

Prof. FOWLER: I hardly think it would, but I have not the practical knowledge to decide the question.

Mr. BURRELL (St. Catharines): I understood you to say that the strawberries depend almost altogether on the bees?

Prof. FOWLER: Yes, different kinds of bees.

Mr. BURRELL: I keep bees, and I have noticed very few of the ordinary honey bee, and very few of the humble bee ever fertilizing. Do not a large number of those syrphus flies fertilize?

Prof. FOWLER: Yes.

Mr. BURRELL: I see Prof. Erwin Smith is beginning to doubt the bee theory although it is very plausible. Anyway, we know that yellows is on the increase, and it has been decided that the axe and the fire are the only ways of curing it. On hearing that story of Frederick the Great we will all regret that he hadn't a spray pump.

Mr. CASTON (Craighurst): I watched very closely one year and did not see a single honey bee fertilizing; but I believe the bee that fertilizes strawberries is one smaller than the honey bee—I do not know the name of it.

Prof. FOWLER: Strawberries are native to this country, and were here long before honey bees were here, so that it is a native bee that must fertilize it.

Mr. CASTON: Yes, it is a native, but it is not what we call the wild humble bee nor the honey bee. It is a smaller insect that is very industrious, and that works all the time the blossoms are out.

The SECRETARY: I think we are very happily situated on this occasion by holding our meeting in the vicinity of Queen's College. We are very much indebted, I am sure, to the two gentlemen who have given us addresses, and we very much appreciate this one on cross-fertilization, because it is a line of study that we hope our more intelligent fruit growers will take up and pursue, because it is in this way that our new and valuable fruits are produced. In the history of horticulture in Canada there has been too much haphazard and chance work in the production of the excellent varieties that have originated in Ontario, with very few exceptions. We are happy to say we have had some gentlemen who have done some good work in this line, and to them we are very much indebted. I refer more particularly to Mr. Charles Arnold, of Paris, who was the originator of the Ontario—that beautiful and valuable commercial apple; and to him we are also indebted for some other valuable hybrids in other lines. I may also refer to the late P. C. Dempsey, of Trenton, to whom we are indebted for some very valuable apples and pears—notably the Trenton apple, the Dempsey pear, and others. I am glad to know there are others who are pursuing this line to a certain extent, thought not so largely as perhaps they should be. I am glad to say we have with us to-day a hybridist who is an enthusiast, although not in the line of fruit; I refer to Mr. Groff of Simcoe, who has made a special study of the canna and the gladiolus, and who is very enthusiastically devoting a large portion of his time to the production of new varieties of gladioli. Therefore I hope this very interesting and valuable paper of Prof. Fowler's may be the means of stimulating some member of our Association to do some practical work in the line of producing new fruits by cross-fertilization, by understanding more scientifically the methods of hybridization. It is very important, I am sure, that these should be produced. It is only recently that we learned how important it is that the blossom of one variety be fertilized by the pollen of another variety. We have only recently learned that some varieties of fruit will not produce much fruit unless they are fertilized by another tree; and this is explaining the trouble with some of our barren orchards. We have large orchards of Northern Spy, for instance, that have not been producing, and possibly the reason is to be found in this fact, that the Northern Spy may not be able to fertilize its own blossoms. We have large orchards of Baldwins that have not been producing, and probably this is the reason; it wants cross fertilization between the different varieties of apples. So with the different varieties of pears. It has been demonstrated that this is true with regard to pears; some varieties have been artificially pollinated with