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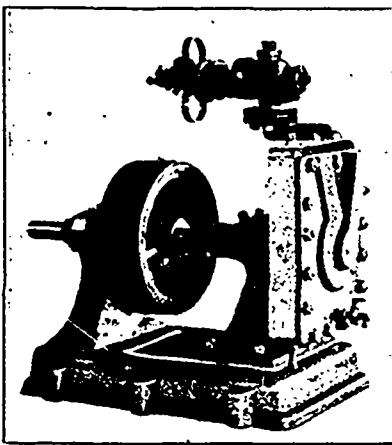
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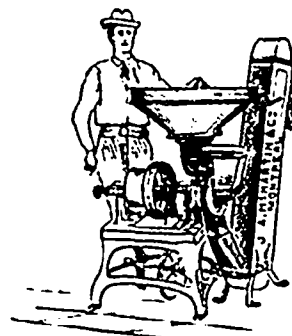
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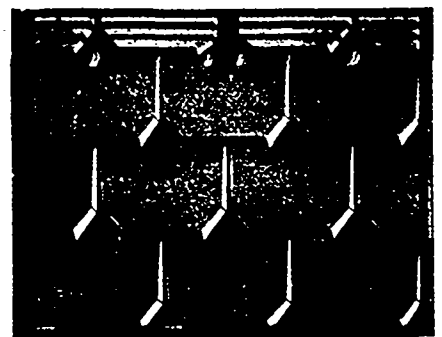
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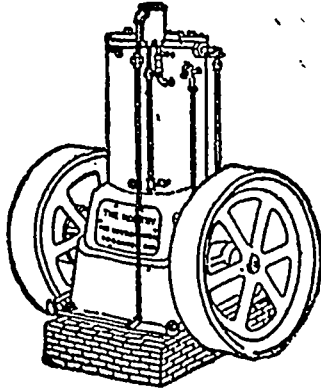
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FARMING

VOL. XVI.

OCTOBER 18th, 1898.

No. 7.

A Farmers' Business Paper.

"Why do some people imagine that an agricultural paper should be published less often than any other trade paper?" This question was asked and answered by a prominent and successful business man whose business dealings are almost exclusively with the farmers, and who knows their requirements as well as they do themselves. He said, "The fact is there is no reason whatever why the farmer should not read a paper devoted exclusively to the business side of his vocation as often as he can get it. The oftener the better. If it were possible to have a daily bulletin delivered to him, similar to some of the trade bulletins published on the other side, giving seasonable hints regarding his work, the current prices of his products, and information as to the best available markets, with possibly a single article upon some topic of practical and present interest to him in his business, it would be of the greatest advantage to him imaginable. Of course, the present condition of the mail delivery in rural districts makes this an impossibility, but I venture to predict that the agricultural paper of the future will be published at least twice a week, and that the farmer will require, and the postal authorities be compelled to afford him, similar facilities with regard to mail delivery as those enjoyed by other business men. A weekly paper of this kind is, however, not only a possibility but an absolute necessity, and I am pleased to see that FARMING has been able, not only to appreciate the farmer's position as a business man, but has had the courage to take the initiative in this matter. It supplies just what is wanted, and what every farmer should know is wanted if he has any true conception of his position as a business man. The market reports alone, being accurate and reliable, are extremely valuable, more so even than those supplied by the majority of the daily papers, because they are prepared especially for the farmers' trade."

The majority of our friends will agree with these views, since they have had an opportunity of comparing the value of a farm paper published weekly with one issued less frequently. The fact that FARMING has largely increased its circulation during the past year, and that since September 1st many hundreds of new readers have been added to the list, is sufficient evidence that an up-to-date weekly publication of this kind is not likely to lack appreciation.

Agricultural News and Comments

The smallest horse in the world is said to be a Shetland pony owned by the Marchese Carcano in northern Italy. It is twenty-four inches high, and when standing beside its owner this very diminutive little pony's back is only about an inch above his knee.

The British Board of Agriculture has issued a new sheep-scab order, having as many as thirty clauses for the purpose of the suppression of sheep-scab. Practical flockmen of experience are doubtful about its being very effective. About the only way of eradicating the pest in its entirety is to adopt the plan of the Australian Government and make dipping compulsory whenever needed.

