yet not much more has been learned than that it is contagious; but its cause has so far evaded research.