



Farming

A Paper for
Farmers and Stockmen



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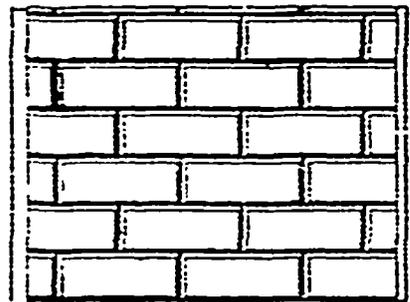
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Hatches the largest per cent. of fertile eggs at the lowest cost.
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FARMING

VOL. XVII.

MARCH 27th, 1900.

No. 30

Regulating Prices for Eggs

A meeting of egg exporters was held in Toronto last week for the purpose of regulating prices for eggs during the coming season and discussing other matters of interest to those engaged in this important trade. The exporters claim that the prices paid last season were too high to admit of a profitable business being done with Great Britain. It was also pointed out that last year the United States had, in order to develop a market, shipped to England large quantities of eggs, which were sold at such an extremely low figure that Canadian exporters could not compete with them.

Whatever grounds there may be for forming a combine to control prices it will be gratifying to egg producers throughout the country to know that the scheme has fallen through and that the country dealers returned home without anything definite being accomplished in the way of pre-arranging prices. We are of the opinion that what is needed more in the development of our export egg trade is not a combine to control prices but some arrangement whereby eggs could be gathered from the farmer and sent forward in good condition. A great many eggs are partly spoiled before they ever start on their journey to the Old Land and in many cases before they leave the farm. If some scheme could be inaugurated whereby the eggs could be secured from the farmer when fresh and kept in as good condition afterwards as possible, we believe it would help producers and exporters as well, much more than forming any combine of prices. Some system of co-operation between the local dealer and the farmer might be arranged in many localities whereby all eggs could be collected when fresh and kept as much as possible in that condition till they reached the English consumer. It is quality that counts in the British markets, and where that is supplied there should not be much difficulty as to prices.

Care of Young Lambs

There is no animal kept on the farm whose young require more care and attention than the sheep. Especially is this true if the lambing season comes during the winter or early spring. While old, careful ewes, that have the instincts of motherhood well developed and udders full of milk, cause comparatively little trouble if good, comfortable pens are provided, the yearlings or two year-olds with their first young ones may cause a lot of trouble if not tame, and if they have been neglected. The income from the sheep depends largely upon the lambs she raises, and if she loses them the chances of securing a good income from her are past for a year at least. The careful shepherd should therefore plan to have every sheep raise at least one lamb, and to accomplish this should be willing to sacrifice a little of his time and, if necessary, his sleep. The large Scotch and English sheep raisers have their night shepherds, who stay with the flocks through the night to see to the lambing ewe. Some sheep farmers make a practice of visiting their stock a couple of times during the night in the breeding season. This may be quite a task, but it will pay in the crop of good, strong, healthy lambs that will result from such care and attention.

Where a large number of sheep are kept it is a good plan to have a number of little four-foot-square pens that open out for use and can be folded up when not needed. An examination of the udders when the ewes are at the troughs eating will generally show how near lambing they are, and those due within a day or two can be put into the small pens, where they do not need so much watching. The ewes can be kept in these enclosures until the lambs are several days old. Twins are much less liable to be disowned when the ewes are shut in by themselves and the lambs cannot get away from their dams. These pens are inexpensive; can be put away when not in use, and are always ready for use.

Very often young lambs are lost by getting a chill when not looked after properly. A remedy recommended for this, and one that will warm up the lamb as quickly as by any other plan, is to submerge it in a pail of water at a temperature of 100° Fab., just keeping its nose and ears above water. Keep the lamb in the water for a few minutes, and, after rubbing it as dry as practicable without hurting it, get some milk into its stomach. Care must be taken so as not to overdo the feeding if it is done by hand; there is no danger of it getting too much from its mother's udder. A little food, often and hot, is the rule in lamb feeding. Ewes in good condition, and which have udders full of milk, are usually able to feed their own young, and nothing will take the place of this condition, which is the result of the feed and treatment they have received the month previous.

Locating the Winter Show

At the live stock meetings which take place on Thursday and Friday of this week the permanent location of the Provincial Winter Show will, no doubt, be decided upon. There are hardly two opinions among breeders as to the advisability of permanently locating the show at some central point where suitable accommodation in the way of buildings, equipment, etc., can be secured. The interests of the show, as well as of the exhibitors, demand that something of this kind should be done in order to insure the future success of the show.

In regard to the place where the show is to be located there is a very much wider difference of opinion, though in this connection only two places, Brantford and Guelph, are prominently mentioned. To decide between these two is a task which we trust our stockmen will perform to the satisfaction of all concerned. Both places can, no doubt, put forward good reasons why the show should be permanently located in their midst, and it will be for those who have the work of locating in their hands to weigh these carefully, and decide only for the place that is best suited in every respect for the purposes of such an organization as the Provincial Winter Show. In making a decision, all personal leanings towards one city or the other should be sacrificed, and the claims of each place decided upon their merits. The decision that will be arrived at on Friday will not be one affecting only the present, but one that will affect the success of the show for many years to come. From what we know of the breeders of this province we believe they will approach this matter in a fair and impartial manner, and if they do, whatever place is selected

cannot help but give satisfaction and prove beneficial to provincial live stock interests with which this show is so closely connected.

A Trip Through Manitoba

By Joseph Yuill, Carleton Place, Ont.

Having been honored in company with Mrs. Yuill with an invitation to attend meetings of the different breeders' associations held at Winnipeg in February, we accepted the invitation. When we arrived in the city we found it greatly crowded, as all the different breeders' associations, such as horse, cattle, sheep and swine, poultry and the dairy convention, also the fraternal associations (Freemasons, Oddfellows, Orangemen, Foresters, Royal Templars), the lumbermen and the curlers' bonspiel met in the city at the one time. All the railways running into Winnipeg sold one fare tickets. Owing to the Manitoba Hotel being recently destroyed by fire it was difficult to obtain accommodation, but fortunately Miss Cora Hinds, secretary of the Dairymen's Association, had previously obtained accommodation for us at the Hotel Leland. Many had to get their meals at restaurants and hotels and lodge over a mile from them. But the citizens of Winnipeg proved equal to the occasion and threw open their homes for the accommodation of visitors, and when the rush was over they seemed to be all comfortably settled.

The breeders' meetings were all well attended and the business was all disposed of on Thursday night with the exception of the poultry. We had our "crammer" with us and the association provided us with one-half-dozen chickens which we fed three times a day all week. On Friday we killed, dressed and packed them ready for the British market. The poultry industry has been very much neglected in that province and therefore our illustrations proved very interesting. The hall was crowded every day during the week. We were kept very busy feeding the chickens three times a day, at 10 a.m., 2 p.m. and 8 p.m., and we were also expected to address one or more of the breeders' meetings every day at one of their gatherings.

H McKellar, Esq., Superintendent of Farmers' Institute, being present, thinking we could do some good among the people of Manitoba, asked us if we would attend meetings at Crystal City, Portage la Prairie, Neepawa, Brandon and Emerson. Taking into consideration the fact that the notice was so short the meetings were well attended with appreciative audiences. The subjects which were the most interesting were, "Care and Management of Dairy Cattle," "Raising Steers for Beef," "The Bacon Hog," "Care of Milk for Cheese and Butter-making," "Butter-making in the Home Dairy," "How to Select the Best Laying Pull-lets," "Feeding Hens for Egg Production in Winter," "Fattening Chickens for the British Market," "How to Raise Young Turkeys."

We visited the Government Farm at Brandon, and, through the kindness of the efficient superintendent, Mr. S. A. Bedford, were escorted through the buildings, where we found specimens of nearly all the different breeds of cattle we have in Ontario. The cattle representing the beef breeds were exceptionally good. At that station there is an experiment being conducted in feeding steers dehorned and those with the horns on. So far the results are in favor of the steers with the horns on. We visited a creamery at Brandon which is running all winter, and is equipped with all the modern appliances for making butter.

At Emerson we saw where the firm of Gordon & Ironside, of Winnipeg, were feeding five hundred steers for the British market. They were enclosed in a piece of bush on the banks of the Red River, with temporary sheds to go into at night. These sheds were built of poles and covered with straw. They were being fed all the cornmeal they would eat without wasting any, which was eighteen pounds per day per animal, with all the good high land prairie hay they could consume; they were a fine lot of

steers. There were about five hundred pigs in another enclosure fed on ground corn and water out of the river; the pigs also are doing well.

Our meetings were not so well attended as they would have been had the time for advertising been a little longer. In one case the secretary was in the woods, and did not get the notice of the meeting until the previous evening. Some of the meetings were held in the evenings, as it was more convenient for railway accommodation, and were not so well attended as those held in the afternoon. At all our meetings we met people from Ontario whom we knew, and in every case those we met were well pleased with the country, and many would not return to live here under any consideration.

This has been a very fine winter; no blizzards, but the roads have been very bad, not enough snow for sleighing, and in some places the drifts are so deep it is almost impossible to get through with wheels. If no unforeseen events occur to retard progress it is bound to be a great country. The Government of Manitoba recompense their Institute workers very liberally, paying each speaker four dollars per day and all expenses.

Fattening Poultry

The Royal Agricultural Society of England has published an article on the fattening and marketing of poultry. This article treats of the poultry industry in the East Riding of Yorkshire; poultry fattening at Birdsall, Yorks; the sale of fowls by weight, and the by-products from chickens. Feeding experiments at Birdsall are briefly reported. In one test thirty-two chickens in three weeks consumed 188 pounds of meal, $7\frac{3}{4}$ pounds of fat, and $7\frac{1}{4}$ gallons of skim-milk. At the beginning of the test the chickens weighed from 3 pounds 3 ounces to 4 pounds when fasting, and gained from 10 ounces to 1 pound $9\frac{1}{2}$ ounces. In the author's opinion, to obtain a fine quality of poultry it is necessary to confine the fowls in cages for three weeks. If, however, it is desired to produce flesh at a minimum cost, it is considered more economical to confine the birds only a fortnight.

The author believes that proper attention to the by-products from chickens would materially increase the profits in fattening poultry. It is suggested that chickens' feet be used for the manufacture of jelly, and the necks for soup-making; that the livers be sold separately; that the feathers from cocks' necks be utilized for tying artificial flies for fishermen, and that the feathers be utilized in other ways. The gizzards are regarded as nutritious and a salable product. It is further suggested that the offal be used for fattening pigs. The value of the droppings as manure is also spoken of.

Prince Edward Island Dairy Association

The annual meeting of the Prince Edward Island Dairy Association took place at Charlottetown on March 8th. All parts of the province were well represented, and the meeting was spirited and earnest. Much work was accomplished. The president, Mr. Anthony Simpson, Cavendish, presided, who in his opening address among other things said:

Our co-operative dairying industry during the eight years of its existence has prospered beyond our most sanguine expectations, and is now becoming the mainstay of our farmers. Still there is room for growth; the business is capable of being enlarged to much greater proportions if our people would give it that attention which its importance demands.

A great many of our patrons have still much to learn with respect to the proper care of their cows during the winter season. Warmer stabling must be provided and

proper feeding, easy access to water keeping up the flow of milk, until about six weeks of the time of calving. Our coarse grains, as well as our roots, can be fed to stock with more profit to the farmer than by disposing of them in any other way, and by this means the soil is not exhausted, but rather increased in fertility.

More attention should be paid to securing the most profitable cows for dairying purposes, which give good returns as milkers, and that when too old to keep for dairy



Apiary and Residence of F. E. French, Oshawa, Ont.

purposes or from other reasons are not profitable as milkers, will be suitable beef.

In order to maintain the reputation of our cheese and butter it is of the greatest importance that every care should be taken to have the milk delivered at the factories in the best possible condition. Absolute cleanliness should be the rule with respect to all milk pails and cans; clean stables or yards where the milking is done. Milk cans over night must be kept away from all contaminating influences, and if the slightest taint is noticed on milk in the morning we should not send it to the factory.

Great care is also necessary in the feed given to cows and the places where they are allowed to graze—swamp and marsh grasses often give the milk a flavor which unfits it for butter or cheese making. The feeding of turnips also, except it be to a very limited extent, injures the milk, and turnip tops should never be given to cows supplying milk to factories, and the law against their use should be strictly enforced.

The directors next made their annual report, setting forth the work of organization of the association last year, and the work done during the year. This association was organized last March in connection with the Cheese Board, at the instance of Prof. Robertson, who, on behalf of the Federal Government, promised a bonus of \$300 to the association, provided the Provincial Government would give \$400 additional. This money has been paid. To augment this sum of \$700, a levy of 1¼c. per thousand pounds of mill: received was placed upon each factory and creamery in the province. The total receipts from this levy was \$507.80. Mr. Fraser T. Morrow was engaged as instructor at \$100 per month. A report of the business of the cheese and butter factories of the province for 1899 was submitted, which showed that the year 1899 has been a remarkably prosperous one, amounting to the handsome sum of \$513,000, a marvellous growth since 1892, when it was not more than \$10,000. There is not the least doubt but the million mark will be reached this present year.

The report of the secretary-treasurer, Mr. Dewar, showed the total receipts of the association for the year 1899 to be \$833.16 and the expenditures \$815.06, leaving a balance of \$18.10.

The cheese and butter instructor for the province, Mr. F. T. Morrow, in presenting his report stated that the number of cheese factories in operation last year was 34 and the number of creameries 6, besides two skimming stations. He found the majority of the factories in good condition and doing good work. A few had insufficient capacity, being too crowded, and a few were not as well kept as

they might be. The milk delivered showed in many cases a little carelessness and neglect on the part of the patron. Many whey tanks were badly neglected causing bad flavors in the product. The only remedy for this unless the whey is fed at the factory is to keep the whey tank in the best possible condition.

It was resolved that the sum of \$800 be asked from the dairy stations this year to successfully carry on the work of the association, to engage one or more instructors, etc.

The election of directors resulted in the following:— Robert Jenkins, John Anderson, John P. Brennan, Arthur Simpson, Lachlan McDonald, D. P. Irving, James and E. MacDonald. J. A. M.

World's Product of Sugar

The following statement regarding the world's production of sugar from a recent issue of the *Price Current* will be found of interest to beet sugar promoters in Canada:

While the beet sugar producers have been borrowing trouble over freedom of trade between Puerto Rico and the United States, they might study the figures as to sugar production. The treasury bureau of statistics has prepared some interesting figures on the sugar production of the world. These show that, while in 1840, 95 per cent. of the world's sugar crop was from cane, in 1899 only 34 per cent. was from cane, 66 per cent. being from beets, which, in 1840, supplied only 4 per cent.

The world's cane sugar crop of 1899 would little more than supply the demand of the United States. In the year 1900 it is estimated there will be produced 5,575,000 tons of beet sugar, and only 2,862,000 tons of cane sugar. Even should all the sugar of Cuba, Hawaii, and Puerto Rico come into the United States free it could not supply the demand which last year brought 723,336,352 pounds of best sugar into this country from Europe. Beet sugar has captured the markets of Europe and supplies one-fifth of the imports of sugar into the United States.

The following table shows the tons of production of cane and beet sugar in the principal producing countries of the world in the sugar year of 1899-1900:

CANE SUGAR PRODUCTION.

Java	*722,000	Australia.....	140,000
Cuba.....	400,000	Louisiana.....	132,000
Hawaiian islands	275,000	All other.....	868,000
Brazil.....	175,000		
Mauritius.....	150,000	Total.....	2,862,000
	*Export.		



A young poultrywoman feeding her chicks

BET SUGAR PRODUCTION.

