

evenly divided throughout the seasons; that if the clover be ploughed under after the second year, the land is kept in good heart, and will be still more enriched by the application of our barn-yard manure to the fallow; that the fallow cleans the land, and is undoubtedly followed by a good crop of wheat.

We now take a Five Year's Rotation, usually adopted upon the light lands of the east of England, a part of the kingdom famed as a great turnip raising country:—

1st year, roots; 2nd, barley; 3rd and 4th, clover; 5th, wheat.

It is not customary, nor indeed convenient to grow such a large proportion of roots in Canada. We may therefore put part of this field in roots, peas, &c.; but should, when the rotation again comes round to this field, reverse the division, sowing grain, where we before planted roots, and roots where we grew grain.

The advantages of this system are that it is peculiarly suitable to our lighter lands and loams; the roots get a thorough cleaning, and prepare a mellow seed-bed for the barley; and a young sod is held to be, when broken up by a single ploughing, a good preparation for a sound seed-bed for the ensuing wheat crop.

I will close by laying down for consideration a rotation for such land as we have generally through this township of Ancaster.

This extends over six years, and is as follows:—

1st year, wheat, 2nd, 3rd, and 4th, grass; 5th, hoed crop; 6th, barley.

By bringing in grass for three years—say one in pasture and two in hay—we have an excellent sod to plough down, and we also have plenty of opportunity to enrich that land, which may have been put to barley by a liberal dressing of dung before putting in fall wheat.

The advantages that I claim for this rotation are an even distribution of crops over the land, a thorough enriching of the soil every sixth year, and a good proportion of superior hay and wheat—the two most valuable products of a Canadian farm.

FRUIT GROWERS' ASSOCIATION.

WINTER MEETING.

Reported by the Secretary.

The regular winter meeting of the Fruit Growers' Association was held on Tuesday, Feb. 7th, 1871, in the City of Hamilton. There was a good attendance, members being present from London, Goderich, Brantford, Toronto, Cayuga, Clifton, Niagara, St. Catharines, Winona, Milton, Oakville, Wellington Square, Thamesford and other places.

The minutes of the last meeting were read and approved.

The following papers were then read, viz:

By the President on Thinning fruit.

By A. B. Bennett, Esq., The Garden and Farm.

By G. Leslie, jr., Esq., Tree Planting for Shelter.

By W. H. Mills, Esq., Vegetable Tissues and Fire Blight.

By Rev. George Bell, Experiments in the Culture of Small Fruits.

Moved by Mr. Morse, seconded by Mr. Saunders, that the gentlemen who have read papers be requested to hand their papers over to the custody of the Directors for disposal as they think fit. Carried.

Moved by Mr. Holton, seconded by Mr. Martin, that a cordial vote of thanks be tendered the gentlemen who have so kindly furnished the papers we have just read. Carried.

Resolved, that the seedling and other apples be handed over to the Fruit Committee to examine and report.

Mr. Arnold brought a russet apple before the meeting, for the purpose of soliciting an opinion as to whether any one had seen anything like it before. After various opinions had been given, he stated that it was a Spitzenburg, a remarkable variation from the normal form.

Mr. Arnold also read an interesting letter from Mr. Thomas Meehan of Philadelphia, in relation to a singular combination of the apple with the pear, which had been sent by Mr. Arnold to Mr. Meehan. It was a fruit shaped like an ordinary apple, and having the external appearance of an apple, but found growing on a pear tree. Mr. Meehan stated in his letters that he had carefully examined the fruit sent him, and that he had found the pulp to be apple, and the stem, core and seeds to be pear, and was of the opinion that it was produced by the blossom of the pear tree having been fertilized by the pollen of an apple.

Here is a new field for investigation. Can the pear be fertilized by the apple, or the apple by the pear? If so, what new combinations are yet to be brought out by the crossing of these fruits, and what a field of experiment is opened to the fruit raiser! It is to be hoped that Mr. Arnold, who is skilled in cross-fertilization, will make such numerous and careful experiments next spring as will settle the question of cross-fertilization between the apple and the pear.

Moved by Mr. Martin, seconded by Mr. Morse, that any member sending to the Secretary the names of five new members, with their subscriptions, shall be entitled to a double supply of fruit trees at the next distribution. Carried.

The discussion of the appointed subjects was now taken up.

BEST TIME FOR TRANSPLANTING TREES.

Mr. Freed approves of digging the trees early in the spring, as early as possible; turn the roots and heel them in until ready to plant.

Mr. Watson, Summerville, has light land, and has found fall planting most successful with him. Does not prune, in case of fall planting, at the time they are planted, but in the spring following.

Mr. Grey, of Toronto—It depends on the soil; fall planting is to be recommended on light soil, spring planting when the soil is heavier. If planted in the fall, the trees should be banked up with earth, or mulched, to protect the roots.

Mr. Holton, of Hamilton, thinks, as a rule, spring planting is most successful; but when a tree survives the winter uninjured, the growth during the following year is much better. Fall planting does as well, perhaps better, to cover the roots well with earth, taking care to select a dry place for them.

Mr. Bell, of Clifton, has had excellent success with spring planting.

Mr. Arnold, of Paris, thinks there can be no general rule for either fall or spring planting. If the wood is well ripened, and the winters not too severe,