

Lumbering and Dairying in Quebec.

Work on the land being at a standstill, nearly everybody is cutting logs for lumber and for fuel. Wood choppers are so scarce, that many men who own large wood lots are unable to get as much cut as they would wish in order to supply the demand; but, after all, perhaps it is just as well that help is scarce, because some men are so concerned with the present that they would cut down all their wood without any thought of the future.

The good prices that dairy products brought during the past summer, and are bringing now, have encouraged not a few dairymen to feed more grain than usual in order to keep up the flow of milk as long as possible, and where the feeding is done intelligently, it pays well. Very few of the farmers here understand the compounding of balanced rations, and most of them feed what they raise on their own farms—principally timothy hay and oat straw. Stos are more popular than they were a few years ago, but many people still look on them with disfavor.

This is not a horse-raising county, scarcely enough being raised to supply the local demand, and consequently those who have to buy are forced to go into the market and pay good high prices. There has been a more active demand lately for beef cattle, and prices have advanced. New milch cows are selling at from \$20 to \$35 each, the price depending on the age and apparent quality of the animal. Live hogs are being bought for \$6.25 per cwt. Hens are beginning to lay again, but very slowly, and there is no danger of flooding the market for a few weeks at least.

Missisquoi Co., Que.

C. A. WESTOVER.

Short Courses at Truro in February.

One of the strong features of the Nova Scotia Agricultural College at Truro, is the short courses of a fortnight or so in the winter months, by means of which inexpensive education of the most practical kind is made available to those who cannot spare the time or money to take the regular two-year courses. Even for young men who contemplate entering the extended course later on there is no better preparation, so far as it goes, than the short winter courses; while for the son or father who wishes to inform himself regarding the scope, character and value of the work carried on at this institution, the short course affords the best possible opportunity for getting an insight into it at first hand. The short courses that have been undertaken in the past two years have been a great success, and an inestimable benefit to those who have attended—a statement which will be heartily confirmed by almost everyone who took advantage of them. The lectures and discussions in field husbandry; the talks on animal husbandry; and, better still, the practice in judging stock which is one of the strong features; the lectures and demonstrations in dairying, horticulture, poultry and veterinary practice, in all of which the faculty will be prepared to give courses this year, assisted by prominent representatives of the Dominion Department of Agriculture, as well as by a number of the most successful local farmers and stockmen—all this is worth many times the cost of attending. The course this year will commence on February 1st, lasting till February 16th. Tuition will be free; board is always obtainable at reasonable rates in Truro, and single-fare rates may be obtained on the railways. Write for further particulars to Principal Cumming, Truro, N. S.

Thirty-five Per Cent. to the Combines B-fare Breakfast.

To the Editor "The Farmer's Advocate":

I am not greatly in favor of the embargo being taken off our cattle. The cattle should be fed here; our soil is not inexhaustible. What is grown on the land should be consumed on the farm, if we are to keep up the fertility of our soil. If the embargo was taken off, we who have to buy stockers would have a miserable lot of the dairy breeds to select from. The beef breeds would all be picked up and shipped, with the exception of what we raise, which is not sufficient.

I hope you will use your influence against these combines, which are in evidence all over the country. They soon will have the last straw on the farmer's back. The "plumbers" investigation has let a little light on a system of fraud which no right-thinking man could countenance. The oatmeal millers have a combine; and when, after paying for a certain number of mills to stand idle, have a good rake-off to divide among the operators. The poor man with a big family has to pay his 35 per cent. tax to these barnacles before breakfast.

J. G.

United States Cattle in Bond.

Do Canadian customs officials keep any record of the number of American cattle that are bonded in the Western Cattle Market, Toronto, and the dates of arrival and departure of each carload? What is the regulation governing such cases? DEALER.

The Canadian customs officials keep no record of the cattle feeding in bond at the Western Cattle Market, Toronto. The only record is kept by the railways, and the necessary information is only furnished to the Government if a request to that effect is made. The cattle arrive at Toronto to feed, and are in charge of the railways. They are accompanied by the veterinary's certificate and other necessary papers, and when again loaded into the cars the American Government seal is affixed by the railway authorities, who, in the regular way of business, keep a record of the arrival and de-

parture of cars, the date, numbers, etc. So far as the Government is concerned, we believe the only record kept is at the place of entry and the port of departure from Canadian territory.