Germany.....	1,780,000	Holland.....	170,000
Austria.....	1,120,000	All other.....	275,000
France.....	960,000		
Russia.....	885,000	Total.....	5,480,000
Belgium	290,000		

The following table shows the world's production of beet and cane sugar at decennial periods from 1840 to 1900,

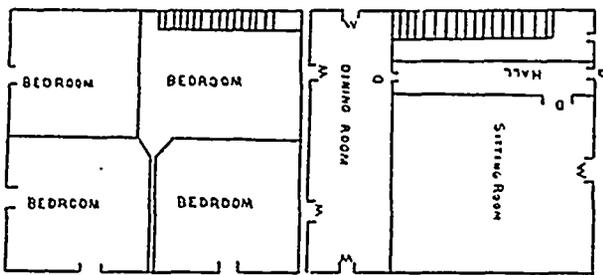
the figures indicating thousands of tons, and the percentage which beet supplied the total world's product at each period named :

Year.	Cane sugar.	Beet.	Per cent. supplied by beet.
1840.....	1,100	50	4.35
1850.....	1,200	200	14.29
1860.....	1,510	389	20.43
1870.....	1,585	831	34.40
1880.....	1,852	1,402	43.08
1890.....	2,069	3,033	63.70
1900.....	2,862	5,575	66.08

Suggestions Wanted.

Mr. James Larden, Cache Bay, Ont., sends us the accompanying plan of his house, and writes for information regarding it as follows :

I have a log house, 28x26, divided off as below. I want to put a kitchen to it about 20x16, with a second story to



Plan showing upper and lower floors of Mr. Larden's house

it. As I am a poor hand at designing and planning I would thank any of the readers of your popular journal for a suggestion or two with a view to convenience and ornament, and, of course, keeping within fair economy.

Raising Calves for Profitable Beef Production

In press bulletin No. 11 issued by the Nebraska Experiment Station a very interesting experiment is reported as to the cost of raising calves for profitable beef production. A number of cows were purchased in 1897 of good quality, showing evidences of either Shorthorn or Hereford blood, and weighing from 650 to 1,010 pounds in fair condition. When selected they were in herd with two bulls, one a pure-bred Shorthorn and the other a pure bred Hereford.

These cows and heifers were bought at \$30 per head. By February 1st, 1898, they had made fine growth, were in fine order, and would fairly be worth \$40 per head, and therefore the cost of calf production was figured on that basis. As all the calves were dropped subsequent to Feb. 1st, 1898, that date was used as the starting point in figuring the cost of the calves and the expense of keeping the cows for one year.

The total cost of feed for the cows for the year (Feb. 1st, 1898, to Feb. 1st, 1899) was \$70.09, consisting largely of alfalfa, fodder corn and pasture. Calves were allowed to run with their dams from date of birth to April 25th. On that date two calves were put in barn, and each calf started upon six pounds of alfalfa hay and one pound of mixed feed per day. Feed mixture was composed of one pound of corn and oats together, of which $\frac{2}{3}$ oats and $\frac{1}{3}$ corn by measure, 1 pound bean and $\frac{1}{4}$ pound oil meal. On Oct. 22nd, 1898, all the calves were weaned and started upon alfalfa and feed mixture, composed of corn and oats ground together in proportion of $\frac{1}{3}$ oats and $\frac{2}{3}$ corn by measure. Feed was gradually increased to 20 pounds alfalfa and 4 pounds of ground corn and oats per day to each calf, and continued till Jan. 25th, 1899. At that date one pound of bran was added to the daily ration, and this feed was continued to April 1st, 1899.

The financial statement of the cost of the six calves is as follows :

Total feed consumed by calves to April 1st, 1899, was as follows :

17,320 lbs. alfalfa of medium quality, valued at \$3 per ton.....	\$25 98
36 bush. corn, at 25c. per bush.....	9 00
23 $\frac{1}{3}$ bush oats, at 25c. per bush.....	5 83
Cost of grinding 2,760 lbs., at 5c. per cwt.....	1 38
460 lbs. bran, at \$9 cost per ton.....	2 07
18 lbs. oil meal, cost \$1.45 per cwt.....	26

Total cost feed consumed \$44 52

At a very conservative estimate these calves are now worth \$4.50 per cwt., or a total for present weight of 4,355 lbs. of say \$195 98
Or \$32.66 per head.

Deducting cost of production, including cost of keeping cows, say.....	\$70 09
Interest on value of cows at \$40 per head, \$240 for 1 year at 7 per cent.....	16 80
Value of feed consumed by calves.....	44 52

Makes total cost of calves to date. \$131 41 1.35

And leaves estimated net profit on six head to date \$64 57
Or say \$10.76 per head.

From statement of weights and gains it will be noted total gain for 160 days, October 22nd to April 1st, was 1,405 lbs., or an average daily gain of 1.46 lb. per head per day. For the 95 days, October 22nd to January 25th, the gain was 745 lbs., or an average daily gain per head of practically 1.3 lb., while for 65 days, January 25th to April 1st, the gain was 660 lbs., or practically 1.7 lb. per head per day.

Deducting from the total cost of feed consumed \$44.52, the cost of the feed used by the two calves August 15th to October 22nd, \$2.30, the feed used from October 22nd to April 1st by the six head cost \$42.22. This for 1,405 lbs. gain would make each 100 lbs. of gain at an expense of say \$3. The average daily feed ration for 160 days cost say .0254 cent per day, with compensating average gain of 1.46 lb. per head per day, which at \$4 50 per cwt. would be worth .0657, practically a profit of 150 per cent. on cost of feed consumed.

The calves on June 30th were well developed for future usefulness, were in fine, thrifty condition—not very fat—and it is the intention to full feed, market in the autumn of this year, and report further results.

Blanketing Horses

For eight years it has been my custom to blanket horses which are warm and wet after a hard drive. The results have been very satisfactory, and there are physiological reasons why they should be. Rapid evaporation extracts heat rapidly; the rapid extraction of heat causes the great network of capillary blood-vessels to contract, thus causing internal congestion. Many have observed a horse standing with front and hind feet closely together and spinal column curved upward, till he resembled a dromedary, on a cold morning after being put away warm without blanketing. The desideratum is not drying off quickly, but the application of a woollen covering, that doesn't absorb heat rapidly, but prevents rapid radiation, thereby preventing the impairment of muscular tissue, which will sooner or later be recognized in muscular soreness. Not only this, but the internal organs—liver, lungs and intestines—have to accommodate an abnormal quantity of blood if the surface is cooled rapidly, resulting in serious impairment of their functions. Retained heat on the surface keeps up a normal action of the skin. The sweat glands cease to exercise gradually, and the oil glands at the roots of the hair functionate normally, hence the smooth coat of soft and pliable hair we find in the morning on the hard driven horse which has been properly blanketed at night. These statements refer to stables not artificially heated. The writer

once broke through the ice while crossing the river. The temperature was considerably below the freezing point. A couple of good blankets wrapped about him enabled him to ride six miles with comparative comfort (and no unpleasant after-effects), without which there would have developed much muscular soreness, the explanation of the same having already been given.—*L. E. Barton, in Western Horseman.*

CORRESPONDENCE

A Withdrawal

To the Editor of FARMING:

I wish to withdraw that portion of my letter in FARMING March 13th in which it reads thus: "I have reason to believe that Mr. G. W. Miller wrote the report of the Ontario Show for the *Canadian Poultry Review* as published in the February issue." I have found that the information I received was incorrect in that particular, and therefore I wish to make the correction through the same medium as I used on that occasion. Thanking you for your many favors.

WM. COLLINS.

Peterboro', March 22nd, 1900.

Locating the Provincial Winter Show

To the Editor of FARMING:

Your's came duly to hand some time ago, requesting me to write as to the location of the Provincial Fat Stock and Dairy Show. I may say that I agree with the other writers and believe it will be the better way to have it located permanently at some place where it will accomplish the greatest amount of good.

First of all, as an educator. Prof. Day has already shown very clearly that the farmers of the Dominion, who are going to the expense of educating their sons at the O. A. C., should have every possible encouragement, and also the ex-students who meet annually at the Experimental Union from all parts of the country, should be thought of in locating this important annual event. The coming together of so many educated farmers, who are at the practical work, (rubbing together as iron sharpeneth iron) who will go away each year bright to accomplish more of the same kind of work that is winning for Ontario a very important position in the agricultural world, is of great importance. If Ontario is going to hold her own in stock-raising there is no time to waste, for there are hustlers in other places who are promising to make us move, or leave us behind in the race. There is a fresh lot of those interested young men coming in each year to the College, from all parts of the Dominion, and their rights in this location should, and will, we have no doubt, have due consideration.

Perhaps the next most important question is a convenient, paying locality for buyers of exhibition stock. At first when the show was moved to Brantford this objection was raised, and the writer was one who thought it was just a little spleen, to hamper the Brantford Show, but I may say I have now been fully convinced in a very practical way that it is very important, and I am satisfied that every other cattle exhibitor who attended the two shows at Brantford, and the last one at London, will agree with what I say in this respect. I am satisfied that if continued any length of time exhibitors would feel it an unsafe business. The location should be backed up substantially by feeders of good cattle suitable for the Christmas trade, so that butchers can come and get one or two fancy cattle, and get the balance of a load of good, ordinary stock and make their trip pay. Both exhibitors and buyers should be considered, as our president, Mr. Richard Gibson, who put it very strongly stated that he did not think we got any too much for our trouble.

A short while ago our worthy County Councillor, Mr. McIntosh, told the writer about the veteran feeders of many years ago holding a meeting to organize the Fat Stock Club, and how enthusiastic they were. Old Mr. Parkinson said then: "We will make it the Smithfield of Canada." And now, when it is proved beyond a doubt that his words have come true, and the county from its farthest point will do its part, and the citizens are also ready to do theirs, have not the sons and grandsons of those men whose minds conceived the idea, and whose time and means were used to bring it to what we saw at the last December Show, at Guelph, any rights? Can anyone with *British blood* in their veins say that the sons of the County of Wellington have not the sole right to this inheritance?

JAMES BOWMAN.

Guelph, Ont., March 15, 1900.

Tree Planting and Road Improvement

To the Editor of FARMING:

The articles on "Trees and Their Relation to Road Improvement," had come to my notice before I received your letter with reference to them, and your request for my views on the subject was not unwelcome. The matter, although a very important one, has not received the attention it deserves. The promoters of the good roads movement have, doubtless, found the main question one of sufficient difficulty to demand all their attention as yet. It is certainly of much consequence that the rural districts shall be rendered as beautiful as possible, but, from every standpoint, the building and maintaining of good roads as an invaluable factor in the great transportation system of the province, must take precedence.

The judicious planting of trees by the roadside is by no means to be condemned; indeed as a means of providing agreeable shade, of beautifying the landscape, as well as being of benefit in certain cases to the road, it is distinctly to be recommended. But it is necessary to place particular emphasis on the word judicious.

The effect of trees on the road varies with the kind and number of trees, the distance from the road, and the character of the soil. Shade is of benefit to the roads of very sandy districts, or localities of other light, porous soil; while in the case of heavy clays, retentive of moisture, a dense shade is apt to be injurious. There should be no misconception as to the meaning of this. Good drainage is the secret of successful roadmaking, but drainage carries away only the excess water. A certain amount of "moisture"—not wet nor dampness—is necessary to every road, but this is not to be interpreted as conflicting in any way with the demand for good drainage.

In sandy districts the roads are the better of considerable shade during the hot summer months. In clay districts on the other hand, care must be taken that the shade is not sufficient to keep the road damp as is sometimes the case. Nor should it be so great as to prevent the road drying quickly in the spring.

These matters should receive due consideration when selecting the kinds of trees, and in deciding upon the method of planting them. For all purposes, there is no better tree than the white or American elm. No tree excels it in beauty, it grows with fair rapidity, and does not cast a dense shade. Where trees are desired on the roadside in a clay country, it is therefore satisfactory, but is equally so on a sandy soil. The maple, on the other hand, while a beautiful tree, casts a dense shade, and where growing close to the road, particularly on clay soil, causes injury. In a sandy district there cannot, of course, be the same exception taken to it. These, the maple and white elm, are the two trees which find most favor.

In addition, the oak in its various varieties, the chestnut, the beech, walnut, butternut, shellbark hickory, basswood, locust, tulip-tree, birch, poplar and sycamore are all de-

servicing of a place. Fruit trees have also been suggested and are common in European countries. The objection to fruit trees is that children are apt to injure them in their efforts to secure the fruit. The same difficulty arises in connection with the trees bearing edible nuts, as the chestnut, hickory, etc. If injury to the trees can be prevented the fact that they are productive is a merit rather than otherwise.

Mention has not been made in the foregoing list of the pines, hemlock, and Norway spruce, all common roadside trees. These trees retain their leaves throughout the entire year, and in consequence cast their shade in spring and fall, which is very injurious to roads and crops, and therefore should be employed with caution.

In planting the trees consideration must be had to the size of the matured tree, the density of shade they will cast and amount of shade which the roadway or crops will sustain without injury. It is customary to plant the young maples or elms fifteen or twenty feet apart, the alternate trees being taken out when they have reached a size where the branches begin to touch and interlace, leaving the older trees about thirty or forty feet apart, the latter distance being desirable in the case of the elm, the larger of the two.

It is generally best to plant the trees as far from the road as possible, and inside the fence on the private property is to be preferred. This guarantees ownership of the trees and they can receive better care. There are few farms which cannot afford the necessary land for this purpose, and the reward in many ways is ample, increasing as it does the attractiveness and value of the farm. The subject is a most interesting one and opens up a wide field for thought, leading to the fact that many portions of the province are denuded of its trees to far too great an extent, and the time has fully arrived when much should be done to repair the injury.

A. W. CAMPBELL,
Provincial Road Commissioner.
Department of Agriculture, Toronto.

Experimental Union Field Tests for 1900

To the Editor of FARMING:

The members of the Ontario Agricultural and Experimental Union are pleased to state that for 1900 they are again prepared to distribute into every Township of Ontario material for experiments with fertilizers, fodder crops, roots, grains, grasses and clovers.

This system of co-operative experimental work in Agriculture was started in 1886 with 60 plots, which were situated on twelve different farms in Ontario. Since that date, however, the work has increased from year to year, and in 1899 there were 12,035 plots, which were situated on 3,485 farms throughout Ontario.

LIST OF EXPERIMENTS FOR 1900.

1. Three varieties of Oats.
2. Three varieties of six-rowed Barley.
3. Two varieties of Hulless Barley.
4. Three varieties of Spring Wheat.
5. Three varieties of Buckwheat.
6. Three varieties of Field Peas.
7. Two varieties of bug-proof Field Peas.
8. Three varieties of Soy or Japanese Beans.
9. Three varieties of Husking Corn.
10. Three varieties of Mangolds.
11. Two varieties of Sugar Beets for stock feeding.
12. Three varieties of Swedish Turnips.
13. Two varieties of Fall Turnips.
14. Three varieties of Carrots.
15. Three varieties of fodder or silage Corn.
16. Three varieties of Millet.
17. Three combinations of Grain for fodder.
18. Grass Peas and two varieties of Vetches.
19. Dwarf Essex Rape and two varieties of Kale.

20. Three varieties of Clover.
21. Sainfoin, Lucerne and Mammoth Red Clover.
22. Five varieties of Grasses.
23. Three varieties of Field Beans.
24. Three varieties of Sweet Corn.
25. Four fertilizers and no fertilizer with Corn.
26. Four fertilizers and no fertilizer with Mangolds.
27. Sowing peas at four different dates to determine the injury done by the pea bug (*Bruchus pisi*).
28. Planting Potatoes the same day and five days after being cut.
29. Planting Cut Potatoes which have and which have not been coated over with land plaster.
30. Planting Corn in rows and in squares.

Material for either No. 25 experiment or No. 26 experiment will be sent by express, and for each of the others it will be forwarded by mail.

Each person in Ontario who wishes to conduct an experiment and is willing to use great care and accuracy in the work and report the results of the test as soon as possible after harvest should select the exact experiment desired and apply for the same at an early date. The material will be forwarded in the order in which the applications are received until the limited supply is exhausted. It might be well for each applicant to make a second choice for fear the first could not be granted.

C. A. ZAVITZ,
Agricultural College, Guelph, Ont., March 19th, 1900.

The Cause of Soft Bacon

The Remedy and How the Bacon Trade may be Better Regulated

To the Editor of FARMING:

The problem before us now is, what are the real causes of soft bacon, and how best to overcome them. Of all our farm live stock there is none so much affected by varied conditions as the hog. The excitability is so great that even the flesh is disturbed with all sudden changes and frights. These heated and disturbed conditions just previous to the time of slaughtering tell their tale upon the carcass. Let the hog settle down quietly a few days before killing and get well cooled, and the irritated ones will overcome their fevered condition and their flesh will show it. Is there no difference in the character of the meat of the animal killed in the chase, and one killed when at rest? The observations of the past century say there is, and more has been done within that century to lay bare the minute details of animal existence and their products than in all the previous centuries put together.