The plan of removing a lot of leaves from trees or grape vines, to admit sun to the fruit and presumably hasten ripening, is a most pernicious one. Leaves are the nourishing organs, the lungs of the trees, and to remove them is a detriment to fruit development. More than that, any branches stripped of leaves this year will have weak, ill-formed buds next year, which means feeble growth.

A writer states that a horse well prepared for the sale ring is half sold. This is more true to-day than ever be-

fore. Several years ago this was not so much the case and horses, particularly trotting-bred horses, would sell quite well regardless of the condition they were in. Now, however, no horse will bring a good price when led into the sale ring unless he shows good care and good manners.

Mr. J. W. Hart has been appointed to succeed Mr. J. A. Ruddick as Superintendent of the Kingston Dairy School. Mr. Hart is a graduate of the Ontario Agricultural College, and was on Professor Robertson's staff for a time. For the past two years Mr. Hart has been in charge of the dairy department of Clemson College, South Carolina, and has a wide knowledge of practical dairying, particularly of butter-making.

Cornstalks are likely to come into use for a new purpose. It is now believed that the shive or outside of the cornstalk can be made into a finely surfaced paper. A company has been organized at Rockford, Ill., for this purpose, and the manufacture of paper from this portion of the cornstalk already begun. In addition to paper a splendid cardboard can be made, and also a superior line of fancy products, at a comparatively low cost.

A movement is on foot to organize a creamery at Orillia. Recently Prof. Dean addressed a meeting there in behalf of this movement, in which he pointed out that there was no risk whatever in establishing a creamery providing it was managed in a business-like way, and properly patronized. There was no danger that the creamery business would be overdone. Canada was now supplying only three per cent. of Great Britain's butter, and over sixty per cent. of her cheese.

The Quebec Government is endeavoring to interest the people of that province in road-making. Provision has been made whereby municipalities may avail themselves of road-making implements and instruction on fairly easy terms, but there does not appear to be much enthusiasm in the way of taking advantage of this offer. The people of Quebec will have to be educated along the same lines as the people of Ontario before very much enthusiasm will be evinced in improving the condition of the public highways.

The people in Manitoba are agitating for some effort to be made to develop the interprovincial fruit trade. About eighty per cent. of the fruit consumed by the people in Manitoba and the North-West comes from the United States. The *Winnipeg Free Press* says that the people of Manitoba would far rather buy the superior fruits of Ontario and British Columbia could they secure them in sufficient quantities and in good condition. All that is needed to develop this trade is the placing of Canadian fruits on the Western markets in good condition.

It is a common practice to use a curry comb on a horse but how seldom are such things used on a cow. The keeping of a cow clean is just as essential as the keeping of a horse clean. Carding or currying a cow helps to keep her clean and prevents hair or dirt, which if left would get into the milk. It helps to maintain a condition of good health and in winter time is no bad substitute for exercise. Those who desire to progress in dairying should not forget the large part which thorough and regular cleaning of the cows has in up-to-date dairy work.

The wheat standards selected by the Grain Standard Boards of Manitoba and the Territories are as follows:

Extra Manitoba hard—Nos. 1, 2 and 3 hard; Nos. 1 and 2 Northern, and No. 1 frosted. These are different from last year's standards. Last year there was no frosted wheat grade or No. 3 Northern. The Manitoba extra hard is selected to comply with the statute. It is a choice sample of wheat, and is used principally for seeding purposes. A committee was appointed to meet later on if necessary and select standards for oats, barley and No. 2 frosted.

For some time there has been a bitter feeling between the cattle and sheep men on the ranges in the Western States. Cattle men claim that the sheep poison the grass and their cattle will not eat it, or they bite so close that it is useless to graze cattle where sheep have been. The sheep men have offered to divide the ranges with the cattlemen, but the latter seem to want the former to get out altogether. Recently this feeling has been intensified by the death of a sheep man in Nebraska in a fight between the two elements. The sheep men are now organizing to avenge his death, and it is hard to say what the outcome will be.