Electric Lighting of Farmhouses and Barns.

With the advent of the gasoline engine upon the farm, and due to its easy manipulation, and being always ready for immediate use, many farmers have been asking whether it is feasible or not to light their houses and barns by electricity.

It has occurred to them, that whilst they are running the engine for chopping or other purposes, that the surplus power of the engine might be employed for storing up electricity sufficient for their lighting requirements. That this can be done there is not the slightest doubt, whether by the use of steam or gasoline, but as to its being an economical means of obtaining light is very doubtful.

The very best of storage batteries upon the market to-day are very ticklish things to deal with; their efficiency is low, their upkeep high, and skilled attention is necessary to keep them in good condition. Even then the wear and tear in connection with the plates in the cells is very considerable, besides the first cost of the installation being no small item. An outfit complete would consist of a generator, countershaft, bearings and pulleys, belt, switch-board, batteries, cables, wires, lamps, and cell-testing appliances. Further, it is important that the battery should, if possible, be placed apart from the generating plant; in many instances a disused room or loft in outbuildings can be utilized, or a small building or lean-to erected. In either case the room should have as many windows as possible, to allow of easy inspection of the plates, substantial shelves or trestles erected, and the room should also be cool and well ventilated. As to the size of the plant, this will be regulated by the number of lights that are required, and the hours they are in use per day.

We will, however, assume that a plant capable of supplying 25 lights is required, but that not more than 10 are generally in use, and those for, approximately, five hours per day. Such an installation would cost complete, and fixed in position, in the neighborhood of from \$450 to \$500; not, of course, including the engine, which it is assumed would have sufficient surplus power to drive the generator charging the storage battery—from 2½ to 3 horse-power would be required.

If the battery were of sufficient capacity so as to be able to supply current for 25 lamps, burning during five hours when fully charged, but only 10 lights were in use, then, of course, the battery would supply current sufficient for possibly three days of five hours, after which it would be necessary to recharge the cells, which might take 8, 10 or 12 hours, according to the condition of the battery.

From this it will be seen that in order to have light for seven days it would be necessary to run the engine two whole days per week, and possibly more. If a smaller battery were employed, then it would mean running the engine three or four days per week, and possibly no chopping or other work required, so that the engine would be running specially to store up electricity. On the other hand, a larger battery might be used, and one that would be capable of storing sufficient current to run the 10 lights a week from one charging. This would increase considerably the first cost of the battery, and not only that, the expense in connection with wear and tear, depreciation and interest would add considerably to the cost of the light obtained. The writer is of opinion that it would be far preferable, and certainly much more economical, to simply have a generator from the engine as long as light is required. After starting the engine little or no attention would be required, and if so desired, an appliance might be fixed in the kitchen, so that the engine might be stopped without having to leave the house.

By adopting this system any ordinary man could, after a little instruction, operate the plant.

An installation of this description would include the generator, resistance, countershaft, pulley belt, wires and lamps, and the cost complete and fixed in position would be about \$200 to \$225.

Seeing that at most not more than three horse-power would suffice to drive the generator producing current sufficient for 25 lights, the amount of gasoline used would be but a small matter, and in connection with this it must be remembered that in the case where a storage battery was employed, extra gasoline would be consumed over and above that which was necessary to develop the power required for chopping, etc.

The chief advantages to be derived from the use of storage batteries are that in case of a breakdown in connection with engine, dynamo, belting, etc., the lights would not be interfered with; light could be obtained at a moment's notice, a convenience sometimes in the night, and generally it is more convenient, but there is just as much chance of the battery going out, and possibly more so, than the engine or generator, unless, of course, a skilled man be employed, and in that case his wages would almost pay for the gasoline consumed when running the lights direct from the generator.

Possibly when Mr. Edison has perfected his new cells that he is now working upon, and provided they are not too costly, the storage system upon the farm may become more applicable, but the writer is of opinion that with a gasoline engine the direct system is the

one most suitable to meet the farmer's requirements at the present time.

