

Agricultural Legislation in Quebec Last Session.

CO-OPERATIVE AGRICULTURAL SOCIETIES
The law relating to such societies has been amended by inserting therein a new article as follows:

The minister may at any time have the books and accounts of any co-operative agricultural society examined by one of his employees.

"The officers of any such society shall, when required, submit such books and accounts for examination, and shall, to the best of their knowledge, make true answer to all questions which may be put to them regarding the same, or regarding the financial condition of the society."

At the International Agricultural Congress, held last year at Gand, a resolution was adopted recommending the examination by the state of the books and accounts of co-operative associations.

The number of such associations is increasing in the province. The most important ones are the Cheesemakers' Co-operative Association and the Tobacco Growers' Association, of the Yamaska Valley. Last year, the Cheesemakers' Association sold butter and cheese for more than \$1,300,000. Its capital exceeds \$10,000 and its reserve fund is \$5,800. It pays this year a dividend of 6 per cent. to the shareholders. The capital of the Tobacco Growers' Society is \$35,800 and its reserve fund \$16,000. It paid a dividend of 6 per cent. last May.

PROTECTION OF PLANTS FROM DESTRUCTIVE INSECTS AND FUNGUS DISEASES.

The new Act adopted last session enacts as follows:

It is forbidden to import into the province any plant or part of a plant attacked by destructive insects or the plant diseases hereinbelow specified. The entomologist, or his assistant or representative, has the right to enter any nursery, orchard, or other premises wherein there is reason to believe that there are plants of any kind. No one shall keep in his possession, nor offer for sale plants or parts of plants which may be infested by any of the destructive insects or plants herein-after specified. The owner or occupant of any lot of land where the existence of any of the said insects or diseases may be ascertained or suspected, must inform the minister thereof. The instructions given by the entomologist for the treatment or destruction of any plant infested by destructive insects or plant diseases must be carried out by the owners or occupants of nurseries or orchards.

Among the destructive insects and plant diseases to which the Act shall apply the following insects and diseases are expressly included: 1. The San Jose Scale, 2. The Brown Tail Moth, 3. The Gipsy Moth, 4. The Woolly Aphis, 5. The Black Knot, 6. Apple Canker, 7. Potato Canker.

When any one of the destructive insects or plants exists in a nursery, no plant or part of a plant can be removed or transferred elsewhere until the entomologist has given the owner a certificate stating that the instructions he has given for the treatment or destruction of the plants infested have been followed to such an extent as he deems necessary.

Every contravention of the Act renders the person guilty of the same liable to a fine not exceeding one hundred dollars.

LOANS TO FARMERS' CLUBS OR OTHER AGRICULTURAL ASSOCIATIONS.

A new Act enables the Minister of Agriculture to make, out of the appropriations, loans to an agricultural society or farmer's club or other agricultural associations for the purchase of registered live stock or for any other agricultural purpose.

There are now 642 farmers' clubs in the province and almost everyone of them owns registered live stock. Last year they spent \$38,492, 10 for the purchase and maintenance of such live stock.

Loans have been made to breeding syndicates, some of them owning registered Belgian draft horses. A few agricultural societies have also bought some. This breed of horses is very popular and their crossing with the Canadian mares has given most satisfactory results. There are now hundreds and hundreds of half-blood Belgian horses and fillies for which the farmers obtain or refuse very good prices.

COW-TESTING ASSOCIATIONS.

A law has been enacted in order to authorize farmer's clubs to form cow-testing associations among their members managed by the directors of the clubs.

A club may devote its funds, wholly or in part, to defray the expenses of such testing, with the consent of the minister. It may also give prizes to members of the association for herds of cows submitted to the testing by the society.

Experiments with Farm Crops in 1914.