Another cause is poor feeding. It is useless to ask and call for good finished feeding by all the farmers of the community, when as yet there is no test to detect the living firm-fleshed from the soft and poorly-finished hog.

The only safeguard would be for the packers to purchase unfinished hogs and finish for themselves. This they will not do as it wouldn't pay. Neither will it pay honorable men to do so, when their product will realize them no more than the cheaper fed of the more unscrupulous.

Our exporters are continually calling out for a steady all-the-year-round supply. Are there any other farm products supplied all the year round? The farmer sells his product when he has it fitted. It is the merchant's business to supply the market at the time when the markets are at their best, and he must devise means for preserving the product until such times as the best market can be obtained. These packers and merchants will soon be asking us to supply them with eggs before they are laid, so that they may get them fresh.

Their excuse is they have adopted the Wiltshire curing, and it requires a fresh supply all the year round. The best remedy is to cure better so that it will keep longer during the summer period, and spring a new name for such cured sides.

Well-cured bacon will keep a long time under favorable conditions, but half-cured Wiltshire bacon will not. The British public want the lightly cured meat all the year, and so they do all their other out-of-season products, but they pay considerably more for them, often double and treble, so they must do it if they want lightly-cured Wiltshire bacon from Canada throughout the year. Farmers in Canada will then find a way of supplying a little more of the out-of-season bacon hogs, just as they are now finding a way to get fresh eggs at Christmas, but it costs money and extra pains and consequently it requires so much higher price, or it will not pay to supply.

The farmers are beginning to know the packers pretty well now, and if they continue to practice lowering the prices at the time of the output, the farmers will recognize it, and either leave their pens empty or find some joint method of disposing of this important product. In this particular there is a magnificent market in Britain for loins of pork, and now that our fresh meat conveyance is almost perfect, it would be well if this trade was opened up. There is no portion of the animal so much in demand in Britain as the loin of fresh pork and fresh chops, and this part of the carcase makes the poorest bacon. The juicy out-like flavor of the loin is entirely lost by salting and curing. It gives us in its stead a hard, salty, lean meat with a rim of fat without even a line of lean. If these loins were packed and forwarded they would command the highest price as pork, and we should have left the best streaky meat for curing and exporting as bacon, and these streaky sides would keep longer and fresher than full sides, while we have a good market for the remainder of the carcase at our own home and in the Northwest. It is a curious coincidence, but the Britisher eats very little fresh pork in summer but very much in the colder season, and this is the very time when we are best able to supply this choice joint.

ELLIS.

Storing Fodder Corn

A Practical Farmer Tries a New Plan With Success

To the Editor of FARMING:

The question of storage for corn fodder for winter use is a very important one, and perhaps a convenient and satisfactory method has not been adopted by every farmer who grows corn for winter feed. That corn fodder is a cheap and nutritious food is now pretty generally recognized by agriculturists. But I believe a much larger amount would be grown throughout our province if a practical way of storing the fodder for winter use conveniently and in a comparatively limited space were known. Of course, I know that practically the simplest and easiest method is to build a silo and convert the corn into ensilage, but we must remember that many farmers are not in a position financially to undertake the outlay which such a course demands, for not only is there the cost of a silo, but proper machinery must be procured, which all combined, probably at a low estimate, would mean an expenditure of \$150. Then, again, a great many farmers are still opposed to the use of ensilage, especially for milking cows, and I think the results obtained by experiments conducted by experts, between well-cured corn fodder and good ensilage, are not very marked; however, it is not my intention to discuss the relative values of such feeds, but simply to give my experience in storing the dry fodder.

It has been generally customary to stand the sheaves around the inside in a mow, care being taken to keep them in an upright position, and at intervals to fasten boards or scantling to make an air space between rows of stalks and keep them from falling together; as, if many were allowed to come in contact, the result would be to heat and get musty, or rot, and thus spoil the whole business for feed.

But very few have the barn space that would be required for following out that plan, except for an acre or two, for of course they could only be placed one deep. Another plan adopted was to place poles in upright positions conveniently near the barn or stables, and build round stacks of a load or so of stalks around each pole. Others, again, have allowed the corn to remain on in the fields in the stooks as they were put up at the time of cutting, and drawing them as required for feeding, which is a very laborious and wasteful and often a vexatious way, as the stalks, being frozen to the ground, have had to be chopped off, and very often dug out of the snow. But what has been the most ridiculous method of all which I have seen adopted is to stake poles or rails horizontally about four or five feet from the ground, and then stand the stalks on either side only one deep, and there, stretching back and forth half way across a field, they have been left out in rain and snow all winter; truly there will be no danger from heating, but what an enormous loss in nutritive value by bleaching and freezing!

I have tried some of these plans, but did not find them satisfactory, and, besides, the mice worked in them badly, eating all the corn, and making the stalks smell so that the cattle did not like them, that is, those which were not fed in the earlier part of the winter. Two years ago I heard of a plan which I do not think I have ever seen in an agricultural journal, that is, packing the stalks with a layer of straw between each layer of corn-stalks, and I resolved to try it with one load, which I did, and, although they were the last I fed on toward spring, they were in excellent condition, as fresh and nice as when placed there in the fall.

Last summer I had three acres of corn for fodder of good height and yield of cobs, altogether a nice crop, I think about 2,500 sheaves of average size, and I must say I was somewhat perplexed to know how to store it, for although I had tried packing with straw, it was in such a limited way that I did not feel at all certain about the result of storing such a large quantity in one or two mows in that manner. However, as I have no silo, I thought I would risk it, although not without some "fear and trembling," but I must say I am very pleased with the excellent condition in which it is preserved. It is not musty, nor injured, but fresh and green as when I placed it there and something worth remembering, the mice do not work in it to harm it. Why, I cannot explain, unless they do not like the straw. All I know is they leave it alone, which is a great consideration.

My plan is this: After the corn has stood in the stooks long enough to be nicely cured—not left so late as to be rain-bleached or frozen—to draw them in and place a layer of straw on the bottom of the mow, then a layer of corn-stalks placed flat, close together, like grain sheaves, but not overlapping. Let each sheaf have its whole length on the straw, cover the whole mow with the layer, then cover over with straw again, and repeat with corn, and so on to the roof or as high as you wish to pitch them. You cannot injure the corn by putting too much straw, but I think all that is necessary is from four to six inches for each layering. Have the straw convenient in an adjacent mow, or, better still, on a scaffold over the driveway, so that it may not be too much trouble to get at when drawing in the corn.

I have been feeding milch cows all winter on corn preserved in this way, giving them no other fodder, excepting straw, besides grain and roots, and they are doing well. I think about 2,000 sheaves can be conveniently placed in a mow 15 x 30 feet. The variety of corn which I grew last year is called "High-mixed," and I think it very good. It may be that some other varieties, such as the Mammoth Southern Sweet, which, although I like very much as a fodder corn, it seems to be more succulent and, consequently, harder to cure, and might not be as easily preserved in the way I have described, but I think almost any kind of well-cured corn will keep all right. I thought perhaps this might be of use to some, and if you think it worth while you can print it in your valuable paper, FARMING.

Camborne, Ont., March 1st, 1900.

A. J. LACEY.

The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders', \$1; Sheep Breeders', \$1; Swine Breeders', \$3
BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale, are published once a month. Over 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

A. P. WESTERVELT, Secretary.
Parliament Buildings, Toronto, Ont.

that is inclined to be short and thick. This class of pig must be underfed to induce a growth of bone and muscle, and, when finished, it will have a hard, coarse quality of lean meat, with the fat soft and oily. A hog having good length and depth of side, when well fed from birth, will furnish a carcass full of lean juicy meat, with an even distribution of fat throughout the entire carcass. I would say in conclusion that, to produce an ideal "Wiltshire side," the form of the pig is of as great importance as the food given. Food is only wasted in trying to produce bacon hogs from short, thick pigs.

Another Car for the Northwest.

An Association car of pure-bred stock was sent off last week from Chatham, London, and other points in Western Ontario. It contains animals destined for Portage La Prairie, Moose Jaw, Brandon, Calgary and Wetaskiwin. This is the second car despatched this spring. Applications have been received sufficient to fill three-quarters of a third car. Those, therefore, who have animals to be delivered in Manitoba or the Northwest Territories should write at once to A. P. Westervelt, Parliament Buildings, Toronto, in order to ensure their shipments arriving at their destination as soon as possible.

Annual Meetings.

The adjourned Annual and Directors' Meetings of the Dominion Cattle, Sheep and Swine Breeders' Associations will be held as follows:

The Dominion Cattle Breeders' Association at the Palmer House, Toronto, Thursday, Mar. 29th, at 10 a.m.

The Dominion Sheep Breeders' Association at the Palmer House, Toronto, Thursday, Mar. 29th, at 3 p.m.

The Dominion Swine Breeders' Association at the Palmer House, Toronto, Friday, March 30th, at 10 a.m.

The directors of the Provincial Winter Fair at the Palmer House, Toronto, Friday, March 30th, at 3 p.m.

A. P. WESTERVELT, Secretary.

Feeding of the Sweepstake Yorkshires at the Provincial Winter Fair.

By J. E. Brethour, Burford.

In making a report of the system of feeding and care given to the pen of hogs which won the sweepstake at the Provincial Winter Show at London,

1899, I would say first that I took special care in the selection of these pigs that they should have the required length and form necessary to produce carcasses suitable for the English trade. The pigs having been selected carefully, were treated in the following manner: They were allowed to suckle the sow until two months old, then weaned and fed upon wheat middlings and a small quantity of skim-milk, given four times daily until three months old, a small quantity of barley and cornmeal being added as they grew older and were able to stand stronger feed; but after they were three months old their feed was composed largely of green clover, and, later in the season, green corn and rape. For six weeks previous to the commencement of the finishing period, they were allowed the run of a small field of artichokes which they dug and ate at their own free will, being given a small quantity of whole corn scattered broadcast. This system of feeding was inexpensive and promoted a good development of muscle and a healthy condition. The finishing period lasted about a month, when they were confined to the pen and fed upon a mixture of chopped wheat, oats and corn, which was fed to them in liberal quantities during the finishing period. One danger to guard against in the production of high-class bacon is, to avoid over feeding while the pigs are young and during the growing period. Such food should be given as will develop bone and muscle, and sufficient exercise should be allowed to induce good healthy digestion. One cause of soft pork is too high feeding when young, and sufficient attention not being given to the development of a healthy, vigorous condition of the pig. Soft pork is not so much a matter of what you feed as how it is fed, and the form or condition the pig is in to properly utilize the food given. It is useless to try and make a bacon hog from a pig

Some Notes on My Chester White Hogs.

By R. H. Harding, Thorndale.

My pigs were a little over 8 months old. They were allowed a small run of pasture during the summer, their principal food besides being skim-milk and a little mixed chop, composed of oats, peas, goose wheat, and flax, but principally oats, occasionally a little corn chop or shorts. They were fed comparatively cheaply until about three weeks before the show, when the meal was increased and they were given nearly all they would eat. They were home bred from a Canadian-bred sire and dam. They dressed 80 per cent. and 82 per cent. respectively. The latter, I believe, was the highest percentage dressed in the show. We hear a good deal said against the Chester White as a bacon hog, which is in some instances quite correct, but the same thing is noticeable in all other breeds, yet I believe with careful selection and proper feeding (this, I think, should be done in a grass plot during the summer, instead of keeping them enclosed in pens), they can be made an ideal packer's hog and be produced at a profit—profit being what the producer is aiming for, but what I am sorry to say he does not always get.

[Mr. Harding is mistaken as to his pigs giving the highest percentage of dressed pork in the show, as one of Mr. Andrew Elliott's Tamworth grades dressed 85 per cent. Ed.]

The Feeding of Poultry for Show and Market.

By J. Poole, Lambeth.

We keep about seventy thorough-breds, always replacing them every third year, which I think is quite long enough to be profitable. We generally have our hens commence to sit

about the first of March. We find that if they are set earlier than this, the per cent. of chicks that live is rather small. By looking well after our eggs, so as not to get them chilled, we obtain a pretty fair brood, provided the hen and rooster are not over two or three years old. Our plan is to set if possible two or three hens on the same day, so that when they hatch we can take all the chicks and put them with one hen and set the others again; in this way a hen can take care of thirty or forty chicks. We have had hens sit for nine weeks and hatch three broods, but six weeks I think is long enough, for if they sit for nine weeks it takes too long for them to commence to lay again. When setting a hen the second or third time be sure to make a new nest or the lice may bother you. Always use shallow boxes for nests, say about fifteen or eighteen inches square, on the floor if possible, and in a portion of the hen house protected from the laying hens. If a hen should break an egg the others should be washed with a little warm water, as a dirty egg will seldom hatch. Now as to care of chicks, provide suitable coops for the hen so that the little ones can go in and out at will and be protected from rain. The very best feed for the little ones is small or cracked wheat, which nearly every farmer has of his own. It is a dry healthy feed that cannot be beaten for the first five or six weeks. After this they will take any coarse grain that a farmer has to hand, but to make your chicks grow fast use plenty of wheat and corn and avoid wet or sloppy food as much as possible. I believe soft food is the forerunner of all disease. As soon as the hen starts to lay, the chicks will take care of themselves. We give them full liberty and allow them to wander at will; by so doing they gather fully half their living and we allow them to do so till fit for market. By this method we manage to raise from three to five hundred every year, making them average from 50 to 60 cents per pair in our local market, which is London. Our style of dressing is this: The chicks are starved for twenty-four hours before killing; by so doing their crops are quite empty before they are stuck, which is done with a pen-knife inserted into the mouth and cutting the roof, which I think is the neatest and cleanest way to kill. They are allowed to hang by the feet for a few minutes so that the blood may drain out; then the feet and head are washed clean and the fowl is ready for plucking, which is done dry, I think chickens thus dressed look cleaner and more attractive than if done in any other way. Our style of tying up is to fasten strings securely around each foot, turn the feet back by the side of the breast, pass the strings down between the wings and the body and tie them together on top of the back; take another string, pull it through the legs, drawing them tightly together at

the joints, and also passing the string around the tail and secure firmly. This gives your fowl a neat, plump appearance, and you then have them in proper shape for packing for the Old Country market or home market.

Feeding and Care of Turkeys.

By R. H. Harding, Thorndale.

A word or two on the feeding and care of turkeys. While they are quite young we feed stale bread, bran, pea-meal, cornmeal and herbage, moistened with curd, and keep them closed up in coops by night, allowing them to roam at will during the day when it is dry. After they are four or five weeks old they need very little attention, especially if there is a good field of corn convenient, until the snow appears. Turkeys are very fond of boiled turnips. The sweepstake turkeys at the Fat Stock and Poultry Show were fattened on boiled turnips and flint corn (shelled). They were kept well filled up with the turnips during the day, and then fed a liberal feed of corn before going to roost. There is not much fear of your flock going to roost in your neighbor's yard, if a good feed of shelled corn awaits their return every evening. As to the different colors of flesh, the yellow-skinned turkeys are preferred in the home market, but there does not seem to be much preference in the British market. As to which gives the nicest flavor I cannot say, but would say that, if you want to produce the yellow appearance, you must feed plenty of corn and milk; and, if you want to raise large turkeys, get a good pair of Bronze.

FARM HELP EXCHANGE.

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the employees. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for farm or dairy, is requested to forward his or her name and full particulars to A. P. Westervelt, Secretary, Live Stock Association. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable length of engagement, wages, etc. In the case of persons wishing employment, the following should be given: experience and references, age, particular department of farm work in which a position is desired, wages expected, and where last employed.

These names when received together with particulars will be published FREE in the two following issues of the "Agricultural Gazette" and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file.

Every effort will be made to give all possible assistance, to the end that suitable workers, male or female, may be obtained. Every unemployed person wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

Help Wanted.

