



ey-



sary to lift the  
lock.  
The Jumbo's big  
locking hoist on  
ment for ropes  
steel, critically  
ment. Shipped  
re; guaranteed

toist and Wire  
her, we make  
her sizes Hall  
capacity 400  
4 tons. Mail  
name and your  
for the catalog  
at BIG FREE  
R-right now!

Profit

dy  
scale



an to the

ghing, and  
ould get.  
Canadian  
s through

00 pounds—  
interested?  
in the Last  
—and ho  
Scale.

Mail  
Now  
Coupon

Please send me  
free of charge  
e booklet, "The  
it in the Last

/ SCALE CO.  
ntario

# The Farmer's Advocate and Home Magazine

PERSEVERE AND SUCCEED

ESTABLISHED 1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1879

Vol. XLVIII.

LONDON, ONTARIO, FEBRUARY 6, 1913.

No. 1063

## EDITORIAL.

Will some of our agricultural scientists undertake to explain precisely why clay land, in Canada, usually proves better adapted to alfalfa than equally well drained loam? Is it a question of alkalinity or what? An interesting point awaits disclosure here.

If the production of milk is not making the advance in Canada that some regretfully think is the case, is it not because the dairy farm which requires so much manual labor is the most seriously short-handed? We must have feeders and milkers as well as cows.

With the chartered banks declaring dividends of from ten to fourteen per cent., fat reserves being laid away, and borrowers warned of having higher rates to pay for their loans, the depositors will naturally expect to see something doing by the urbane clerk who marks the rate of interest on the margin of the little book in which the savings deposits are credited. Why not?

A few excellent hints on advertising were offered the other day by Peter McArthur. Tell facts, he says, instead of pumping hot air. Make the facts appeal, but stick to facts. Such advertisements are instructive. They create good business, and do not re-act. It is not good business to push a good article with untrue claims. More and more strongly does experience emphasize the great truth that Honesty is not only the best ethical principle, but the best business policy.

If electricity can obviate the necessity of hired help in the farm home, its economy for many farmers is indisputable. The wages and board of a girl amount to two or three times the cost of two horse power of electric energy. Of course electricity will not do all that an efficient maid can accomplish, by any means, but by lightening work outside and inside the house, it should enable many families to get on nicely alone, where paid domestic service is, at present, the alternative of over-work.

In estimating rations, remember that much of the silage weighs light this winter, having been made from shocked corn that had lost much of its moisture before filling. We find that a big ensilage forkful of our silage weighs about 13 pounds, as compared with 15 to 18 pounds last winter. And it was made from extra well eared Longfellow hill corn, whereas the previous year it was made mostly from rank-grown dent corn, also well eared, but averaging a bigger percentage of stalk and leaf than the crop from which we filled in 1912.

If the Dominion Grange wishes to extend its influence and become an important factor in molding public policy, it should turn its attention toward constructive criticism. At present it is largely destructive. Habitual indulgence in this line of attack begets an attitude of mind which the general public scarcely distinguishes from "knocking." There are many keen thinkers in the Grange, and their criticisms are usually incisive, but lose some of their effect for the reason mentioned. It is easier to win support for a good policy proposed to supersede a bad one, than for a policy of mere demolition.

## Electric Light Per Horse-Power.

A very important practical point in determining the economy for farm purposes of electric energy purchased on a flat-rate basis is the amount of current required for lighting. There are some power operations, such as milking and cream separating, that synchronize with lighting. What is the minimum load which will run a milking machine or a cream separator, and keep a few necessary lights going at the same time?

A four-unit milking machine of the kind most commonly used in Canada at present can be run with about one and a half horse-power. A cream separator, suitable for farm purposes requires less than half a horse-power. In either case this would leave an odd half horse-power available for lighting. How many lights will this run? With the carbon-film lights in common use, a horse-power of electric current will run 13½ sixteen-candle-power lamps.

The same horse-power, turned into the most efficient makes of Tungsten lamps, will supply thirty twenty-five-Watt lamps, each producing 18 to 20-candle-power of light, which is whiter and more agreeable than the light from the old-style fixtures. The Tungsten lamps are a little more expensive and not quite so long-lived, the filaments being subject to breakage by jarring, though not nearly so much so as was the case with those first made. A prominent foundry in the city where this paper is published has lately equipped its plant with Tungsten lamps, using spring shock absorbers in places where vibration is greatest. A carbon-film 16-candle-power lamp ordinarily retails at 25 cents, and a 32-candle-power at 30 cents. A Tungsten 18 to 20-candle-power ordinarily retails at 55 cents, going considerably higher with some makes as the candle-power increases.