The members of the Ontario Agricultural and Experimental Union are pleased to state that for 1914 they are prepared to distribute into every township of Ontario material of high quality for experiments with grains, fodder crops, roots, grasses, clovers and alfalfas, as follows:

No.	Experiments.	Plots.
1	Testing two varieties of oats.....	2
2a	Testing O. A. C. No 21 barley and emmer.	2
2b	Testing two varieties of two-rowed barley	2
3	Testing two varieties of hullless barley.....	2
4	Testing two varieties of spring wheat.....	2
5	Testing two varieties of buckwheat.....	2
6	Testing two varieties of field peas.....	2
7	Testing two varieties of spring rye.....	2
8	Testing two varieties of soy, soja, or Japanese beans.....	2
9	Testing three varieties of husking corn.....	3
10	Testing three varieties of mangels.....	3
11	Testing two varieties of sugar beets for feeding purposes.....	2
12	Testing three varieties of Swedish turnips	3
13	Testing two varieties of fall turnips.....	2
14	Testing two varieties of carrots.....	2
15	Testing three varieties of fodder and silage corn.....	3
16	Testing three varieties of millet.....	3
17	Testing two varieties of sorghum.....	2
18	Testing grass peas and two varieties of vetches.....	3
19	Testing rape, kale and field cabbage.....	3
20	Testing three varieties of clover.....	3
21	Testing two varieties of alfalfa.....	2
22	Testing four varieties of grasses.....	4
23	Testing three varieties of field beans.....	3
24	Testing two varieties of sweet corn.....	2
25	Testing two varieties of potatoes.....	2
26	Testing three grain mixtures for grain production.....	3
27	Testing three grain mixtures for fodder production.....	3

Each plot is to be two rods long by one rod wide, except No. 28, which is to be one rod square.

Any person in Ontario may choose any one of the experiments for 1914 and apply for the same. The material will be furnished in the order in which the applications are received, while the supply lasts. It might be well for each applicant to make a second choice, for fear the first could not be granted. All material will be furnished entirely free of charge to each applicant, and the produce will, of course, become the property of the person who conducts the experiment. Each person applying for an experiment should write his name and address very carefully, and should give the name of the county in which he lives.

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The Evolution of Commerce.

A recent issue of the Canadian Journal of Commerce places the total value of the World's commerce at the enormous figure of \$40,600,000,000. This stupendous amount of trafficking is carried on through the assistance of 55,802 sailing ships, 47,714 steamers and 625,000 miles of railroads. This mileage of trunk and branch roads is enough to girdle the earth twenty-five times, and we are sometimes prone to stand aghast at the monstrous locomotives and elaborate coaches which are "fearfully and wonderfully made" and think what a genius some man must have been who had the audacity to invent such a thing. But no one man did it at all. With steamships the semi-nude barbarian is responsible in part for their development. He it was who tied together a bunch of twigs and got it to float, or gouged out a log and with a flattened sapling propelled it through the water. Since that time a pole has been added and a small sheet, a nail here and a bolt there, an extra layer of wood or sheet of steel, a crude engine and a wheel, a larger engine and a screw; each man has added his small quota to the invention of the barbarian until we have palatial steamship which will plow across the Atlantic in less than five days, bearing in luxury almost five thousand human lives and thousands of dollars' worth of freight.

Railroads were not always thus. The gigantic locomotive with its string of one hundred freight cars is an evolution of the wagon on the ordinary road. As early as the middle of the sixteenth century tramways were in use in the mineral districts of England around Newcastle for the conveyance of coal from the pits to the river Tyne for shipment. In 1676 Lord Keeper North writes, "The manner of carriage is by laying rails of timber, exactly straight and parallel, and bulky carts are made with four rowlets fitting these rails, whereby the carriage is so easy that one horse will draw down four or five cauldrons of coal" (from 10.6 to 13.2 tons). Iron sheathing was later added to prolong the life of the rail, but this produced considerable wear on the rollers of the wagon, so iron wheels were introduced in the 18th century. In the intervening period iron rails of all descriptions were invented

and some had a flange to keep the flat wheels on the track, which principle has been applied to the wheel instead of the track. The Stockton and Darlington railway was authorized by parliament in 1821 and animal power was proposed, but on the advice of Stephenson, the engineer, steam-engines were adopted. At its opening on the 27th of September, 1825, a train of thirty-four vehicles, making a gross load of about 90 tons, was drawn by one engine, driven by Stephenson with a signalman on horseback in advance.

