

followed by M. Blanchard, Abbotsford, and answers well, being very easily done and most effective.

The *gnawing-worm*, is the terror of the orchardist. At all my lectures, I am asked to give instructions for their extermination. Generally, a fine iron-wire is introduced into the hole the beast makes in the tree, and it is killed. Sometimes the hole is not straight, and the worm is got at with difficulty. Perhaps, forcing a strong solution of Paris-green into the hole, with a syringe, would answer well. The worm is the worst foe the orchardist has to contend with, especially in dry, elevated situations. Any one who knows how to destroy it infallibly would greatly serve farmers by publishing his method in the *Journal d'Agriculture*.

M. Ls. L'Espérance has some superb crab-apples, which keep well up to May and June. He has just sold two barrels for \$11.00. The Sœurs de la Miséricorde, too, have some fine fruit of this kind.

Prizes for crabs :

Next January (1896), at Iberville, a competition will be held to encourage the growing of the best sorts of crabs in the province.

Four prizes will be offered ; \$3, \$2, and \$1 ; and a provincial prize of \$10.

A gold medal will be awarded to the sort obtaining the greatest success during 5 years of competition. These apples must possess, both as to the fruit and the tree, the qualities requisite to constitute a good, salable, winter-apple. M. Danlop, Outremont, P. Q., will give any farther details required. This gentleman, to whom I sent two crab-trees, from M. P. Denis' orchard, speaks very favourably of the them.

The cultivation of orchards.—M. Denis has 2,000 apple-trees. Until lately, they appeared to be sickly, worn-out. The leaves were yellow, squinny and rough. Last year, he sowed the whole orchard with buck wheat, and this year with oats and clover. He states that it has completely changed the look of the orchard ; the leaves are larger and of a fine deep green in colour. The trees seem to have started into a new life. The land of an orchard should be ploughed and sown with buckwheat (1) at least every fourth year.

The largest branches should never be cut off. The Sœurs de la Miséricorde still regret having done so : at least, so says their farmer. According to MM. Denis and Blanchard, "there should never be less than 40 feet between apple-trees.

M. Hamel prefers orchards facing the north : the roots of the trees should be more attended to than the heads.

Honey.—M. Louis Hamel has 66 hives. He thoroughly understands the business. Four hives gave him, last year, 30 gallons of honey, which he sold for \$35.00 !

"I always put two swarms into one hive, and sometimes three." One swarm often will not make more than 20 lbs. of honey ; while two together will make 60 lbs., and three 200 lbs.

This year's honey-yield is not so great as last year's was, because of the cold nights and the paucity of honey in the clover-blossoms. There was only a fortnight's real honey-gather-

(1) We should prefer alternating buckwheat with clover.—Ed.

ing instead of 6 weeks. The season of the lime blossom was the most-productive. (1)

THE ST-JEAN-BTE., ROUVILLE, FARMER'S CLUB.

There are 280 families in this parish, and 5 well supplied cheeseries, 3 of which belong to cooperative associations. The shareholders are satisfied with this system.

M. Ludger Guertin gathered six barrels of apples from a 10 year-old tree (the Elzéar.)

M. C. Gaboury, who sprayed his trees this year with B. B., says that his worst fruit is finer than the best of last year.

How to use coal-ashes :

M. le curé Véronneau mulched his currants with 3 inches of coal ashes. The effect was marvellous (2) ; the fruit was better in flavour, the bushes more healthy, and the insects vanished.

Pear-trees.—M. Véronneau imported from France 5 sorts of pear-trees, which turned out well ; Belle d'Anjou and Jules Chrétien, (3) among others ; they yielded very fine pears, bigger than one's fist, ripened perfectly. The trees cost 45 cents a piece.

M. St. Boucher, St. Hilaire, gathered from one tree 3 bushels of perfectly ripe pears.

Potatoes.—M. Wilfrid Touchette has tried 8 sorts of potatoes ; they were all sprayed with B. B. ; names : Lee's Favourite ; Beauty of Hebron ; Dakota red ; Thornburn ; Snowball ; Maggie Murphy ; Rose of Ireland ; (4) Early Puritan.

