



An Impression May Here be Gained of the Extent of the Fruit, Flower and Honey Exhibits at the Recent Horticultural Exhibition in Toronto

and trees for public places must be much older than this. But small nursery trees eighteen inches to two feet in height should make good Christmas trees in ten years. It will thus be seen that to grow trees especially for this purpose one must be prepared to wait some time, but there is much cheap, rough land which might be used in this way. Moreover, a very large number of quite small trees are used every year, both for decorative purposes and for Christmas trees for the younger children who amuse themselves for a long time by decorating them and by playing Santa Claus.

#### AVOID FIRES

A word of caution should be given to those who are about to have a Christmas tree for the first time. Beware of fire. While candles on trees make the latter look much more beautiful than they are without them, they are dangerous unless great care is exercised. I was at a Christmas tree once where the person who was dispensing the gifts in the guise of Santa Claus was dressed in a suit of cotton wool. In bowing to the people the wool caught fire. He rushed about and nearly set fire to some ladies' dresses, but fortunately a woollen shawl was thrown over him in time and the fire extinguished with but severe burns to himself.

Almost every Christmas one hears of fatalities, hence we prefer electric light if it can be obtained, and no light on the tree if it cannot be had. There are so many bright decorations made specially for Christmas trees nowadays that the tree can be made beautiful even with-

out candles. Small, red apples attached to the tree are used by the Germans in their decorations, a custom which may well be followed by Canadians.

### The Use of Fertilizers Defended

By Leslie Esalie C. D. A., Toronto, Ont.

While appreciating the desire of Dr. J. B. Dandeno, of Bowmanville, Ont., to contribute to our knowledge of the fertilizer question, as shown by his article on this subject that appeared in the November issue of *The Canadian Horticulturist*, we regret to note the tenacity with which he clings to old and almost entirely discredited theories. His statement that at least half the sum spent on commercial fertilizers in the United States and Canada is wasted, may be a slight exaggeration, but doubtless considerable waste results from ignorance of the meaning of fertilizer analyses and of the requirements of different crops and soils.

Dr. Dandeno undertakes to correct our misconception of what constitutes lack of fertility. This condition, he asserts, is not dependent on the lack of plant food he mentions in passing that he never met a man who could give a fair definition of "plant food." This being the case, we shall not make the attempt, believing that our efforts to do so to the satisfaction of Dr. Dandeno would be as futile as to undertake the definition of that popular dish of "human food" known as "boarding-house hash." We only know that plants draw on the soil and air for certain substances, entering into their composition, and if these

substances are not plant foods or constituents of the same, let them be called by any other name.

Dr. Dandeno says: "Plant excretions are the chief cause of infertility, and it is in the decomposition of such material that the application of fertilizers of any kind proves of value." It is gratifying to note that, in Dr. Dandeno's opinion, fertilizers may sometimes, if even in an obscure way, prove beneficial; we had feared to hear that their application, like a dose of salts, might only tend to aggravate the condition referred to.

Dr. Dandeno might state with equal aptitude that the "food which we eat does not nourish the body, but serves as an antidote to the effects of the previous indulgence of our craving for meat and drink." We should endeavor to dispel his concern regarding the ruthless destruction of bacterial life in the fertilizer manufacturing process, with the assurance that the majority of fertilizing materials are of mineral origin and have, therefore, no association with bacteria.

Those of organic origin will be taken care of by the favorable bacteria (including the nitrifying bacteria, mentioned by Dr. Dandeno) which are present in all well-tilled soils. We agree with the idea conveyed in the statement that "certain fertilizers are adapted to certain crops and to certain soils, and the only way to find out which is to try these by using them on part of the field so as to compare."

In concluding his article Dr. Dandeno states that "no mistake is made in applying barnyard manure or other excreta, but in buying commercial fertilizers 'patent medicine chances' are taken." From this statement one can readily infer to what he likens his own prescriptions. We find no fault with Dr. Dandeno's quite natural aversion to patent medicines, but with his inclination to relegate commercial fertilizers to the same class.

Not wishing to encroach too far, we conclude with the reminder that commercial fertilizers are not supposed to be a substitute for, but rather a supplement to, barnyard manure, and that the chief value of the latter, as Dr. Dandeno rightly infers, lies in its physical action on the soil.

**Peach Trees from Seed.**—Seeing an article in *THE CANADIAN HORTICULTURIST* about peach trees, I would say that I have eight strong, thrifty peach trees that came up from stones planted in the chicken yard. Three of them are fully five feet high and I hope to see them bear. If they are half as good as the ones my mother grew on the old farm near Paris, I will be well satisfied.—E. W. Moyle, Lanstaff, Ont.

The apple barrel is nature's medicine chest.