Wanted, two farm teamsters. Must be able to milk and be good ploughmen. One will be hired by the year, with wages \$180; the other for seven months at the rate of \$17 a month. Farm is within one mile of Ottawa. No. 519. a

Wanted at once, three good men that can milk, for farm in British Columbia, on an engagement of one year or more. Must be sober, steady

and industrious, and ready to put their hands to all kinds of work. Single men preferred, but employment as cook could be given to wife of one of the men. Wages \$25 a month for the summer and \$20 a month for the winter. No. 510. b

Wanted, married man with children, or members of a family old enough to help on a farm and in a cheese factory in Welland Co. Will hire, give share, or sell to one with some funds to start a creamery in connection with good paying business. Send credentials. No. 511.

One or two men required to work with stock and do general farm work on a farm in Missouri. One could be a married man. Steady work for years if men are satisfactory. No. 512. b

Young or middle-aged man, single, wanted on farm in Kent Co. Must understand general farm work and care of stock. Engagement to commence April 1st. Wages \$150 for year or \$120 for seven months, with board and washing. Boys from English Homes need not apply. State age and size and give references. Address Box 66, Duart, Ont.

Wanted, working foreman, married man, capable of looking after stock and handling machinery. Good wages to steady, industrious man. No. 513. b

Am in need of good cattleman on large milk farm near Ottawa. Present man has been 14 years in the place and leaves to start farming himself. Six other men kept. Wages \$18 in summer and \$16 in winter, paid monthly, and board and lodging, no washing. Travelling expenses allowed here. Middle-aged man, Scotch or English preferred. No. 514. b

Wanted, at once, a single young man who understands all kinds of farming, is handy with horses and is a good milker. Must be a total abstainer and not use tobacco, and be a Protestant. Wages \$175 a year, or will engage for six months if desired. Give references, age and size. No. 515. b

Man, married or single, wanted on farm. Permanent position to good man. Also man required for two months during haying and harvest. Man could be boarded or board himself. No. 516. b

Good, strong boy, about 17 years of age, required for general farm work near Hamilton. Eight to twelve months' engagement. Must have no bad habits. Give age, weight and references and state wages required. No. 517. b

Wanted, young man accustomed to all kinds of farm work. Must be honest and trustworthy. Will hire by year or for eight months. Box 58 Wyoming, Ont.

Wanted, married man about 30 or 35 years old to work on a ranch in Assiniboia and take full management.

About 300 head of cattle, all domestic. Man must understand management of cattle and be a good feeder. To capable man and wife good wages will be paid and full board furnished. Yearly engagement or longer. To begin work in April. Also young man wanted, about 18 or 20, to work with the above. Must have had farm experience. Good wages and board. State experience. No. 518. b

Wanted, at once, married man not over 60 years of age, to do general farm work and board himself. Good brick cottage and garden provided, also one-third of fruit of orchard. Steady employment to good man. Box O., Maple Hill, Ont.

Unmarried farm hand wanted for grain and fruit farm. Steady job and good wages paid. Apply, stating age and experience, to W. McLaren, St. Davids, Ont.

DOMESTIC HELP WANTED.

Wanted, at once, a respectable girl or elderly woman to assist in housework on a farm, in a family of three. Must be able to milk. A good home and constant employment to a suitable person. Good, quiet locality. No. 520. a

Situations Wanted.

First-class herdsman wants a position on stock farm where Shorthorn cattle are kept. Age 28 years, is steady and honest. Or will take position as manager on small farm. Good references. No. 402. b

Young man, 22 years of age, with good experience wants engagement for seven months on a farm. Wages \$15 a month and board, lodging and washing. No. 403. b

Man, 60 years of age, wants place as manager of farm. Would go on trial for a month. Good references. Protestant family preferred. No. 404. b

A young butter-maker, with good ability and two years' experience, wishes a situation. Has worked at the Anandale Farm Creamery, Tilsonburg, for three years, and is now taking a course at the Western Dairy School, Strathroy. Will be open to engagement on April 10th. No. 405. b

N.B.—Where no name is mentioned in the advertisement apply to A. P. Westervelt, Parliament Buildings, Toronto, giving number of advertisement.

Farmers' Institutes

Under this head the Superintendent of Farmers' Institutes will each week publish matter relating to Institute work. This will include instructions to Secretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. We will also from time to time review some of the published results of experiments conducted at the various Agricultural Colleges and Experiment Stations of Canada and the United States. In this way we hope to give Institute members some valuable agricultural information which they might not otherwise receive, on account of not having access to the original publications. If any member at any

time desires further information along any of the lines discussed, by applying to us he will be put in direct communication with the Institution that has carried on the work.

G. C. CREELMAN
Superintendent Farmers' Institutes
Parliament Buildings, Toronto.

As Farmers Let Us Learn from Each Other.

G. C. Creelman, Superintendent of Farmers' Institutes, Visits Some Progressive Sections of Ontario.

There is no class of people in Ontario so diffident about exchanging ideas in reference to their own business as the farmers. From the farms come many of the very brightest professional men of our cities and towns. Their splendid constitutions, which enable them to do such hard mental work, have been given to them by healthy, hard-working parents, and the daily life spent on the farm up to the time they enter college or business helps to develop and strengthen their physiques, until they are able to stand almost any amount of work. The professional man, however, does not expect to have to work out every detail of his business for himself. Every day he has recourse to the experiences of others in the same walk of life, and by reading, observation, and conversation he secures information that enables him to avoid very many mistakes.

In the profession of agriculture many causes have tended to prevent such intercourse among its members. In the country, houses are necessarily far apart, and so much of the manual labor has to be performed by the proprietor himself that he has little time to devote, during the busy months, to the discussion of matters pertaining to his business. In the winter time, however, he has plenty of leisure time, and now that the land is not as rich as it was, and a great many industries are growing up around him, he is beginning to think more and consult prosperous neighbors in reference to things that will help him in his work.

The Farmers' Institutes have come as a boon to the thinking farmers of Ontario, and the present season has seen more interest taken and more enthusiasm manifested than ever before. The delegates who are sent out to every county from the Department of Agriculture of the Province are in every case men who have been successful in their own lines at home. They deliver addresses and take part in the discussions of practical subjects relating particularly to the industries carried on in their vicinity.

AIDS TO SUCCESS IN DAIRYING.

Probably no branch of agriculture has made greater strides during the last ten years than that of dairying. The statistics of 1899 show that the farmers of Ontario were paid in cash for their milk sent to cheese factories alone more than \$8,500,000. Mr. J. S. Woodward, Lockport, N.Y., in

speaking on dairying to the farmers of Norfolk County, said, "You are standing in your own light when you have your cows come in fresh in the spring. Butter is always a better price in the fall and winter, and if you keep your stables warm and feed silage and roots, you supply much the same conditions to the cows as they have in summer, and you will get just as much milk. The water supply," said Mr. Woodward, "is also very important, and to get the best results the cows must have constant access to good pure water in the stables. I have seen," said Mr. Woodward, "cows get up and take a few mouthfuls of water and lie down again. This is to moisten their food and assist the natural digestive liquids in preparing the food for assimilation. When cows receive water but once a day they take too great a quantity, the result being the food in the stomach is diluted too much. Milk at best," said Mr. Woodward, "is 87½ per cent. water, and I do not know of any cheaper food that can be supplied." Continuing, Mr. Woodward said, "If I were asked what are the corner stones to success in dairying, I would say (1) proper housing, which means plenty of air space and warm buildings. The best dairymen now agree that it does not pay to turn the cows out in the cold, and the old theory that cows must plow around in the snow, and break the ice to get a drink in order to be healthy, is completely overthrown; (2) stables must be well ventilated." In explanation of this, Mr. Woodward said that he did not mean there should be boards left off the stable, and the wind allowed to blow in on the cattle in order to supply fresh air. Nor did he mean that there should simply be openings above the cattle in the barn. "I find too many examples of the latter case in Ontario," said Mr. Woodward. "The breath from the cattle and the stable odors are allowed to rise into the barn above and settle on the feed. This later is fed to the cows, and the farmers wonder where the bad flavor in the milk comes from. The third corner stone," said Mr. Woodward, "is proper feeding, but it does not follow that because a cow eats up what you give her that that is necessarily the best food for her. In order to get the very best results out of your feed you must have a balanced ration. By applying to the Superintendent or the Department of Agriculture, you can get a table showing the nutritive ratio of each of the combined foods. You can by this means combine your different feed stuffs in such a proportion as to get the very best results from them. Lastly," said Mr. Woodward, "you must keep good water before your cows all the time."

Mr. T. H. Mason, Strathroy, in speaking to the farmers of North Perth, said that as soon as the milking was done it should be taken into a purer atmosphere than that of the stable. "It is here," said Mr. Mason,

"that it is most susceptible to odors and germs, hence should be removed at once. As soon as possible it should be surrounded by a temperature of from 55 to 65°F. It is easier to accomplish this by using deep-setting cans than by the shallow pan method, as the cans can be immersed in cold water and a fairly low and even temperature kept. After skimming, the cream should remain in cold water for 24 hours. Every dairy should have a can large enough to hold a churning. By keeping the cream cool and occasionally stirring it, it will give butter of even flavor and body. I do not advocate any particular churn," said Mr. Mason, "but the dash churn is a thing of the past and we must have a labor-saving churn in every family. The time at which the butter comes will vary, being affected by the weather, the feed, and by the temperature of the cream. It has been demonstrated that butter can now be salted in the churn, and butter coloring, at which many good farmers' wives look askance, is nevertheless a necessity, at least during the winter months. The one-pound package is now the most popular on the market, and good butter put up in this way with neat, clean wrappings, and presented on the market by a tidy housewife will always bring a good price.

Farmers' Institute Notes.

Farmers' Institutes Are Growing. Already we have received from local Secretaries more than 15,000 names of members for 1900. This is greatly in excess of the number received up to this time last year.

Send in Lists of Members. The Superintendent would like to have all the lists of members sent in promptly by the 10th of each month. A few Secretaries have not yet sent in their membership lists that were gotten up at the Regular and Supplementary Meetings.

About the Annual Meeting. A few Institutes have not yet reported on their February business meeting. At that meeting the directors are all called upon to decide the place of the annual meeting. They were also to instruct the Secretary whether they wanted a speaker for their annual meeting. Please report at once as we wish to lay out the routes of delegates who will attend these meetings.

Supplementary Meetings in Haldimand. We are pleased to see that some of the Institutes are growing and spreading into every nook and corner of their riding. Haldimand held eight meetings in March and all were conducted by local men and addressed by local talent. This with six regular and supplementary meetings in January and February makes fourteen meetings for Haldimand since January 1st.

A Good Joint Meeting. North and

South Norfolk Institutes held a joint meeting in the town of Simcoe, March 8th and 9th. Mr. Duncan Anderson, Rugby, and Mr. J. S. Woodward, Lockport, N. Y., assisted the local talent. These Institutes are alive to the interests of their members and require no spoon feeding.

Former Ontario Workers. Last week while attending the annual meeting of the Association of Farmers' Institute Managers at Delavan, Wis., the Superintendent met Superintendent Smith of Michigan. Mr. Smith reported that Mr. J. J. Ferguson, formerly a member of our Institute staff, was doing excellent work as Assistant Professor of Agriculture at Lansing. The Superintendent also met Mr. W. L. Carlyle "one o' our own" who succeeded Professor J. A. Craig as Professor of Animal Husbandry at Madison, Wis. Professor Carlyle was making a tour of Wisconsin and Illinois with a class of 70 short course Agricultural College students. They expect to be out for ten days visiting the leading stock farms in the two States. The boys were examined in the handling and judging of live stock at each farm visited.

The "Little Red Horse."

John R. Gentry.

The horse world has heard much of the pacing stallion, John R. Gentry, who with his record of 2.00½, stands before the public as the fastest horse in the world on active list. What may be considered his official autobiography, briefly, has been written at the request of Secretary F. D. Coburn of the Kansas Board of Agriculture, by the man who bred him, Col. H. G. Toler, and it is published in the board's quarterly report for December, 1899, as follows:

He was foaled on my farm near Wichita, Kansas, May 17th, 1889, sired by Ashland Wilkes, 2.17¾, and his dam was Damwood, a daughter of Wedgewood, 2.19.

When I engaged in the business of breeding horses, in 1887, I tried to buy the stallion Guy Wilkes, 2.15, by George Wilkes, then owned in California but was unable to get a price on him. I then heard of a young stallion owned by M. Beamer, near Blackburn, Mo, that was said to be a race-horse and the making of a good stock horse. So I went to Missouri to see this horse, liked him, and bought him. This was Ashland Wilkes, then a four-year-old, with a race record of 2.33½. I put him into the .30 list the next year with a record of 2.29¾, which he successively reduced to 2.22½, 2.19¾, and finally 2.17¾, and was then retired to the stud.

In the spring of 1888 I bought two car-loads of brood-mares in Lexington, Ky., and among them was a sorrel filley, Damewood, by Wedgewood, 2.19. I bought this filly because I liked her general conformation and,

as I had seen her sire race, to my mind she would make a good cross with the Wilkes blood.

Damewood bred to Ashland Wilkes produced Myron McHenry, race record 2.15¼, as her first foal. The next season she foaled to the same sire a small, chunky, bay colt, with black points and without any white on him, which afterwards led to the name "The Little Red Horse," applied to Gentry, for this colt was Gentry, or rather, Neely Todd was what we named him, and the name was changed afterwards by James F. Ramey, who was then a trainer in my employ. Ramey broke Ashland Wilkes and wanted to own a colt by his pet stallion. So I advised him to buy Neely Todd, but he thought he would be too small. I told him he would be large enough and that he could have him at half price, or \$400. James F. Ramey and his brother Joe, and John R. Gentry, of Hughesville, Mo., finally bought him at one year old. Ramey severed his connection with our farm and took his colt to Hughesville, where the youngster received his early education, as a two-year-old. He was worked as a trotter but didn't make speed fast enough to suit the trainer, and they put the hobbles on him for a couple of times to set him to pacing, and along in the spring of his three-year-old form I began to get a letter twice a week from Jim Ramey, full of "the great young pacer," "fastest horse on earth," etc., but as I am originally from Missouri, I did not place a great deal of confidence in his talk, although I had to "acknowledge the corn" when Gentry won five straight races, and took the world's three-year-old race record pacing, and never was beaten a heat.

As a four-year-old he was laid up and not raced, and in his five-year-old form he took a record of 2.03¾, which has since been reduced to 2.00½, and it has been often said that Gentry has never been beaten in fast time; that they could beat him when he was off, but never when he was on edge. As an individual he is a perfect model, perhaps a shade over fifteen hands, a beautiful, rich red bay in color, and the best, purest gaited pacer on the turf. Gentry is not the only one of his family known to the racing public, for his full brother, Theodore Shelton, has this year taken a mark of 2.09¾, and Myron McHenry, the stallion that heads our stud, has a trotting-race record of 2.15½, and twenty-six heats to his credit better than 2.30.

Shorthorns For Sale.

Mr. Frank J. Barber, Georgetown, who has rented his farm, intends holding an auction sale on April 6th next, when the whole of his Shorthorn herd will be offered for sale.

A "hair's-breadth" is one-forty-eighth of an inch.

The Farm Home

"If We Didn't Have to Eat"

(With apologies to Mr. Nixon Waterman.)

Life would be a dreary matter
If we didn't have to eat.
If we never had to utter,
"Won't you pass the bread and butter,
Likewise push along the platter
Full of meat?"
Yes, if food were obsolete,
Life could not be called a treat.
If we didn't—shine or shower,
Old or young, 'bout every hour—
Have to eat, eat, eat, eat, eat,
'Twould be awful if we didn't have to eat.

What would be the good of money?
If we didn't have to eat.
Should we have to cease our buying,
Baking, broiling, brewing, trying?
Life would then be not so sunny
And complete;
'Tis with pleasure that we greet
Every grocer in the street.
Unless perchance, some man or woman,
Or some hungry, helpless human—
Has dyspepsia, or no teeth—
With which to eat, eat, eat, eat, eat.

I'd want to die, yes, die all over,
If we didn't have to eat.
Would the grocer, butcher, baker
Get our money? Yes sir; take her!
With good food we're all in clover,
Cool and sweet.
What would life be without meat,
Bread and butter, pastries sweet,
If we didn't—poor or wealthy,
Halt or nimble, sick or healthy—
Have to eat, eat, eat, eat, eat?
'Twould be sinful, if we didn't have to eat!
—Alex. J. Wedderburn.

Maple Sugar.