The Snowball is very early ; the Rose of Ireland is proof against the potato beetle, and yielded 17½ bushels from a planting of half a bushel. Still, he prefers the Dakota red to all the others.

Maize.—M. W. Touchette is highly pleased with the "Pear's Prolific," which is very good for ensilage, and ripens within 8 or 10 days of the Canada corn. The seed is very large.

Mangels for hogs.—M. L. Guertin fed 22 hogs with the produce of ½ arpent of mangels. He lays great stress on the piggery being warm.

ST-MATTHIAS' FARMER'S CLUB.

This parish contains 100 farmers' families ; there are 35 members of the club, and 3 cheeseries, two of which are doomed to annihilation, to the benefit of every one.

Very few fruit trees grown here. M. Nadeau, the curé, has grown the "Early Yellow Flint" maize very successfully. The ears are long and well grained. M. le vicomte de Bouthillier, too, has a very fine field of maize, the finest I have seen in the country.

Lucerne.—Mr. Cheese has cut his lucerne 3 times and is delighted with it.

(1) *Tilleul* is the lime in England, the *linden* in the U. S., and the bass-wood of Canada. There is a white lime—*tila-alba*—in the little garden between Dorchester and St. Catherine Streets, Montreal (near the Western Hospital) that is worth inspection. The foliage is superb.—Ed.

(2) Mr. Martin, nurseryman at Côte St. Paul, told us, some 12 years ago, that the English gooseberry, mulched with coal-ashes, never mildewed.—Ed.

(3) Is this the old "Bonne Chrétienne," so well known in England ? Is not the "Belle d'Anjou," the "Beurre d'Anjou" which we grew fifty years ago?—Ed.

(4) Perhaps, the "Rosa d'Erina," which is the same thing.—Ed.

M. Amable Ostigny has some very fine crabs, and M. Alfred Morin gave me "Elzéar" apples of good quality, very like *Famousses*.

Sale of clover and timothy.—M. Amédée Nadeau deals in hay, clover, and timothy. The former fetches \$8.00 a ton for export to England ; the latter and cow hay (*le petit foin à vache*) are sent to the States. Clover at \$8.00 a ton pays better than timothy at \$10.00, while the yield of clover is at least a ton an arpent more than that of timothy, without reckoning that the clover exhausts the land less than timothy. Doubtless, the English take the trouble to chaff the clover and improve it by a slight fermentation. (1)

What shall we do with our clover, our inferior hay and our straw ?

Consume them on the farm ; but before feeding them to stock, they should be improved by chaffing them, at the rate of one of hay to two of straw, and making them undergo a slight fermentation. That is what I do with mine and the results are highly satisfactory.

RICHÉLIEU FARMER'S CLUB.

There are 4 cheeseries to be met with on 4 miles of road ! Three too many. Why then patronise them ?

The Station Master told me that hay and clover are in great request ; 500 cars are required for these products to-day.

Two crops in one.—M. Henri Robert sowed 5 lbs. of turnip-seed with his oats. When the oats were cut, some of the leaves of the turnips were cut too (probably), but recovered, and he has enough turnips now to keep his 10 cows during the whole of the winter of 1896. (2)

We must change our seed-grain and sow plenty of clover.—The Club has bought 300 bushels of fine oats, and maize, and 5,700 lbs. of grass-seed.

STE-MARIE DE MONNOIR CLUB.

In this fine parish there are about 250 families, and a club that is able to reckon a large number of members, who have greatly contributed to the advancement of agriculture. There are, though, 5 cheeseries, two large and three small ones : Oh ! if the two large ones would only ruin the small ones ! as a farmer remarked to me *en passant*.

