HYDRO-ELECTRIC IN ONTARIO.

Ontario possesses the largest public ownership organization for developing and distributing electric power in the world. The Hydro-Electric Commission, appointed by the Ontario Government, is developing the great water powers of that province. At the present time 225 municipalities in Ontario are using hydro-electric power supplied by the Commission. Altogether 1,750,000 people are using 210,000 horse power and being served with many conveniences in lighting and heating. The Commission has six separate systems where water power is used for developing electricity, the principal one being at Niagara Falls.

ONTARIO'S GOLD AND SILVER.

Up to the beginning of this year the total value of the production of gold and silver in Ontario amounted to over 43 millions sterling. To this total the silver mines of Cobalt contributed nearly 34 millions sterling, the Porcupine Gold Mine over eight millions sterling, and the Kirkland Lake Camp gold to the value of over half a million sterling.

RAILWAY SLEEPERS FOR BRITAIN.

The Ministry of Shipping in London are arranging to bring away the stocks of spruce lumber collected at Prince Rupert, British Columbia, and have secured for that purpose a steamer now in that port. The "War Convoy," recently completed at Vancouver, is proceeding to New Westminster and Chemainus to secure a full cargo of railway sleepers, which is part of the first consignment on account of the order placed in British Columbia by the United Kingdom Timber Controller.

FARMS AND FARMING

Milking Machines.

Since the war the shortage of labour has been a very serious problem for the Canadian farmer. This shortage has been felt most keenly by dairy farmers as the problem of milking was always a serious one. Many farmers had therefore to face the alternatives of either reducing their stock or buying a milking machine. With some fears milking machines were bought, and have generally given good satisfaction. Mr. H. C. Hamill, the noted Ayrshire breeder of Markham, Ontario, has been using his machine for over a year and is well satisfied with his investment as shown by the following remarks: "Yes, the milking machine is a splendid investment, but there is one thing a man must do and that is he must make up his mind to keep things clean. A milker if properly cared for will produce clean milk, but if carelessly handled it can become the worst source of contamination imaginable."

One of the great advantages of the machine is that it relieves the monotony of farm life. Instead of all hands being on deck for milking twice a day all the year round, milking becomes a one man job. Even when other help is available it is more profitable for one man to go ahead and do the milking. There are always plenty of other jobs for the extra help to do such as cleaning out and feeding, and this work does not have to be done after the milking to produce clean milk, as the machine is tightly closed during milking. This reducing of the length of time taken up by chores is a very important point. The handling of the machine is simple, although a little mechanical knowledge is necessary. The cows are comfortable and once accustomed to the machine, which takes only a few days, will give larger returns than where the average farm hand is milking. On the other hand it seems to be well established that a really good hand milker will get as good, probably better, results than a machine, but good hand milkers are scarce among hired help. There is no milking machine that will milk a cow absolutely dry, and so "stripping" is necessary. Some agents, in their eagerness to make a sale, claim that their machines do not require to be followed by hand milking. They are doing their machine an injustice because some one is going to take their word for it and trouble will result. This fact has done more to prejudice farmers against the machine than any other cause. Further, as the machine does not milk absolutely clean there is a time when greater efficiency will result, and time be saved, by taking the machine off the cow when the machine does not take it as quickly as it would be taken by hand towards the end of milking.

As the attendant has plenty of time to finish the job the machine is kept at full working capacity.

It is of particular interest to find that cows which are bad tempered and unruly to milk by hand readily take to the machine, and cows which have the habit of holding up their milk let it down quite readily to the machine.

One man with a machine can do the work of three men milking by hand. Further the keeping of records is made easy as plenty of time is available to weigh the milk of each cow. The great point to be remembered is that cleanliness and care are absolutely necessary if good milk is to be obtained.

"Farm and Dairy."

Artificial Light for Laying Stock in the Winter.

The above heading may sound like a new fad to the uniniatiated, but while it is new it appears, from results obtained, to be a commercial success.

Some time ago one of the leading poultry experts of Canada thought that the short days of the winter did not allow of sufficient time for the laying hens to get enough food to produce eggs in quantity. Experimenting on this point the results of the Experimental Farms have so far indicated that this assumption was correct and the financial statement has shown a balance considerably in favour of the artificial light.

Pullets of the same breeding and age were taken and divided into two lots.

In each pen of twenty birds getting light two tungsten 40 watt lamps were used. They were turned on at 6 a.m., and left till daylight then turned on again at dusk and left till 9 p.m. This was started in November when the days became short and continued until the middle of March, when light was unnecessary. In the 1916-17 test the light pen laid 1,106 eggs with a total value of $54.93. The cost of feed was $22.53, the cost of light $2.40—a total cost of $24.73. This gave a balance over cost of feed and light of $30.20.

The dark pen laid 616 eggs with a total value of $29.46; cost of feed was $21.09, this gave a balance over cost of feed of $8.37.

In 1917-18 the number of eggs was not as high as the previous year in either case for those months. The six months' results are given.

The birds with light for six months gave 2,470 eggs valued $136.32. The cost of feed was $55.48, cost of light $3.20, balance $77.64.

Those without light gave 2,242 eggs valued $118.90, costing for feed $60.01, balance $58.94.

Thus for the two years the pens with light produced a balance of $107.84, and those without light $81.10, a cash balance in favour of the light of $26.74, or $13.37 per annum.

The conclusion may be drawn that for early winter eggs during the short days the light does increase the egg yield, but later in the season the yield is not as heavy with the birds that have not had the light. The advisability of using light therefore will depend upon what is wanted.

If early winter and high-priced eating eggs are desired the lights are an advantage; if eggs during the hatching season are the object in view the lights are a disadvantage. The experiments of the originator of the idea have not yet been published as the test covers a period of five years.—Dom. Experimental Farms Note.

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The appetite of the animals is a fair guide as to how much and the kinds of feed necessary for best results.