There has been much interest aroused among the farmers in the Lothians of Scotland recently, respecting an experiment in regard to winter-sown barley. The barley in question was grown on a field which was cropped with potatoes last year. No artificial or other manure was applied other than what had been applied to the potato crop the previous year. The field was seeded on December 11th with three bushels of barley drilled in. As the winter was mild it continued to grow all winter. The crop was very thick on the ground, and was cut on September 5th last. The color was good, and the sample weighed fifty-seven pounds per bushel, and, when threshed, there was seventy-five bushels of dressed grain per acre.

The workers in a bee-hive are all females, in whom the sex organs are present but undeveloped. The development of the sex organs depends upon the food supplied to the young bee when in the larval stage. By feeding certain foods the bees can produce a developed female or a "queen bee," and this queen bee, when impregnated, will produce eggs that will hatch out either as workers or as drones. If a queen bee has not been impregnated she can produce fertile eggs, but they will all hatch out males. Impregnation is, therefore, absolutely necessary to the production of females. Thus it would appear that there may be some truth in the old belief that males take chiefly from their mothers and females from their fathers.

Deptford is the foreign cattle market for London. Here the cattle from South America, the United States and Canada are landed. The enclosure contains thirty acres, and in the huge building 8,000 cattle and 14,000 sheep can be kept under cover and as comfortable as you please. Two thousand men are directly or indirectly engaged in keeping the place sweet and clean. A reporter of the *London Leader*, who paid it a visit recently, says: "The cattle were as characteristic of their countries as their men are. The States cattle ranked first—fine broad backed beeves these, weighing a good twenty to thirty per cent. heavier than even the Canadians. These ranked next. Argentines were scraggy beasts comparatively."

Many Manitoba farmers claim that they are unfairly treated in the system of "mixing" and "skimming" wheats by the large elevator men. They are able to do this because every bushel of wheat graded as No. 1 hard when taken from the farmer weighs from 61½ to 62½ pounds to the bushel, while the law demands that No. 1 hard should grade only 60 pounds. This being so it is claimed that by a judicious mixing of inferior grades with No. 1 hard it is reduced to 60 pounds the large dealers are making a large profit which should go to the farmer. The remedy suggested is for the legal standard to be made 61½ lbs. instead of 60 pounds per bushel. The injurious effect of this "mixing" is that, when a lot of wheat so "doctored" arrives in the British market or is received by the Eastern miller, it is not the real No. 1 hard as sold by the Manitoba farmer.

There seems to be a good opening in China for certain kinds of Canadian products. Mr. H. J. Craig, a Canadian resident of Shanghai, China, in a recent interview at Winnipeg, said:

"In my opinion Canada should have a share of Chinese trade, and there is no reason why it should not. China wants flour, lumber, butter, canned goods, hams and bacon, and they want the best of them. The only Canadian article now sold in China, to my knowledge, is Canadian club whiskey.

"I believe a commission was sent from Canada some time ago to investigate China as a market for Canadian products. I don't think that anything could be accomplished in that way. Let the goods be sent. If they are of the right quality and handled by a man on the spot they can be sold at good prices.

"While I am in this country I will see some of the large milling and lumbering firms with a view of securing trial shipments to the East. If the freight rates are not prohibitive these goods can be handled with profit. If Canada is to make a bid for Chinese trade it should be done now before the Americans get a 'cinch.'"



The Worrying of Sheep by Dogs

In a recent issue of *The Canadian Statesman* a correspondent discusses in a practical way this subject. Referring to his own township, he points out that the amount paid out in sheep damages each year by the treasurer is but a fraction of the total loss of the municipality through this evil. In proof of this he states that a number of farmers have gone out of the sheep business altogether owing to the danger from dogs; that the council only allows two-thirds of the value; that often a number of sheep are bitten, but not serious enough to claim damages; that when only one is killed the farmer will not go to the trouble of calling a valuator; that if a flock is scared by dogs at night they do not thrive as well as they otherwise would, and that, to save their flocks, owners house their sheep at night and in so doing deprive them of their best feeding time. With these difficulties and losses, is it any wonder that many farmers are giving up sheep-raising altogether?