No one knows who discovered the possibility of making sugar from the sap of the maple tree. Students of Indian traditions seem to agree that the origin of this art dates back to remote antiquity, and that like the cookery of maize, the early European settlers learned from the Indians how to transform the watery juice of the maple into sugar. This was the only sweet the Indians knew, and though their methods of manufacture were less appetizing than those followed in the best sugar camps to-day, still the result was sufficiently satisfactory to induce the white man to go and do likewise.

The maple crop of the United States is not a large one, yet it is estimated to allow from a half pound to a pound of sugar yearly for every person in the country. Northern New England, New York, Michigan, Wisconsin, Ohio and Indiana are the states which produce the most syrup and sugar. Nearly half of the entire supply comes from Vermont, and about one quarter from Ohio, and both these States have severe fines for adulteration.

Much of what is sold as maple syrup and sugar gets its maple flavor, if it has any, by boiling maple chips with the brown sugar and glucose of which it is composed. Some of the leading manufacturers of the real article are almost discouraged at trying

to compete with such frauds. Consumers should be wise enough to investigate the source of their supply, or at least to know that maple sugar cannot be bought at brown sugar prices.

The true maple season begins about the first of March and lasts into April, or so long as the snow is melting by day and freezing by night.

The sugar maple is a handsome tree fifty to sixty feet high, and is in fine condition for tapping when about twenty-five years old. The ideal tree grows in open ground where it has sunshine all the year. Gnarled and imperfectly developed trees do not furnish the best or most abundant supply of sap.

Will Carleton has thus described the sugar maple:

"The han'some trees! they used to rise
Like they was huntin' for the skies!
All summer they would kind o' seem
To wake an' sleep an' dream;
Their leaves was fresh as fields o' grass
For clouds to step on as they pass;
While in their language soft an' low,
They seemed to whisper to an' fro;
An' every sweetest wind that blew,
An' every drop of heaven's dew,
An' every flower that blossomed near,
An' every bird a-singin' here,
Through all the blessed summer would
Just gather up what sweet they could,
An' then, it al'ays 'peared to me,
Present it to some maple tree!"

The trees are tapped in several places and the flow on the south and east sides usually begins earlier than on the north and west. It is claimed that an extra quality of sugar is obtained where the hole is not too deep. After the tree is bored with a half-inch auger, for an inch or an inch and a half, a metal spout is inserted.

The sap varies in sweetness. That from trees in low, moist land is abundant, but less sweet than that which is yielded in other locations. The first sap of the season is the sweetest and makes the best sugar. The sooner the sap is gathered and boiled, the better the flavor and the lighter the color of the syrup and the sugar. In some sections of the country the syrup is commonly called honey, and the sugar when carefully made is hardly darker than beeswax. The dark color and strong flavor, sometimes in the past associated with maple sugar, was due to the accumulation of leaves and twigs in the sap, and to other imperfect methods of manufacture. Much of this dirt can be removed by careful skimming and clarifying, but it is surely better to keep out in the beginning. Large evaporators now are generally used in the sugar camps, which hasten the process considerably. Syrup is the preferred form for market, and the standard thickness, secured by the use of the sugar thermometer, is about

eleven pounds to the gallon. Thirty-two gallons, or a barrel, of sap is required to make one gallon of syrup.

In the olden days each household laid in its barrels of maple sugar to last till the season came again, and it was commonly used as white sugar is to-day. Now maple sugar retails to-day at about the price of cane sugar.

John Burroughs says that sugar making is one of the most picturesque features of farm life peculiar to this country, and further: "Before the bud swells, before the grass springs, before the plow is started, comes the sugar harvest. It is the sequel of the bitter frost. A sad rite is the sweet good-by of winter. It denotes a certain equipoise of the season; the heat of the day fully balances the night.—A day that brings the bees out of the hive will bring the sap out of the maple tree; it is the fruit of the equal marriage of the sun and frost. When the frost is all out of the ground and the snow is gone from its surface, the flow stops.

"Maple sugar in its perfection is rarely seen, perhaps never seen in the market; it has a mild delicacy of flavor that no other sweet can match. What you smell in freshly cut maple wood, or taste in the blossom of the tree, is in it."

Mr. Charles Dudley Warner describes sugar-making in the past as "Something between picnicing and being shipwrecked on a fertile island, where one could save from the wreck tubs, and augers, and great kettles, and pork, and hen's eggs, and rye, and Indian brown bread, and begin at once the sweetest life in the world."

To-day sugar camps have conformed more to the methods in other large factories, but occasionally there is a place where the sugar-making is conducted more for pleasure than profit. However, in the desire for novel entertainment, "sugaring off" parties have been accomplished even in mid-summer. Each guest is provided with a shallow tin pan filled with pounded ice, and a fork or wooden skewer for manipulating the candy. The syrup is boiled until it will keep its shape when dropped in ice water, and is then put in pitchers and passed around the table to pour in thin layers over the cracked ice. Crackers and pickles are the only other refreshments required. If there is any candy left after all appetites are satisfied, it may be reheated and some butter and nuts added to it and the whole poured into pans to serve as caramels later in the evening.

Special recipes for the use of maple sugar are quite unnecessary, for it may be substituted for cane sugar in anything.

A delicious frosting is made by dissolving the sugar in thick cream and boiling until it will harden in cold water,

then beat till it begins to harden and spread over the cake.

A cupful of maple sugar grated or cut in bits stirred into an ordinary quick biscuit dough will give a novel sweet cake. The biscuits are then cut as usual and baked quickly; the sugar melts during the cooking and glazes the outside.—*American Kitchen Magazine*.

Papering Pointers.

New walls should be sized before papering with one pound of glue soaked over night in cold water. Add twelve quarts of boiling water and a tablespoon of powdered alum. Rough walls should be gone over with a block of wood, then a thin coat of paste applied and dried before papering. If the walls have been calcimined wash with water and apply the sizing. If they have been painted go over them with ammonia water, one part ammonia to six parts water.

Cut all the strips of ceiling paper necessary before commencing to paste (the ceiling should always be papered first), matching perfectly, and have the paper all run one way on the table. Keep edges even when pasting. When paper is untrimmed, as it will be if you send away for paper, paste the strip first then fold up each end till they meet and cut off the edge, taking care to trim the left hand edge. Strike a chalk line, seventeen inches from the side walls for a guide for the untrimmed edge of first strip. Lap the surplus width down on the side wall. Run strips the long way of the room. For side walls cut all the long strips necessary before pasting, having them all on the table at once, face down. Use the ends of the rolls for other pieces over the doors and windows. Commence to hang paper in the corner of the room or at the side of a door or window. Never fold paper around a corner. Cut the strip in two and match again the corner. This prevents cracking in the corner. A yard stick is invaluable for measuring. The best paper-hangers now butt the paper, that is, trim both edges and have them just come together without lapping.

Most workmen call for cornstarch paste, but a very good one can be made of a cheap grade of wheat or rye flour mixed thoroughly and smoothly with cold water to the consistency of batter. Stir in six tablespoonfuls of powdered alum to every quart of flour, then pour on boiling water, stirring rapidly till the flour is well cooked. Let cool before using and thin with cold water. Apply the paper to the wall with a paperhanger's roller, or a whisk broom soft enough not to scratch the paper, or a soft cloth. Match the left edge, then stick the paper down the centre and work each way toward the edge to prevent air blisters. Several neighbors can club together, select paper from sample, and make satisfactory purchases by mail.

Salad Dressing.

The following is Sydney Smith's famous recipe for salad dressing:

"Two large potatoes passed through kitchen sieve,

Smoothness and softness to the salad give.
Of mordent mustard add a single spoon,
Distrust the condiment that bites too soon;
But deem it not, thou man of herbs, a fault
To add a double quantity of salt;
Four times the spoon with oil of Lucca crown,
And twice with vinegar procured from 'town';
True flavor needs it, and your poet begs
The pounded yellow of two well-boiled eggs.
Let onion atoms lurk within the bowl,
And, scarce suspected, animate the whole;
And, lastly, in the flavored compound toss
A magic spoonful of Anchovy sauce.
Oh! great and glorious and herbaceous treat,
'Twould tempt the dying anchorite to eat.
Back to the world, he'd plunge his weary soul,
And plunge his fingers in the salad bowl."

Household Bookkeeping.

The old adage has it that "A wife can throw out with the spoon more than the husband can put in with the shovel," but Edwin Sanderson gives in the *March Woman's Home Companion* some very practical suggestions on this question. He says: "Conducting the affairs of a household is just as much a business and affords the same opportunity as a mercantile business for the exercise of judgment. Many a good income has been frittered away by lack of this care. With a carefully kept record of the money expended during the month or the year there need be no question as to what has become of the housekeeper's allowance, and the head of the family can see for himself just what it costs, by economical management, to keep up his home.

"Such good management does not consist merely in preventing the expenditure of money, but involves the care and judgment which secure the return for the money which is of the most use to the family. Under such management money is not spent in one direction which is more needed in another. One department is not allowed to usurp even an apparently necessary amount when there is some more vital need in another direction. It will be found that the mere fact that an account is kept will of itself result in reduction of expenses. When it is to be remembered that each purchase is afterward to be written in the account, it causes one to think whether the purchase is necessary, even if nobody but the purchaser is to see the account, and there is a natural desire to make the showing at the end of the month as indicative of good management as possible. In closing a month's accounts the result is almost certain to be compared with that of the preceding month, and if there has been an increase of expenses an investigation will follow for the purpose of finding out how it happened and whether it may be avoided the next month. Thus the system promotes that vigilance and care which are essential to good management and

which cannot fail to produce the most gratifying results from the standpoint of economy."

Cabbage and Carrots.

A writer in *Farm and Fireside* tells how winter vegetables may be made appetizing for the spring appetite.

Cut a firm white cabbage into quarters, remove the hard core and boil the cabbage fifteen minutes in water with a pinch of soda. Drain off this water, and add enough more which is boiling to cover the cabbage, add one teaspoonful of salt, and let it boil until the cabbage is tender, then drain it and set aside until it is cold. Chop the cabbage, add one tablespoonful of butter, one teaspoonful of sugar, one-half teacupful of cream and more salt if needed. Mix all well, put it into a buttered pudding-dish, and bake it until a delicate brown. Serve it very hot in the dish in which it is baked. Many who cannot eat cabbage served in any other way find this perfectly digestible.

Pare some carrots, and cut them into dice. Put them into a saucepan, and cover with boiling water. Add a little salt, and let them boil an hour or until very tender. Drain the water off the carrots, then set the saucepan back on the stove, having added one tablespoonful of butter, one-half teaspoonful of sugar, more salt if needed, one-half teacupful of cream, and pepper to taste, to one pint of carrots. Let it just come to a boil, and serve very hot.

Little Girl of Long Ago.

The school girl's dress at about 1830, or even as late as 1837, was as follows: Pantalottes were universally worn both summer and winter. They were usually made of some white cotton material, with or without trimming; for dancing school they were much trimmed. They were buttoned to the drawers at the knee, which enabled them to be easily changed if they happened to get soiled by rain or mud. At that time all the school girls had, for their spring school bonnet, a white straw trimmed with a bright green ribbon, with a frill of the same on the back part of the bonnet at the neck, and a green barege veil with a narrow green ribbon run in the top hem and tied around the bonnet. The veil was to keep off the spring freckles. They also wore bright-colored plaid shawls, which were new in styles at that time, and very pretty. Boots and high rubbers for girls were not known then. My shoes were low cut and rubbers also; the latter had very little form to them, and I used to get my ankles very wet returning from school in a storm.—*O. W. W. P., in Boston Transcript*.

A struck bushel contains about one and a quarter solid feet.

A bushel (heaping) contains one and a quarter struck bushels.

Farming.

A PAPER FOR FARMERS AND STOCKMEN.

Managing Director, . . . D. T. McAINSH
Editor, . . . J. W. WHEATON

Farming is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance.

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FARMING.

CONFEDERATION LIFE BUILDING
TORONTO

QUESTIONS AND ANSWERS

PIGS DYING.

Mr. A. Galbraith, Kenmore, Ont., writes: Please answer in the columns of your valuable newspaper the cause and remedy for young pigs dying.

Symptoms: When about two weeks old they become fleshy, drowsy, sleepy, and short of breath, accompanied by a low grunt. Their sides moved in and out like bellows and they died one by one up to a month old. Sow had litter of fourteen, was fed on roots and a little bran before farrowing, afterwards on provender and bran mixed. She is just in ordinary condition.

There are so many diseases that might give rise to the symptoms stated that it is not possible to give a definite answer on the data given. It is possible that the young pigs may have died of pneumonia as a result of exposure to cold and damp sleeping sheds, but as the manner of housing is not stated in the question it is impossible to say definitely. As to a remedy it would be impossible to give one without knowing definitely what the pigs died of. We would advise, in order to find out definitely the cause, that a post-mortem of some of the dead pigs be held under the direction of some competent veterinary surgeon.

Western Dairy School.

This well-equipped dairy school is progressing very favorably under the able management of Supt. A. Smith and his efficient staff of instructors, consisting of Mr. John Brodie, Mapleton, in cheese-making; Mr. Johnston, in butter-making; Mr. Hearn in separators; and Miss Miller, Guelph, in

the home dairy. The school, though late in opening, has had on the roll thirty-two students, some of them from Eastern Ontario. The home dairy classes have been well patronized. The school closes for this season on March 30th.

During the school term a series of public meetings were held in which an effort has been made to secure the attendance of farmers and others interested in dairy work. These meetings, which have been well patronized, have been addressed by prominent dairymen from other parts of the province, and have been productive of much good. On March 21st the last meeting of the series was held. The chief speakers on this occasion were Prof. Day, Ontario Agricultural College, Guelph; W. C. Shearer, Bright; Geo. H. Barr, Sebringville; and T. B. Millar, London. All these gentlemen gave practical talks on subjects of vital importance to farmers and dairymen.

SIXTH ANNUAL

Canadian Horse Show

Under the joint auspices of The Canadian Horse Breeders' Association and The Country and Hunt Club of Toronto.

To be held in
**THE ARMOURIES
TORONTO, CANADA**

Thursday, Friday and Saturday
APRIL 26, 27 and 28, 1900

Entries close on Thursday, April 12, 1900, and should be addressed to
**HENRY WADE,
Parliament Buildings, Toronto.**

FIGHTING WEEDS

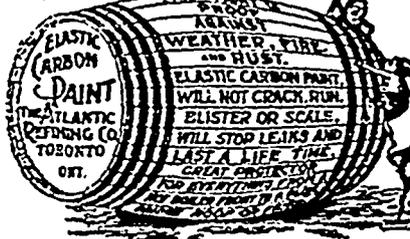
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You want the best tools—those which will save time, labor and backache. Here they are.

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NEW UNIVERSAL SINGLE AND DOUBLE WHEEL HOES.

Send for look descriptive of many new styles out this year. New Universal Model Hand Reelers are the standard of America. Our Combination Drill and Cultivator is the only 1 and 2 wheeler made. Tough oak bent handles used on all our tools. Popular prices to early purchasers.
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A BIG THING. LOOK INTO IT.



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GREAT WORK

is being done this term in the

Central Business College

of Toronto, where 12 regular teachers are employed, and over 300 students are in attendance. This is a big school and a popular school, to which business firms look for skilled help. Eleven young people went direct from College to situations during one week, ending February 16th. Enter any time. No vacations. Write for prospectus.

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There is no nonsense in business. The young man who would succeed in business life must start out with a good business training at his back. You get such in this well-appointed business college.

Bookkeeping, Stenography,
Typewriting, Penmanship,
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WRITE US for AGENTS' PRICE and TERMS on the latest and most complete **CLOTHES DRYER** ever invented. BIG MONEY in these **RAPID SELLERS**
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ATLANTIC REFINING COMPANY

Manufacturers and Importers of
Illuminating and Lubricating Oils,
Greases, etc.

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TORONTO, CANADA

Winnipeg Industrial.

The new board of directors of the Winnipeg Industrial Fair has already got to work and arranged a large share of the programme for the 1900 exhibition which will take place the last week of July. There will be increased prizes for live stock, and a fourth prize will be added for the breeders of Manitoba, the Northwest and British Columbia. As it has been found impossible to have a creditable exhibit of field roots or garden vegetables at an early summer fair, it was decided to take these classes out of the present prize-list and hold a fall exhibition for field roots and garden vegetables.