So far we have been considering the question of generating current for electric light by the aid of a gasoline engine. This might, however, be accomplished by steam, but certainly not more economically.

If storage batteries were adopted and were charged at the same time that the engine was being run for chopping or other purposes, then there would possibly be a little in favor of the steam engine, as far as fuel consumption is concerned, and especially so if straw were burnt in place of coal, then the economy in fuel realized would be in the same proportion as between the gasoline and steam engine when threshing, but it is when we have to produce the light direct from the generator that the use of the steam engine becomes prohibitive, for it would be necessary then to keep two men employed, an engineer and fireman, during the whole of the time that the lights were in use; that is, if straw were being burnt. If coal were used one man would suffice, but even then the wages of the engineer, assuming he was paid at the rate of only \$1.50 per day, would amount to about 75 cents, and possibly the same amount would be expended in coal, so that without taking anything into account for interest, wear and tear and depreciation, the cost for supplying only 10 lights would amount to \$1.50, or 15 cents per light per day. An average cost of lighting by electricity is about 50 cents per month per light, running 24 hours per day.

It will be readily understood that the cost given can only be approximate, since circumstances will naturally vary considerably, but they may suffice to enable the farmer to judge for himself as to whether or not the adoption of electricity for lighting the farmhouse, etc., is feasible.

Of course smaller sizes than 25 light generators are made, but as is the case with all classes of machinery, as time goes on more and more is demanded of it. It is therefore wise to commence with a machine with power sufficient to meet probable extra requirements, and especially so if the extra cost does not exceed, say, \$40 to \$50.

The ideal motive force for generating electricity is, of course, that of water-power, but, unfortunately, there are not many farms in the West where this is available, but if it is, there can then be no doubt that the generating of electricity for farm purpose can be carried out at a very small cost.

Windmills can be employed for generating purposes, and in connection with storage batteries might give satisfaction in some districts, but in connection with the direct lighting from the generator, it would be somewhat awkward if a calm set in at dusk, which often happens, and in which case the dazzling light of our old friend, the oil lamp, would be necessary for rescue from utter darkness.

A. BURNES GREIG.

Go to Guelph.

The January short courses in stock and seed judging at the Ontario Agricultural College have come to be looked for as an annual event. Hundreds of men and boys attend, including not a few experienced breeders, who find the judging pavilion a congenial and invaluable place to exchange opinions with each other, to get hold of the latest ideas in stock-breeding and husbandry, to get rid of fads and prejudices, and to brighten up their faculties of perception and comparison by competitive scoring and judging of animals. The course this year commenced on January 8th, and continues till the 20th. On January 8th there also commenced a practical short course in poultry, which is intended to run until February 3rd. The dairy course began January 2nd and concludes March 23rd, and in April there is to be a special course from 10th to 20th for milk producers and milk dealers. Fuller particulars, regarding any or all of these, may be obtained by writing President G. C. Creelman, O. A. C., Guelph, Ont.

Live Stock and Grain Growers' Annual Meeting.

The annual meetings of the Manitoba Live-stock Associations may be held in Brandon in 1906. Secretary George H. Greig was in consultation with Brandon civic authorities recently, as the holding of such meetings is conditional on the accommodation afforded for the educational work to be done.

The date of the holding of the show will be February 27th, 28th and March 1st. The Manitoba Grain-growers will take advantage of the other gatherings, and convene the latter part of the week at the Wheat City. The rough draft of the programme is as follows: Tuesday, a.m., annual meeting of the S. and S. association; p.m., regular class and stock judging; evening, convention and lectures. Wednesday, a.m., annual meeting of Cattle-breeders' Association; p.m., stallion shows; evening, convention. Thursday, a.m., Horse-breeders' Association; p.m., grain fair and stock judging; Thursday night and Friday, Grain-growers' annual convention.

Not in the Big Combination.

In a recent newspaper interview dealing with floating rumors, Hon. Melvin Jones, President of the Massey-Harris Company, declared: "We have not had, nor ever will have, any connection with the International Harvester Company, or any other implement company in the United States or elsewhere. Our company is absolutely independent, and runs its own affairs."

Renew! Renew! Renew!
Have you forgotten to renew?