

to work and make their farms and farming more attractive; that they must make their farms something more than mills to grind out dollars and cents; that they must interest their children in the products of the farm and in the beauties of nature around them; that they must give them trees, plants, fruits, and flowers to cultivate, and teach them how to adorn and beautify their homes and make them attractive. Make them to feel that they have an ownership and interest in these things. I believe that every true Canadian, whether he be a farmer or not, has an interest in this subject—for the wealth, yea, the very existence of our nation, depends upon the products of the soil and if our farms and farming becomes so unattractive that our young men can not endure to stay upon the land and till it, what is to become of us as a nation? I am glad to see that our Minister of Agriculture has taken an interest in horticulture among farmers and sent out missionaries to the farmers' institutes throughout the Province to discuss and agitate this subject. I should now like to see our Minister of Education take this matter up. What is there to hinder the introduction of text books into our common schools teaching the principles of horticulture in connection with botany and chemistry? Would not a knowledge of the construction of plants and flowers and how to hybridize and produce new varieties of fruits and grains, how to propagate from cutting and bud and graft trees, be as interesting and useful to farmers' sons as a knowledge of ancient history, or geography or algebra would? I doubt if there is one farmer or his sons in one hundred that knows anything about these simple principles; yet how useful they would be to them and what an incentive they might become to the young farmer to develop and bring out the fruit and other resources of the country, besides interesting him in and attracting him to the labors of the farm, and I am not so sure that these studies might add something to the knowledge of some of the students in our higher schools, who, though their heads may be filled with Greek and Latin, don't know all there is to be learned between the house and barn yet. I have not introduced this subject to cast any reflections on farmers, but with a sincere desire to awaken them to a realization of their own interests and responsibilities and a hope that they may in the future become more interested in horticulture.

Mr. MORDEN thought the farmers' lawns and surroundings would compare with those of other people. (Hear, hear). He had never failed to visit a town in Canada or the United States that he was not disgusted with the surroundings of human habitations. It is a great astonishment that people will live with those surroundings. It is a common thing in our towns to find the vilest weeds growing in the streets and yards. If we could reach the city people as well as the farmers it would be very desirable indeed.

FERTILIZATION OF PLANTS.

Prof. PANTON gave the following address:

1. *Definition.*—Fertilization may be defined, as the process by which a plant has the pollen of the stamens, applied to the stigma of the pistil, so that the elements which it contains, reach the ovule in the ovary, and so influence it that it becomes a seed containing an embryo.

2. *The Parts of a Flower.*—To understand this process, we require to know something about the parts of a flower. These are: the outside whorl of leaf-like structures termed the Calyx; its parts are called Sepals, and as a general thing, these are colored green. The next whorl is called the Corolla, and the separate parts Petals, and are usually colored.

It is possible for a plant to produce seed without either of these, and hence the Calyx and Corolla are sometimes spoken of as the non-essential organs, in contrast with the Stamens and Pistils, without which it is impossible for a plant to produce seed, and hence the term essential organs applied to them. Stamens are usually distinguished by having a slender thread-like stalk, the *filament*, on