A splendid lot of attractions is being provided, and the appropriation for this purpose is \$15,000. It is the intention to have a great spectacular scene representing some of the important incidents in the South African war.

"As Regular as Clock Work."

The following letter from Nicola Iake, B. C., addressed: "DEAR FARMING," and signed "Your Old Subscriber," is both interesting and complimentary to our publication as well as to the Post Office Department: You've been coming out here for

a long time now week in and week out. Let the weather be what it may, 'mud slides,' 'snow slides,' you manage to make the trip; over the prairie, through the mountains, and then the sixty miles by stage, and get here every Monday night about as regular as clockwork.

I almost forget when you changed from once every month to once a week. I didn't like it a bit at first. I thought you were going to try to feed me on scraps four times in a month, instead of giving me one square meal every month. But I soon found out it was all right, and that you brought a good feed every week. And do you know I have an awful appetite for such stuff as you bring.

There is one thing I can't for the life of me understand, and that is—why you changed your name. Such a long, flowery name as you once went by. Why I thought you felt quite proud of it. Now, I'm of a forgiving nature generally, but I haven't forgiven you for changing your name. It may be because I am more interested in stock-raising than farming. But then I don't know that it matters so much what name you go by so long as you come, and bring the right sort of stuff, and get here on time. And as I told you before you are a punctual sort of a fellow.

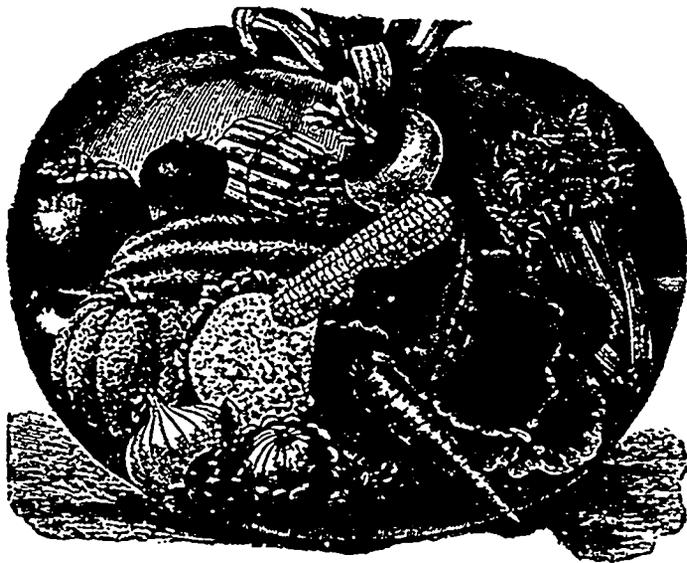
Dairying in the Northwest.

S. Flack, Red Deer, N.W.T., writes of date March 8th, as follows:

Our creamery still continues a success and is running the year round. The amount of butter manufactured for the season commencing May 1st and ending November 1st, 1899, was 62,142 pounds, netting the patrons at the creamery 16.86 cents per pound. The outlook is very satisfactory and there is every promise of a greatly increased make and according to present market prospects a very profitable industry for the dairyman. Patrons are highly pleased with the management of the Commissioner of Agriculture and Dairying and attribute their success to him.

Our winter up to the present has been very mild, without sufficient snow for sleighing, cattle pasturing the greater portion of the time. If the past three winters may be taken as an average of the winters here they are far from what eastern people imagine. Comparatively speaking they have been without snow, wind, rain, mud, or storm; air dry and invigorating.

All crops last year were good except wheat. Hay was a short crop owing to the excessive rains during July and August. Feed is plentiful and no shortage anticipated.



JUST THINK OF IT!

**27 Grand Varieties
Vegetable and 6
Packets Flower Seeds**
(ONE LIBERAL PACKET OF EACH)

ALSO

$\frac{1}{2}$ Pt. Sweet Corn $\frac{1}{2}$ Pt. Wax Beans
 $\frac{1}{2}$ Pt. Garden Peas

FREE—If you mention FARMING
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One Pk. Grand New Cockscomb
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Only \$1.00
An Unparalleled Offer.

\$2.50—No. 1—Vegetable and Flower Collection—for \$1.00.

- 1 Pkt. Beet Turnip
- 1 " Cabbage, Express, early
- 1 " " Lupton or Imp. Vandergaw, late
- 1 " Carrot, Long, Red Coreless
- 1 " Cauliflower, Extra Early Paris
- 1 " Cucumber, Pearce's Imp. Long Green
- 1 " " Pickling
- 1 " Celery, Giant Golden Heart
- 1 " Lettuce, Imp. Hanson
- 1 " Musk Melon, mixed varieties
- 1 " Water Melon, mixed varieties
- 1 " Vine Peach
- 1 " Onion, Yellow Globe Danvers

- 1 Pkt. Onion, Large Red Wethersfield
- 1 " Parsnip, Imp. Hollow Crowned
- 1 " Pepper, mixed varieties
- 1 " Pumpkin, Japanese Pie
- 1 " Parsley, Taber's Exquisite
- 1 " Radish, Scarlet Turnip
- 1 " " Long Scarlet
- 1 " Salsify or Vegetable Oyster
- 1 " Spinach, Giant Thick-leaved
- 1 " Squash, Essex Hybrid
- 1 " " English Vegetable Marrow
- 1 " Tomato, Pearce's Princess
- 1 " Turnip Golden Stone

- 1 Pkt. each Summer Savory, Sage, Thyme
- $\frac{3}{4}$ Pint Corn, Mammoth White Cory Sweet
- $\frac{3}{4}$ " Beans, Kenny's Rustless
- $\frac{3}{4}$ " Peas, Premium Gem

FLOWER SEEDS

- 1 Pkt. Balsam, Best Double Mixed
- 1 " Aster, all varieties
- 1 " Mignonette, Large Flowering
- 1 " Stock Dwarf German Ten Week mixed
- 1 " Phlox, Grandiflora, mixed
- 1 " Nest-Egg Gourds

Above collection contains 29 pkts. Vegetable Seeds, 6 pkts. Flower Seeds, $\frac{3}{4}$ pkt. Sweet Corn, $\frac{3}{4}$ pt. Wax Beans, $\frac{3}{4}$ pt. Garden Peas, sent to any address post-paid.

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Successors to JOHN S. PEARCE & CO.

Catalogue Free.

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Stock Notes

SHROPSHIRE SHEEP FOR CANADA.—Messrs. Alfred Mansell & Co. despatched on Saturday last, the 3rd inst., per the S.S. *Lake Huron*, of the Elder, Dempster Line from Liverpool, a choice consignment of 32 in-lamb Shropshire ewes on account of Mr. Bradshaw, of Canada, selected from the flocks of Mr. Richard Thomas, Mrs. John Everall and Mr. J. T. Nickels, sired by such well-known rams as Bean House Enterprise, 8376, bred by Mr. T. S. Minton, by Montford Dado, 7613; Shropshire President, 7726, purchased at 200 guineas, by Farmer Newton, 4529; Downton Emblem, 7433, bred by Mr. T. Fenn, by Attractor the Second, 4338; dam by Royal Marquis, 2792; Parish Accountant, 9627, bred by Mr. J. Harding, by the 70 guinea Parish Councillor, 8170; Yorkton Gentleman, 8335, bred by the executors of the late Mr. W. Nevett, by Farmer Newton, 4529, (sire of Shropshire President, sold for 200 guineas); Guinea Stamp, 9044, by Yorton Rare Stamp, 8336; Royal Attractor, 9658, by the Royal winner Chester Royal, 7376, dam by Attractor the Second, 4338; Father O'Flynn, 8519, bred by Mr. Bowen-Jones, sire Bar Leader, winner R.A.S.E.; Medalist, 7605, bred by Mr. Graham, by Doncaster Royal, 5977, winner R.A.S.E., and sold for 250 guineas.

All these ewes were served by high-class sires, including the 50-guinea Ensdom Charm-er, 9904, bought at Mr. Bowen-Jones' disper-sion sale, and one of the pen of 1st prize rams at Birmingham Royal Show, owing as his sire Charmleader, 8933, and then going back to the two Royal winners Barr Leader, 6679, and Attractor the Second, 4338. Others were served by Highland King, an exception-ally good son of the Royal winning and cham-pion ram, Diamond King, 9442, dam by Thorpe Squire; Ruling King, 10110, bred by Messrs. Evans, by the 70 guinea Ruling Star, 8720; Downton Emblem, 7433, by the Royal winner, Attractor the Second, 4338; and Felton Fortitude, bred by Mr. J. E. Farmer, sire the well-known ram Fortitude, 9025, dam by the 100-guinea Emerald Chief, bred by Mr. J. L. Naper.

Altogether they were a nice even lot of sheep and should they reach their destination in safety they will form the nucleus of a valu-able flock.

AYRSHIRES AND TAMWORTHS.—Messrs. R. Reid & Co., Hintonburg, Ont., write: Our stock is wintering well and we have a

BUG PROOF PEAS

For Seed

30c PER BUS.

Goose Wheat, Barley, Clover and Timothy, Garden Seeds, etc.

JAS. DUNLOP
Hamilton, Ont.

Insure Your Crops

of wheat and oats. This is best done by applying 100 lbs. of

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per acre early in the spring. Promotes stooling, stimulates growth, increases yield. Of great value on all crops, veg-etables, grass, fruits, etc. Get free book, "Food for Plants," which tells why. Address **John A. Myers**, 12-Q John St., New York. Nitrate for sale by fertilizer dealers everywhere.

Write at once for List of Dealers.



LUMP JAW NOW CURABLE. Sorely, quickly and for good, **FLEMING BROS., Chemists, St. George, Ont.**, have a remedy that quickly cures the most obstinate cases. Supplied by mail under a positive guarantee. Price, \$2.00. Valuable information and full particulars FREE.

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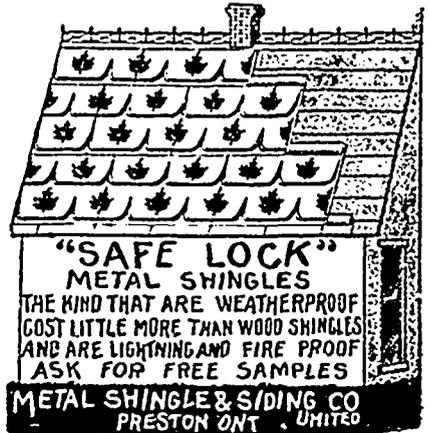


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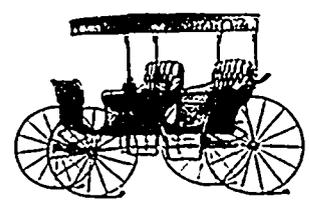
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No. 30—Canopy-Top Surrey, double fenders. Price complete, with cur-tains all around, storm apron, lamps, pole or shafts, \$87—as good as sells for \$10 more.

We can assure you of good quality from beginning to end—good woodwork, good steel and iron, good painting and varnish, good finish, good trimming, fine style, and good selection to choose from. Catalogue free. Address—

INTERNATIONAL CARRIAGE CO. CANADIAN BRANCH, BRIGHTON, ONT.

One Profit Only.

We manufacture 100 styles of vehicles 50 styles of harness, and sell them direct from factory at wholesale prices; in fact, we are the only firm located in Canada selling direct to the consumer exclu-sively. When you buy on this plan you pay **only the profit of the manufacturer**—no travelling expenses, no losses, no agents' commission. **WE HAVE NO AGENTS**, preferring to deal direct with you until we have our goods established at least. We are adopting this system to get our goods in the hands of the Canadian consumers. No matter where you live, we can reach you and save you money.



No. 19—Buggy, 4-bow rubber top. Price complete, with apron carpet and boot on body, \$35—as good as sells for \$25 more.

FREE We give this splendid Rifle for selling only two dozen packages of Sweet Pea Seeds at 10 cents each. Each large package contains 25 most fragrant varieties. All colors. This Rifle is of the best make and latest model, well finished, nickel plated, carefully sighted and tested before leaving the factory. It is just the thing for target practice or for shooting cats, rats, sparrows, etc. Return this advertisement with your address and we send seeds. Sell them, return money and we forward your Rifle all charges paid. The season for selling seeds is short so order at once. Our Sweet Pea packages sell themselves. **International Supply Co., Box F Toronto.**

DAISY AIR RIFLE

SEEDS FOR 25c.

Any 12 Varieties—Regular 5 cent Packages—Money Refunded if not Satisfactory.

VEGETABLES.

- (Order by Number.)
- 1—Beet, Eclipse, Round.
 - 2—Beet, Egyptian, flat-round.
 - 3—Cabbage, Winningstadt.
 - 4—Cabbage, Pottler's Bruns-wick.
 - 5—Carrot, half-long, Scarlet.
 - 6—Carrot, Oxheart, or Guer-ande.
 - 7—Cucumber, Chicago Pick-ling.
 - 8—Cucumber, long green.
 - 9—Celery, Golden Self-Blanch-ing.
 - 10—Herbs, Sage.
 - 11—Herbs, Savory.
 - 12—Herbs, Marjoram.
 - 13—Lettuce, Nonpareil (Cab-bage).
 - 14—Lettuce, Denver Market (Curled).
 - 15—Musk Melon, Extra Early.
 - 16—Water Melon, Early Can-ada.
 - 17—Onion, Large Red, Weth-ersfield.
 - 18—Onion, Yellow Globe, Dan-vers.
 - 19—Parsnip, Hollow Crown.
 - 20—Radish, French Breakfast.
 - 21—Radish, Rosy Gem, White Tipped.
 - 22—Squash, Hubbard.
 - 23—Tomato, Extra Early At-lantic.
 - 24—Tomato, Dwarf Champion.

FLOWERS.

- 25—Asters, Mixed.
- 26—Mignonette, Sweet.
- 27—Pansy, Mixed.
- 28—Petunia, Mixed.
- 29—Nasturtiums, Tall Mixed.
- 30—Sweet Peas, Fine Mixed.
- 31—Wild Flower, Garden Mixed.



No. 18—ONION YELLOW DANVERS.

WM. RENNIE, TORONTO. BY MAIL POSTPAID. ORDER TO-DAY.

FREE Providing this coupon is CUT OUT and sent to us with an order for 12 packets, we will include 1 packet New Giant Yellow Sweet Sultan—Price 25c—FREE OF CHARGE TO READERS.

number of good young things for sale including eight young bulls, two of them will be fit for service this spring and six bull calves from two to seven months old. All except one are sired by Gold King 1387, a son of Willie Asborne, the other by Duke of York 2nd, 2301, (Imp.). We have 15 Tamworth boars fit for spring service and sired by such boars as Amber Luther, 245, who more than once has taken first at Toronto, Red Fallow, 879, Amber King, 976, both first prize winners at Ottawa, and out of good sows, a number of young sows from 4 to 6 months old. We have mated a fine pen of Black Minorcas and will sell eggs from them for \$1.50 per setting, express prepaid.

Publishers' Desk

A Total of \$50,000 Copies.—The first edition (37,500 copies) of the poultry manual and catalogue issued in December by the Cyphers Incubator Company, entitled "How to Make Money With Poultry and Incubators," is nearly exhausted, and a second edition of 12,500 copies is now on the press, so that none interested in the profitable production of poultry, on either a large or small scale, need be without a copy. The preparation of the first edition of this book (192 pages 8 x 11 inches, with over 200 fine illustrations) cost the publishers over \$4,000. Any reader of FARMING can get a complete copy, mailed flat in a large strong envelope for only 15c. in stamps, to cover postage and mailing expense. It contains over 20 deeply interesting articles, written by poultry experts expressly for this book, including Prof. A. A. Brigham, Prof. Wm. P. Brooks, James D. Jen, George H. Pollard, F. Hunter, M. K. Boyer, Myra V. Norys, Geo. O. Brown, John H. Robinson and others. It also illustrates and describes about thirty of the largest duck and chicken plants in America. Address the Cyphers Incubator Co., at their nearest office, Chicago, Ill., Wayland, N. Y., or Boston, Mass., mentioning this paper.

Publishers' Talks

Sowing the Seed.

This will be the work in which readers of FARMING will soon quickly engage. Sowing of the seed—and then the harvest. This is the order.