From the time of the first experiment development has been phenomenal. Power has been added and speed attained until the gigantic locomotives trailing an enormous tonnage now fly over 625,000 miles of steel rails.

The Sprucedale Stock Farm Sale.

The sale conducted by A. Watson & Sons, and C. F. Jackson, at the "Sprucedale" Stock Farm, St. Thomas, on Thursday, March 12th, was satisfactory to all concerned. A large number of stock of all breeds was offered and eagerly picked up by breeders and feeders. Clydesdales, Percherons, Holsteins and feeders in all breeds of cattle were offered as well as sheep and swine. The day was fine, but a cold, chilly wind made it rather unpleasant for those standing long in one position. Among the large crowd present were those who came particularly interested in one line of stock, and they were not absent when that particular breed was being sold. In the horses Lady Grey, a show-ring mare, sold for \$800, while other prices received ranged from \$150 to \$184. Time did not permit the representative to remain till the conclusion of the sale, but among the pure-breeds sold were some high-class Holsteins that had not been fitted for show or sale, but were brought out in ordinary milking condition.

The names of the Holsteins selling for \$100 or over and their buyers are given below:

Susie of Pleasant Valley; R. S. McVitty,	
Munsey.....	\$180.00
Beauty of Elgin County; R. S. McVitty...	160.00
Fanny Bly; R. S. McVitty.....	225.00
Queen May Lass; E. Siple, St. Thomas...	170.00
Lady Bedella; C. Butler, Middlemarsh.....	105.00
Beauty of Hengerveld; H. Johnson, Union.	120.00
Sprucedale; C. Butler.....	100.00

Farmers and Dairymen of New Brunswick meet.

With an attendance of over 200 delegates from the 180 agricultural societies of the Province and many other interested farmers, the 38th annual meeting of the venerable association was pronounced by those in attendance as one of the very best in its history.

The opening session was held in the Fredericton City Council Chamber, where the welcome of the city was extended to the Association by Mayor Hooper.

President W. H. Moore in his opening address emphasized the necessity of our farmers giving more attention to the quality of their products, and to the construction and maintenance of better highways. He believes New Brunswick farmers might do much more than at present to supply the demand for pure seeds. He commended the educational efforts of both Dominion and Provincial Departments of Agriculture, and urged his hearers to co-operate in the efforts of the governments. He gave it as his opinion that the rural clergy might do much both for agriculture and their churches by giving intelligent sympathy and assistance to the farmers of their congregations, and instanced the work of Rev. T. Hunter Boyd, lately of Waweg, N. B., and Rev. Father Burke, of Prince Edward Island, as shining examples.

Treasurer H. H. Smith responded to the Mayor's address of welcome. He believes there is no better agricultural land in America than in New Brunswick, and he proves from practical experience there is no reason why her farmers should not achieve pronounced financial success.

Hon. James A. Murray, the new Minister of Agriculture, made an excellent impression and spoke eloquently and optimistically. He was, he said, determined to do everything possible to attract the best class of people to take up the unused though excellent farming areas of the province, and his department would increase its efforts to do all it legitimately could to aid in agricultural development. Many enquiries are now coming from the West as to the opportunities in this province, and as well as the influx of strangers he expects to see some of our own people return to take advantage of the stir that is now being felt. The farmer's outlook here is excellent, with his fertile lands and a market demand far in excess of his present ability to supply it. Nearly every line of live stock and farm products is being imported. His Department, with the splendid assistance given by the Federal Department, will do all it can to spread the best information to be obtained upon agricultural subjects. In addition to the services of the experts the Department is this year opening schools at Woodstock and Sussex for technical instruction,