Through the Hydro-Electric Commission, however, the hydro departments of various municipalities have been able to secure certain makes of Tungstens which they can retail at a uniform price of 40 cents apiece, for those of 25, 40 and 60 watts capacity. Tungstens are the newer and much the more efficient lamp and especially adapted for use with switches, which reduce jar. No doubt farm users of hydro will be enabled through the Commission to obtain them at a minimum cost.

## The Day of Electricity.

The day of electricity in Ontario farm practice has arrived. Current is already being used by a few farmers in a tentative way with gratifying results. Estimates are being established, data secured and experience obtained, which will make out such a case for hydro-electric energy as a farm power, that demand for it will develop to an enormous extent. We venture the prediction that within five or ten years electric distribution wires will be as common a sight in some parts of rural Ontario as telephone wires are to-day. This statement is made soberly, deliberately, and with a clear knowledge of the essential facts bearing on the problem. We have not jumped at conclusions. While all along hopeful of the advantages of hydro-electricity for farm purposes, we have persistently stayed our enthusiasm with facts and figures.

With the co-operation of Prof. Wm. H. Day, of the Ontario Agricultural College, we have gone into the subject thoroughly. Following Prof. Day's notable contribution to our 1907

Christmas Number, we referred to him a number of practical questions which, in the light of some carefully conducted original experiments he answered through "The Farmer's Advocate" of March 21st, 1912, with the following general summarized results:—

Assuming electricity at a flat rate of \$50 per horse power and gasoline at 20 cents a gallon, the cost of grinding grain was a trifle higher with electricity when the current was used 3½ hours per day. When the current was used only one hour per day the cost was very high as compared with gasoline, but when it was fully employed for 12 hours per day, the cost of grinding was less than one-third the cost of grinding with gasoline at 20 cents a gallon. This left out of consideration labor, oil and durability of motors. These experiments were very welcome, because they brought the comparison of hydro-electricity and gasoline down out of the cloudland of generalities in which it had been enveloped, and gave the rural public a basis to figure on.

Again lately, at the Ontario Experimental Union meeting in Guelph, Prof. Day contributed an estimate that at 20 cents a gallon—the price of gasoline is higher than that now—less than thirty dollars a year would buy the gasoline necessary to do all the grinding, pumping, cutting, pulping, washing, sawing, separating and churning on a hundred-acre farm. Yet notwithstanding Prof. Day's experiments and estimates, which may be accepted without question except for the advance as noted in price of gasoline, we have finally come to the conclusion that electricity is the farm power of the early future. In some cases it may, perhaps, be generated by gasoline, in others by small local waterpowers harnessed to private or co-operatively owned dynamos, but thousands upon thousands of farmers will use the current supplied through the Ontario Hydro-Electric Commission. Why?

Because it will do many things that are impracticable with other forms of power, and when harnessed up to all the purposes which can be found for it on an up-to-date farm, its continuous employment will bring down the cost per unit of energy to a very reasonable figure indeed, even allowing the present high estimate of \$50 per horse power, which will undoubtedly be reduced as time goes on, whereas the prices of gasoline and coal are rising, and will continue to rise. The case for hydro will, therefore, improve from year to year. Even on the present basis a very strong plea can be made for it on large dairy farms, especially where milking machines are in use. Here is what is being, or shortly will be, done on an Oxford County farm with two horse power costing \$100.00 per year:

Milking thirty cows by machine, running a cutting box, grain grinder, drag saw and buzz saw, emery wheel and grindstone, root pulper and fanning mill. Moving the motor once a week to the house, they operate the washing machine. Other household attachments such as electric flat iron, electric air heater, electric water heater, electric body warmer, electric vacuum cleaner, and electric toaster, are operated by merely connecting them up to the electric light wires and other connections specially provided when wiring the house. In addition, both house and barn are well lighted, and a large beacon light, outside the house, is kept burning, except when there is heavy demand on current for power purposes.

Supposing hydro had no advantages whatever