What the harvest will be depends on the methods adopted in tilling the soil, the choice made of the seed sown, and the methods adopted in watching the growing crop and afterwards gathering in the harvest.

If subscribers have been diligent readers of FARMING during the winter months they will have in their possession many useful hints that will make good gold dollars for them. This is an age, more than any age, where intelligent thought adds influence in every vocation. The success of one man, in contrast with the failure of another, is due usually to the degree of intelligence that he mixes up with his work—no matter what that work may be.

We have no sympathy with the mere book farmer—the man of theory and not of work. The readers of FARMING will agree that we are giving them a practical journal, the purpose of our leading articles being to help the farmer to attain the greatest possible success from his toil.

Is not such a paper worth knowing about? Is it not a paper that you can recommend to your friends, knowing that it will do them good in the directions we have suggested, as it has yourself?

WHEN writing to Advertisers it is to your advantage to mention **FARMING** :: :: :: :: ::

KENDALL'S... SPAVIN CURE



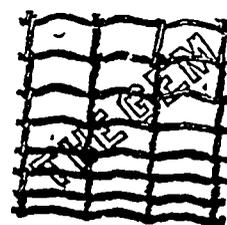
The old reliable remedy for Spavins, Ringbones, Splints, Curbs and all forms of Lameness. It cures without a blister because it does not blister. North Platte, Ont., Feb. 10, '92.
 Dr. B. J. Kendall Co.
 Dear Sirs:—Will you please give me a remedy for heaven. I have a mare that it ached. It ake pleasure in stating that I have cured a Curb of four years' standing with your Kendall's Blisters by using it only once and then applying your Spavin Cure. As long as I have horses, I will not be without Kendall's Spavin Cure and Kendall's Blisters in my stable.
 Very truly yours,
 ADOLPHUS GAUTHIER.
 Price \$1.50 for \$2. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address
 DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.

Binder Twine



One of the Postmaster-General's rural delivery letter carriers distributing the announcement that the Farmers' Binder Twine Co. of Brantford, Limited, are out with their twine prices for the harvest of 1900.

FARMERS' COMPANY LIMITED.
BRANTFORD, ONT.
 JOSEPH STRATFORD, General Manager



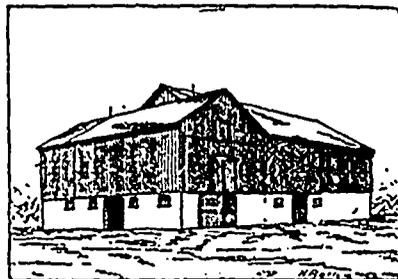
FREE—Best Fence Machinemade.

To first purchaser in each neighborhood not less than 1000 lbs. coiled spring wire at market price. Offer open for 30 days to introduce our goods.

McGREGOR, BANWELL & CO., Windsor, Ont.

When writing to advertisers please mention **FARMING**.

Thorold Cement



Do you intend building Barn Basements, or Stable Walls, or Walls of any kind? if so, use "Battle's Thorold Cement," which can truly be called the

Farmer's Favorite Cement

What Mr. Malcolm McIven says:

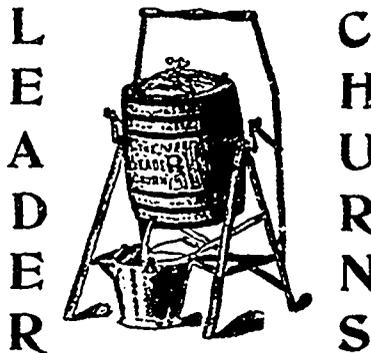
MALCOLM, Ont., Bruce Co.,
 February 7th, 1900.

I am highly pleased with my stable floor; there is not a chip out of it, though I did all the work myself after your Mr. Hagar left. I never had such comfort in feeding stock as I have had this winter, and the amount that is saved in liquid manure is hard to calculate. Everybody that looks at my floors decides to use Thorold Cement.

Write us for Free Pamphlet and Prices

ESTATE OF JOHN BATTLE THOROLD, ONT.

DOWSWELL'S



Steel or Wooden Frames. Made in four different Styles, and six regular sizes. Cranks or Levers as required.

All desirable features to be found in other churns are embraced in The Leader, and many additional advantages.

Our patented Internal Breakers increase yield, improve quality and also reduce the length of operation almost one-half. You will have the best if you buy The Leader.

Trade Only Supplied

See that your dealer shows them to you, or write us for full information.

The Dowsell Manufacturing Co., Limited
HAMILTON.

Grain Grinders

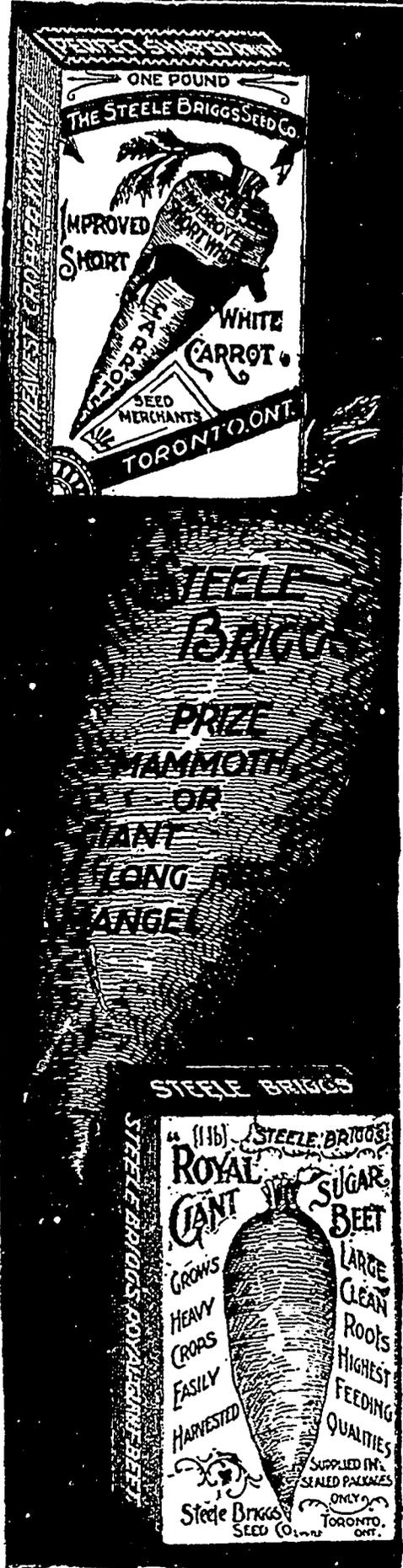


BEST IN THE WORLD

Write for Catalogue

S. VESSOT & CO.,
 Joliette, Que.

“Canada’s Greatest Seed House.”



THE SECRET FOR SUCCESS

Is in using the best seeds at all times, because you secure more tons per acre in the yield of roots. When you use cheaply grown seeds you sacrifice by poor yield in crop and inferior quality of roots many times the cost of good seed.

STERLING SPECIALTIES

Steele, Briggs' CARROT

“Improved Short White”

The King of Field Carrots, largest cropper, heaviest and cleanest roots, most easily harvested of any Carrot grown.

Use Steele, Briggs' Sealed Packages only (see out), then you get the genuine sort.

Price (post-paid) $\frac{1}{4}$ lb., 20c.; $\frac{1}{2}$ lb., 30c.; lb., 50c.

MANGEL WURTZEL

“Steele, Briggs' Money Makers”

Have been perfected by repeated selections of seed roots during several years past, thus securing the finest strains that can be obtained. Growers who value their Mangel Crop will use Steele, Briggs'

“Prize Mammoth or Giant Long Red”

“Giant Yellow Oval” and

“Giant Yellow Globe.”

Price, each, by mail (post-paid), 29c. lb.; in 5 lb. lots or more, 27c. lb.

STEELE, BRIGGS'

“Royal Giant” SUGAR BEET

A new and distinct variety, roots rose color, very large, clean, easily harvested and heaviest cropper of any Sugar Beet known. Every grower should try it.

Can only be had in (1 lb.) sealed packages (see out).

Price (post-paid) 50c. per lb.

NOTICE TO GROWERS

Steele, Briggs' Field Root Seeds are all produced from specially selected roots and with unusual care, that the Canadian grower may secure the most profitable result from his crop. Steele, Briggs' Seeds may be obtained from local dealers who consider the growers' best interest, rather than the small increased profits to themselves by supplying “cheaply” grown seeds.

Secure STEELE, BRIGGS' Seeds

If not obtainable from your resident merchant, send your orders direct, that you may have the best.

CATALOGUE MAILED FREE TO INTENDING BUYERS.

The Steele, Briggs Seed Co., TORONTO, Ont.

LIMITED

Market Review and Forecast

OFFICE OF FARMING,
Confederation Life Building,
Toronto, March 26th, 1900.

During the past week or two trade in some wholesale lines has been rather slow, owing no doubt to the very cold weather. The outlook, however, continues as bright as ever. The money market shows signs of stiffening a little, though funds seem ample for all legitimate purposes. It is now difficult to obtain money on call at under $5\frac{1}{2}$ per cent. Discounts are generally steady at 6 to 7 per cent.

Wheat.

The wheat situation of the week has been somewhat unsatisfactory and hard to follow. One day the market will be reported firm and higher and the next day dull and lower, showing the influence of speculators, and how easily the market is affected by favorable or unfavorable crop reports. Especially has this been the case at Chicago, where futures are reported over a cent lower than the week previous. Nothing of a striking nature has occurred to cause injury to the growing crop on this continent. In fact the more favorable reports from some of the Central States was one of the causes of the drop last week. In Canada the crop has pulled through the winter fairly well so far, though many fields are now covered with ice, which if it continues for some time may do the crop injury. But it is too early yet to say anything definite in this connection.

The English markets have ruled fairly steady all week for stuff near at hand, though an easier feeling was reported at the end of the week. The amount of wheat and flour now in transit to Europe, with the visible supply of wheat in the United States and Canada, show an increase of 22,030,000 bushels as compared with this time a year ago. Considerable business in Manitoba wheat was reported during the week. A large sale, amounting to over 200,000 bushels, is said to have been made for May shipment at about 68c. afloat, Fort William. The market for Ontario wheat has been quiet, though, on the whole, steady. Ontario spring wheat is quoted at Montreal at 65 $\frac{1}{2}$ c. to 66c. f.o.b. at Eastern Ontario points. The market here is quiet at 65c. for red and white north and west, and 69c. for goose. On Toronto farmers' market red and white bring 69 to 71c., spring 72, and goose 70c. per bushel.

Oats and Barley.

Oats are generally duller, with prices easier. A few sales were made at Montreal at 32 to 32 $\frac{1}{2}$ c. afloat May. The market here is steady at 28 to 28 $\frac{1}{2}$ c. for white east, and 27 to 27 $\frac{1}{2}$ c. west. On farmers' market oats bring 32 to 33c. per bushel.

There is nothing doing in barley, and prices are largely nominal. On Toronto farmers' market barley brings 45c. per bushel.

Peas and Corn.

Peas are quiet at Montreal with holders asking 72 $\frac{1}{2}$ c. afloat May, and buyers bidding 72c. The market here is dull at 60 to 61c. west and 62c. east. On farmers' market here peas fetch 60c. per bushel.

The corn market keeps firm and car lots of American are quoted at Montreal at 45 to 46c. per bushel. Canadian is quoted here at 43 to 44c., and American at 45 to 45 $\frac{1}{2}$ c. on track Toronto.

Bran and Shorts.

Ontario bran keeps scarce. Montreal prices are \$17 to \$17.50 for bran, \$18 for shorts, and \$18.50 to \$25 per ton for Moullie. City Mills here sell bran at \$16, and shorts at \$17 in car lots f.o.b. Toronto.

Eggs and Poultry.

The English egg market, as is usual at this

season, is on the down grade owing to large receipts. At Montreal prices have ruled steady during the week at 13 $\frac{1}{2}$ to 14 $\frac{1}{2}$ c. for new laid in large lots. There is a fairly good demand here at about 14c. for new laid in large lots. On Toronto farmers' market new-laid bring 14 to 16c. per dozen.

Prices for dressed poultry on Toronto farmers' market are as follows: Chickens 65c. to 85c., and ducks 80c. to \$1 per pair; turkeys 13 to 15c., and geese 8 to 9c. per lb.

Potatoes.

The market for these is quiet with an easier tendency. Car lots at Montreal are quoted at 40 to 43c. on track. Quotations here are the same as given last week.

Hay and Straw.

The hay trade continues firm under a good local and export demand. There is an improved feeling in United States and Great Britain. Quite a lot of Canadian hay has been sold at Liverpool and London at 82s. 6d. to 87s. 6d. ex-quay. Some Canadian hay held in New York, and for which duty was paid, sold last week at \$17.25. Quite a lot of hay is being shipped from Canada via American ports. Sales of No. 2 baled hay have been made at local points in Quebec at \$7.25 to \$7.50. At Montreal quotations are \$8.25 to \$8.50 for cars of No. 2 quality, and \$9.50 to \$10 for No. 1 on track. Prices are steady here at \$9 to \$9.50 for baled timothy on track, and \$4.50 to \$5 for baled straw. On Toronto farmers' market timothy brings \$12 to \$13.50, mixed \$9 to \$9.50, sheaf straw \$8.75 to \$9.50, and loose straw \$4 to \$5 per ton.

Seeds.

At Montreal the market is steady at \$1.25 to \$1.75 for flax seed, \$1.30 to \$1.75 for timothy, \$5.25 to \$6 for red clover, and \$5.25 to \$6.25 per bushel for alsike. The American seed markets are generally steady, though clover was 10c. lower at Chicago on Thursday. On Toronto farmers' market prices are: red clover, \$5 to \$5.75; alsike, \$5.50 to \$7; white clover, \$7 to \$8, and timothy, \$1 to \$1.35 per bushel.

Cheese.

The season for old stock is practically over so far as the market on this side is concerned. Finest old stock is quotable at Montreal at 12 $\frac{1}{2}$ to 12 $\frac{3}{4}$ c. for white, and 13 to 13 $\frac{1}{2}$ c. for colored. A few factories in the Belleville section have been contracting April cheese at 11c., but most factorymen want more money. Last year the first April cheese were contracted for at 10c. A year ago finest western cheese (old stock) sold at Montreal at 10 $\frac{1}{2}$ to 11c., with a firm upward tendency. It is probable that a large number of factories west of Toronto will begin making cheese about April 1st.

Butter.

The butter market as compared with a week or two ago is weak and declining, though prices are yet sufficient to return a good profit to the producer. Prices in Montreal show a decline of from 9 to 10c. per lb. from what they were two weeks ago, and it would be difficult to get more than 22 to 23c. for choice creamery and lower prices are expected this week. Sales at country points were made at the middle of the week at 23c. f.o.b., but factories would have to take lower values to-day. Western dairy is quoted at Montreal at 16 to 18c. The market here is also on the down grade with finest creamery quoted at 24 to 25c. for prints, and 23 to 24c. for tubs in large lots. Choice dairy tubs are quoted at 20 to 21c., and pound rolls at 22c. On Toronto farmers' market butter brings 23 to 27c. per pound.

Cattle.

The export cattle trade has been in a somewhat unsatisfactory state during the past few weeks. Shippers have found it difficult to get vessel space when wanted and have had to conduct an irregular trade, which has been far from satisfactory. It is also reported that drovers have been paying too much money in the country. During the early part of the week trade at the leading American markets was slow with prices easier, excepting perhaps for handy butchers' cattle. On Friday there was a noticeable improvement in the situation due to firmer cable reports for live cattle. The run of stock on Toronto market on Friday was light, consisting of 640 cattle, 1,584 hogs, 80 sheep and lambs, and 20 calves. The quality of fat cattle was not so good as during past few weeks. Too many unfinished shipping cattle are coming forward. Because of the light run trade was fairly good, and several shippers having secured vessel space choicest exporters were firmer.

Export cattle.—Choice lots of these sold at \$4.70 to \$4.90, and light ones at \$4.25 to \$4.60 per cwt. Heavy export bulls sold at \$4 to \$4.10 and light ones at \$3.25 to \$3.60 per cwt. The bulk of exporters sold at \$4.50 to \$4.70, and good loads of mixed butchers' and exporters' at \$4 to \$4.12 $\frac{1}{2}$ per cwt.