Progress accomplished.—The herds are very much improved, many more acres are sown to roots, to clover for seed, and especially to maize : 5 or 6 arpents on each farm. The Club bought \$1,100 worth of clover-seed, timothy and maize, in which latter crop a great many pumpkins are grown. Farmers, here, are anxious to be informed as to the nutritive value of the pumpkin, and how to use it. (3) Farmers, here, want

(1) Precisely what they do not do. Horses eat at least ⅓ of all the clover grown in England—sheep have some—cows never see it. The clover is chaffed, mixed with the oats, and given dry.—Ed.

(2) About as bad use of the land as may be. Ten cows would require 30 tons of turnips at least for the 200 days of winter. How they must have grown after harvest !—Ed.

(3) According to Stewart, pumpkins are, as one would judge by inspection, of very little value. Besides, growing two crops at the same time is an awful crime in agriculture, except, of course, in the case of grass-seed. The following is the valuation of the pumpkin (by Wolf or Stewart) :

DIGESTIBLE NUTRIENTS			
Albuminoids.	Carbohydrates.	Fat.	Value of 100 lbs.
0.4	7.1	0.1	0.08

Value per ton \$1 60 ; value of swedes per ton \$3.00 ; of carrots \$3.60 ; according to Stewart : v. "Feeding animals," pp. 156, 157. To use pumpkins : chop them up roughly, and give them raw, any cooking would be waste of time.—Ed.

to know how to cure *foot-disease* in hogs.

STE-ANGÈLE FARMER'S CLUB.

Of families there are in this parish 145 ; the club counts 115 members, and there is only one cheesery, which is well patronised.

I was mightily struck with the earnestness with which people, here, flocked to my lectures, and with the attention with which they listened to my words. The hall was filled. Though people everywhere seemed desirous of gaining information, the seeking after it was more evident here than elsewhere.

The people speak with pride of their two pupils at the Oka School of Agriculture ; MM. Auguste and Joseph Fournier ; they are besieged with questions when they are spending their holidays at home. Their studies will be finished in the course of a year, and a great deal is expected from them : these two young men will have to put in practice the valuable information they have gained at Oka.

Steps in advance : Mutual instruction through discussions at the Club ; purchase of fine Ayrshire bulls and of well bred boars ; 200 bushels of maize for seed ; four times as many acres of roots grown. M. Jo. Nadeau has 4½ arpents in vegetables, and has tried the effects of wide or narrow distances between the rows of mangels. He has a liquid manure-tank and waters his dung with the contents. The cost of the tank has been repaid ten-fold the first winter, thanks to the increased value of the dung.

A Canadian Cow.—M. C. Paradis, the village school-master, has a 12-yr.-old Canadian cow, with badly shaped horns, rather lean than fat, and yet she gives six pots of milk a day. (A pot is an indefinite measure, generally equal to about 2 quarts wine-measure.—Ed.) She evidently turns her food into milk and not into meat.

M. Paradis has half an arpent of mangels near the school. He shows the pupils how to sow them ; explains why he stirs the ground deeply ; and why he makes the rows so far apart. When used, he will tell the lads how much weight there was, and how many days they lasted his cow. This is, indeed, practical instruction, which will greatly benefit the pupils. The cow gives milk from one calving to the next without intermission. (Rather hard upon the calf "*en ventre de sa mère*."—Ed.)

(From the French.)

(To be continued)

REPORT OF MM. G. A GIGAUT AND J. D. LECLAIR.

August 28th. 1894.

VISIT TO M. AUGUSTE GRANDJEAN FARMER, AT MALLEVILLE, PLOËRMEL, BRITTANY.

This farm is about 116 arpents (98 acres) in extent, of which 15 are permanent meadows. There are 40 milch-cows, 30 heifers and bulks, 6 brood-mares, 3 two-year-old fillies, 3 yearlings and 5 foals. M. Grandjean ploughs with the "Double Brabant" plough ; he makes a deep furrow when clover is to be sown ; part of the land is drained. There are 4½ acres in swedes and 2½ in cattle-cabbage—*thousand heads* and the *cavalier* cabbage. He prefers the *cavalier* to the *moellier*, because in heavily-manured land the stalk of the *moellier* is liable to rot.

Periodical liming is the rule on this farm. Clover is generally cut twice a