

be easily perceived that its fertility was greatly increased. We have seen it and can bear testimony to Mr. Fortier's success, and it is doubly honourable because it is the first French Canadian who has adopted a like system of agriculture—a system of amelioration perfectly systematic, and a model to which we can with confidence refer, and wish to place it before the eyes of all those farmers who desire to work for the advancement of agriculture.

One thing we would suggest, that the Board of Agriculture should award some mark of distinction to individuals who are pre-eminent in the improved methods of agriculture.

France for a long time has adopted this method as an acknowledgment of services rendered to the Industrial and Agricultural Arts, and to the country in general. Eight prizes of \$1800 each are yearly given to those farmers who have distinguished themselves in this branch of improvement, and the government of the Emperor, who especially favours agriculture, has ordered a special decoration to be bestowed for such improvement, for it is no less meritorious to sacrifice a life of usefulness to enhance the riches of agriculture, than the more vivid and daring exploits of the soldier, and it belongs to the nineteenth century to place the soldier and the farmer equally high in their proper sphere.

Mr. Fortier finds in the green crops abundant and wholesome fodder for his milch cows, the product of which—milk—is readily disposed of in the city of Quebec; a certain quantity is converted into butter, and a portion for the raising of calves and for the fattening of pigs. The cabbages attain also a high price more especially in the autumn when the fall shipping are leaving for Europe.

The spring ploughing receives a grain crop with timothy and clover seed,  $\frac{1}{4}$  of a minot of timothy seed, and  $\frac{3}{4}$  lb. of clover seed per arpent. The 1st year hay crop is magnificent, and, contrary to our experience elsewhere, we find that the 1st crop of clover is equal to anything we have seen, where the general rule is to sow 8 or 10 lbs. of clover to the acre, for the purpose of insuring an abundant crop the 1st year. The 2nd year clover diminishes, and the 3rd year it completely disappears; but here to the contrary the clover is abundant every year and often too rank. It is certain that the timothy alone exhausts the soil more than the clover, for the large

leaves of the clover must absorb a larger quantity of gas or nutriment from the atmosphere, and the spreading roots must furnish to the soil after it is cut wherewith to enrich it.

We shall now proceed to show the method Mr. Fortier has adopted to spread the manure over his meadow after four years crop, and also the application of ley-ashes so generally adopted by the farmers in the vicinity of Quebec, and we would especially call the attention of the farmers near Montreal to the general employment of ley ashes. Mr. Fortier informs us that he uses 200 loads every year, or about 20 loads per acre. They are generally carted after the seed time until the hay commences, and at other seasons when time permits. They are placed in a heap and are spread over the meadow immediately after it is cut. A *tombreau* is driven slowly along, and a man with a shovel throws it right and left as he advances, the soluble salts of potash have time thus to become mixed with the soil before the autumn rains, and the effect is very soon apparent—the grass becoming of a deep green hue, the moss disappearing, and the following year the timothy shows a wonderful increase. The utility of this we may say artificial manure is so well known in Quebec, that at this time a load of ashes sells for 50 cents, while 15 years ago it was worth only 12 cents, and a year or two before this the potash manufactories were obliged to throw away their ashes into the river; some 1500 to 2000 loads are now sold annually to the farmers about Quebec.

At Montreal, we believe, ley ashes can be bought at 10 to 12 cents per load, and yet it is not employed as a manure. The residue of Mr. Redpath's sugar refinery also furnishes a manure of high value, but our farmers at present do not appreciate the value of it. We intend to recur to this subject in a future number, showing in detail their fertilizing value compared with common stable manure. With this method of cultivation, the meadows last for 8 or 9 years with a future rich harvest. We saw a piece of 3 arpents in superficies, which had yielded during several years 1000 bundles of 16 lbs. weight, but the average yield is 250 to 300 bundles. Oats after meadow terminates the 12th year.

The system above alluded to is perfect in theory, and confirms the definition of theory, which is nothing more than practice explained by principles.