Butchers' cattle.—These were bought up readily owing to there being a number of outside dealers present. Choice picked lots sold at \$4.25 to \$4.50; good cattle at \$3.70 to \$3.90; medium at \$3.45 to \$3.65; and inferior to common at \$2.60 to \$3.15 per cwt.

Feeders.—Choice well-bred heavy steers, weighing 1,050 to 1,200 each, are scarce at \$3.80 to \$4.12 $\frac{1}{2}$ per cwt. Light steers weighing 800 to 950 were more plentiful at \$3.50 to \$3.75 per cwt. Feeding bulls bring \$2.75 to \$3.40 per cwt.

Stockers.—Yearling steers for the Buffalo trade weighing 500 to 600 lbs. each sold at \$3.25 to \$3.20, while other than best quality brought \$2.25 to \$2.75 per cwt.

Calves.—Because of the high prices for veal calves some very young calves are being offered. What is wanted is veal calves that will dress from 80 lbs. upwards for which \$4 to \$12 each will be paid.

Milk cows.—About 25 were offered on Friday, very few being of good quality and sold at from \$30 to \$50 each.

Sheep and Lambs.

The market for sheep on Friday was dull with prices easy at \$3.25 to \$3.75 for ewes and \$2.50 to \$3 for bucks per cwt. Butchers' sheep sold at \$3 to \$4 each. Lambs were also easier at \$4.50 to \$5.75 per cwt. Picked ewes and wethers sold at \$5.50 to \$5.75 per cwt. The corresponding Buffalo market was 10c. stronger on fancy lambs.

Hogs.

The hog market keeps firm and strong. Best select bacon hogs sold on Friday at \$5.62 $\frac{1}{2}$ and thick and light fat at \$5 per cwt. an advance of 12 $\frac{1}{2}$ c. over last week's quotations. It is expected that select bacon hogs will reach \$5.75 per cwt. this week. Montreal prices are \$5.62 $\frac{1}{2}$ to 5.75 for choice hogs. The *Trade Bulletin's* cable of March 22nd re Canadian bacon reads thus: "The market for Canadian bacon is firmer and 2s. higher, and at the advance there is a good demand."

Horses.

At Grands' Repository this city on Tuesday about 45 horses were sold. Over one-half of these were heavy draft and sold at good figures. The highest price was \$205 paid for a gelding weighing 1880 lbs. This was one of the best horses in his class ever sold at this place. The balance of the draft horses sold

at \$110 to \$150 each. Driving and other horses sold about the same as last week's quotations.

On April 18th will be sold at Grand's a number of horses from the Hillhurst Hackney Stud, Quebec, the property of Hon. M. H. Cochrane. Among the animals to be sold are Barthorpe Performer and some superb young stock of Royal Danegelt blood. See Grand's announcement elsewhere in this issue.

What She Would Do.

A high school girl said to her father:

"Daddy, I've got a sentence here I'd like to have you punctuate. You know something about punctuation, don't you?"

"A little," said the cautious parent, as he took the slip of paper she handed him.

This is what he read:

"A five-dollar bill flew around the corner"

He studied it carefully.

"Well," he finally said, "I'd simply put a period after it, like this."

"I wouldn't," said the high school girl. "I'd make a dash after it!"

A Study in Yellow

The stranger in a great city was being shown over the offices of a famous publishing house. He saw the printing machines and the type-setting outfit, and then he said, with a little timidity:

"There's one thing more I'd like to see."

"What's that?"

"I'd like to see 'em edit."

"Oh! Of course. I had pretty nearly forgotten that. You know, we're so enterprising that the editor is only a small part of it. But we've got editors. Lots of 'em. See that man with the waste-paper basket by the side of his desk and the stack of letters three feet high?"

"Yes."

"We've got up a discussion on kissing dogs. He's the Kissing Dog editor. The man just to his right, with all the diamonds, gives advice to people in love. He's the Wounded Heart editor. Those portly, handsome gentlemen to his right, who are engaged in ordering the office-boys around, are the Sea-serpent, How-to-be Beautiful, and Summer Drinks editors. The How-not-to eat-with-your knife editor is away on his holiday. The When-to-put-on-our flannels editor is away on his vacation, too."

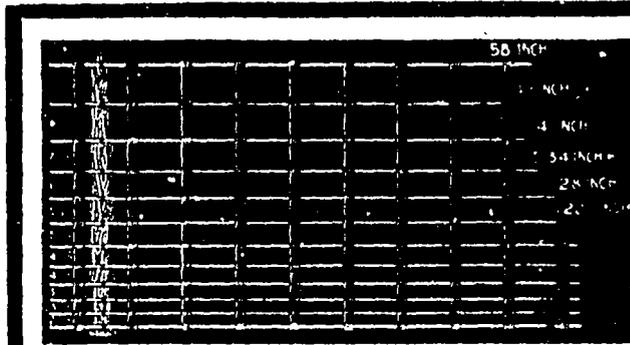
"And that unassuming man, who sits over there in a corner, and doesn't seem to be in it?"

"Oh, he's just a managing editor, or an editor-in-chief, or something—I don't know exactly what.—*Collier's Weekly*."

SEED OATS AND POTATES

SALZER'S Big Four Oats (very early), Wilson's First Choice and Great Divide Potatoes. Prices for a postal.

TILMAN E. BOWMAN
Berlin, Ont.



The
right
Fence
at the
right
Price.

That's the fence here shown. The fence outselling every other form of fencing because it is proving itself from every standpoint the Strongest, most Efficient, most Economical. For Farms, Plantations, Ranches, Fields, Orchards, etc., it is the strongest and safest. Neither animals nor the elements can injure it. It does not injure stock.

American Field and Hog Fencing

Sold by agents everywhere. If you fail to find our agent write direct to the manufacturers.

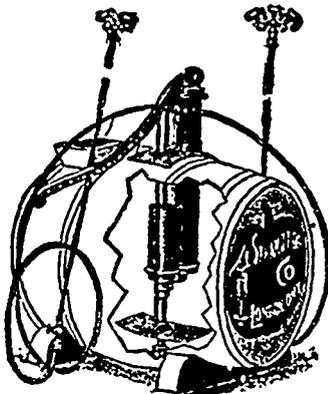
American Steel and Wire Co.,

CHICAGO,

NEW YORK,

SAN FRANCISCO.

WHY THROW AWAY ONE-HALF YOUR LABOR ?



THIS is just what you do with almost all sprayers sold to-day. All the Spramotor salesmen have to do to show this is to shut off all discharge outlets, and ask customers to pump up the pressure. When this is done the handle is held tight, nothing is lost, showing the perfect mechanism.

All other machines lose from 5 to 15 strokes each minute from leakage with a pressure of 100 pounds. One machine in the market, which is claimed to have no packing, but which is in reality packed with metallic rings, lost 10 strokes each minute from leakage back through the plunger, and, to overcome this difficulty, put on leather-faced valves and plunger in the machines used at the Fall Fairs during 1899, displaying the rings to the public.

A metallic packing in a steam engine is a very satisfactory packing, as it can be oiled and kept in proper working order, and are made to expand in width as well as in diameter, but all mechanics know what the result is when it is not kept oiled, and they are amused when told that it is a suitable packing for a sand pump, which is just what a sprayer is when using Bordeaux mixture or whitewash.

Take two pieces of brass, and put sand and water between, and rub them together, and you will soon see what the result is.

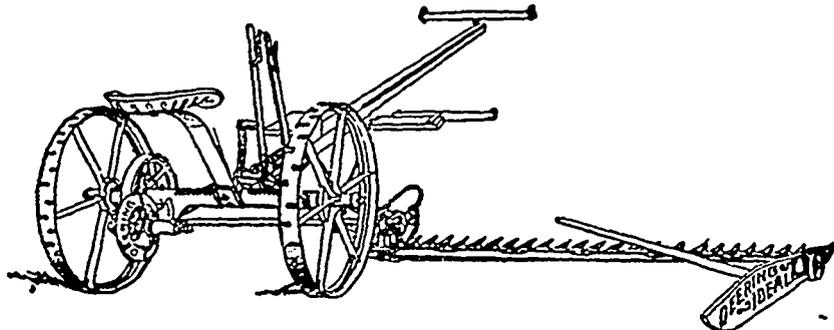
Why throw away one-half your labor, when with the Spramotor you use it all at the nozzle. Each Spramotor is guaranteed, and the guarantee is good.

The Spramotor Treatise of 76 pages is yours for the asking.

SPRAMOTOR CO. 69-70 King Street.
LONDON, ONT.

THE MACHINES That Made America Famous

DEERING
BINDER TWINE



DEERING
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IDEAL MOWER

Starts in the heaviest, toughest grass without backing the team or bending a straw.

IT PAYS TO USE DEERING MACHINES

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LONDON, Ont.

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NO crop can grow without Potash.

Every blade of Grass, every grain of Corn, all Fruits and Vegetables must have it. If enough is supplied

you can count on a full crop— if too little, the growth will be "scrubby."

Send for our books telling all about composition of fertilizers best adapted for all crops. They cost you nothing.

GERMAN KALI WORKS, 93 Nassau St., New York.



Cheese and Butter

Makers of these articles; in many instances, do not pay the necessary attention to the quality of the salt they use. Some people think that "salt is salt," and it does not matter where it comes from or who makes it. This is a great mistake, for it is essential that to produce the best Butter or Cheese nothing but the purest salt should be used.

The number of prizes obtained by users of

RIE'S or COLEMAN'S DAIRY SALT

at the various exhibitions is conclusive proof that these brands of salt stand unrivalled. For prices, etc., address

R. & J. RANSFORD,
Clinton, Ont.

YOU CAN'T DO IT

You can't make good butter or cheese with common, impure salt. It pays to use the best, and the best is

Windsor Salt

the use of which improves flavor and keeping quality.

THE WINDSOR SALT CO.
LIMITED
WINDSOR, ONT.

NO REPAIRING

of fence where the Page Woven Wire is used. Page fence is made of a wire made especially for us, which does not break, stretch or rust. Our standard fence is five feet high and woven so close that stock can't get through or over it. And you can buy it for less money than you may think. Better look into it.

THE PAGE WIRE FENCE CO. (LTD)
Walkerville, Ont.



NEW Household Scale

CONVENIENT and ACCURATE

As well as handsome. The entire Scale nickel-plated. White enamelled ware dish. Capacity, 12 lbs. No loose weights. Requires no table room. Always ready for use. Easily kept clean. For sale by all hardware dealers. Prices moderate. Made by

THE GURNEY SCALE CO.,
HAMILTON, Ont., Canada

ALEXANDRA AND MELOTTE CREAM SEPARATORS

We ask all intending buyers of Cream Separators to study the merits of the "Melotte," if they want to get the best results. The "Melotte" has beaten all competitors in public working trials. Takes one-third less power. Sent on free trial.

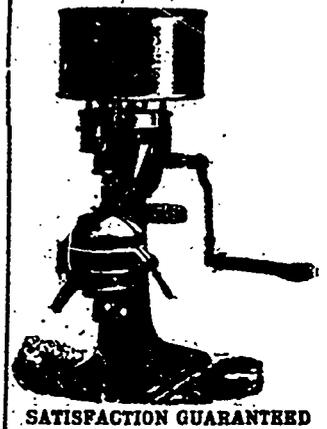
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POSITIVELY NON-POISONOUS

Kills Ticks,
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Heals Wounds,
Heals Ulcers,

Cures Scab and
Greatly Improves
Quality of Wool;
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Thoroughly Cleanses the
Skin, leaving Coat
Soft and Glossy.

Leading Stockmen endorse it as the cheapest and most effective "Dip" on the market. Sold by Druggists, 50c. per qt. can. Special terms to Breeders requiring large quantities. Made only by

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LIMITED
STOUFFVILLE, Ont.

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ULRICH'S Ensilage Corn

MAMMOTH WHITE GIANT PROLIFIC
YELLOW DENT IMPROVED LEAMING
E. R. ULRICH & SONS,
SPRINGFIELD, ILL.

Ask your dealer for samples and testimonials

CANADIAN PACIFIC RY.

Settlers' One-Way Excursions

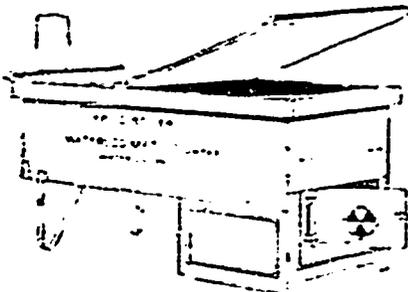
To Manitoba and Canadian North West
will leave Toronto every TUESDAY during
March and April

Passengers travelling without Live Stock
should take the train leaving Toronto at 2 p.m.
Passengers travelling with Live Stock should
take the train leaving Toronto at 9 p.m.

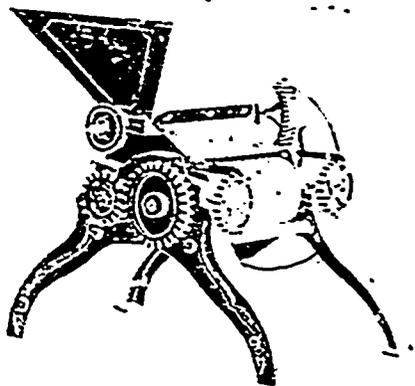
Colonist Sleeper will be attached to each
train
For full particulars and copy of "Settlers
Guide" apply to any Canadian Pacific Agent,
o. to

A. H. NOTMAN
Asst. Gen. Pass. Agent
King St. East, Toronto

Food Boiler



Grain Crusher



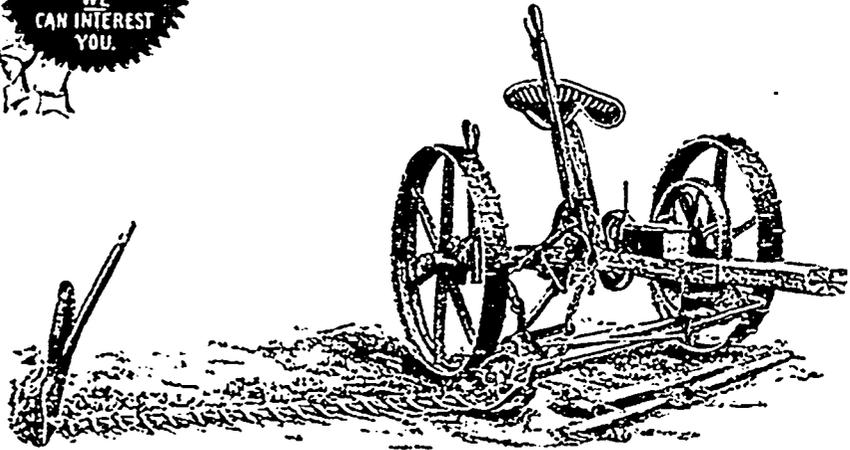
Easy Running, Durable, and of great
crushing Capacity.
Rollers, 10 x 5 1/2 inches.
Will grind from 50 to 100 bushels of grain
per hour
Surpasses all other grinders.
Write for Circulars.

WATERLOO MANFG. CO.
LIMITED
WATERLOO, ONT.



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WITH YOU?
IF SO
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We want every reader of "Farm-
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THE FROST & WOOD New Mower No. 8

Thousands in Use and Giving Satisfaction

Our samples for 1900 are now ready SEE THEM and get our prices before buying.

IT WILL PAY YOU

Local Agents Everywhere.

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petition, is there such a great
demand for this All Steel
Flexible Harrow?

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The Flexi-
bility of the
Harrow enables it to adapt itself as readily
to rough and uneven ground as to smooth,
and the oscillating motion produced by its
flexibility pulverizes the ground, and leaves it
in a loose and more porous condition than
any other Harrow, and it is made of the very
best material money can buy for the purpose.
The bars are made of Hard Spring Steel
very stiff and strong, the hinges and teeth be-
ing of solid steel, all of which are of a higher
grade than is possible to use in any other
make of Harrows.



We can guarantee more than double the strength and wear in this Harrow
than there is in any other make.

Particulars being a first class Harrow will do well to write us first or apply to the local agent.

OUR MOTTO: "Not how Cheap, but how Good."

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