In regard to the remedy for these grievances the writer says:

"Let our Council pass a by-law that dog owners shall tie up or confine their dogs, say from 6.30 p.m. to 5 o'clock a.m., during sheep-killing season, which lasts about three months, commencing about 1st September. To facilitate the carrying out of this plan let the path-masters (or other persons agreed upon) be empowered to report any man on his beat who does not comply with the law, and let a suitable penalty be imposed. In return for this trouble given to dog-owners let there be no tax on dogs or else let the tax be in proportion to that on other live stock. As a dog-tax is levied to pay sheep damages, and as such a law would prevent most, if not all, of these damages, such a heavy tax would not be required. The tax as now levied is very unjust. It is probable that most of the sheep killed are killed by a very few dogs in proportion to the number kept, so that as a consequence a majority of owners pay out each year a large amount of money for sheep damages for which they are not really responsible. Even the present law could, by a little change, be made just, by changing it so that owners who secure their dogs by night be exempted from the dog-tax, or the most of it, and those who do not so secure their dogs be made by increased taxation to pay the whole of the damages caused in all probability by their prowling dogs."

From the above it may be gathered that the existing law which imposes a tax upon every dog kept in the country has not been effective in preventing the worrying of sheep by dogs. Though the farmer who has sheep destroyed or injured in this way may be compensated to the extent of two-thirds of the value of his sheep, this is not sufficient to cover the total amount of the loss sustained, and

consequently he very often, after a few losses of this kind, gives up sheep farming altogether. A by-law compelling dog owners to secure their dogs every night for three months during the fall of the year would be no hardship to anyone, and if it will prove effective in preventing the worrying of sheep by dogs we say by all means let such a law be put in force at once. The sheep industry of this country is too important a one to be side-tracked in any way because some dog owners allow their dogs to prowl around at all hours of the night. It is time that some effective measure such as the one outlined above were in operation in every township so that no obstacle would in any way come between the farmer and profitable sheep-farming. At least a dozen good sheep should be kept on every 100-acre farm in the country. They are easily kept, add to the fertility of the land, and, when properly managed, will return a good profit to the farmer.

Freight Rates and Grain Prices in the United States

There has always been more or less agitation in the United States in regard to railway freight rates, and certain agitators have alluded to the railroads as the oppressors of the farmer. The New York *Financier* takes the matter up in behalf of the railroads, and gives some valuable data compiled from a pamphlet issued by the Agricultural Department at Washington from which we take the following: "First we give a table showing the relative decline in the price of the more important grains in various years since 1870, and the fall in freight rates in the same period. The figures are based on the average prices of the six years between 1867 and 1872, which are taken as a standard of 100. The figures follow:

	1870	1877	1885	1896
Corn.....	102	72	67	44
Wheat.....	87	98	71	67
Oats.....	102	74	75	49
Rye.....	91	71	72	51
Hay.....	107	72	74	56
Tobacco.....	103	70	83	65
Freight rates.....	103	70	55	44

From this it will be seen that the decline in freight rates has been greater than in any of the grains. It is also pointed out that if 1897 and 1898 figures were included the disparity would be greater. Comparing 1896 with prices in 1867, the railroad freight rates decreased 23 per cent. more than the price of wheat, and 12 per cent. more than the price of hay. In comparing the export prices and freight rates it is pointed out that the railroad ton-mile rate on wheat between Chicago and New York has been cut in half since 1886, falling from 8.71 cents to 4.35 cents, but the export price of wheat in the same time fell off only 12 cents, or about 14 per cent., as against the 50 per cent. reduction in freight rates.

Another table gives the number of bushels of wheat and corn carried between New York and Chicago for the price of one bushel as follows:

	Wheat.	Corn.
1867.....	5.77	4.94
1870.....	7.54	5.84
1877.....	10.41	5.95
1885.....	14.65	10.04
1897.....	17.24	8.18

From this it will be seen that the United States farmers had nearly three times as many bushels of wheat carried in 1896 for the one bushel paid the railroads as in 1867.

The charges for carrying a ton of freight one mile and per passenger per mile for various years since 1867 are given as follows:

	Freight per ton mile.	Pass. rate per mile.
1867.....	1.925	1.994
1868.....	1.810	2.164
1871.....	1.789	2.632
1877.....	1.286	2.458
1885.....	1.011	2.216
1896.....	.806	2.019

"The decline in the freight rate in thirty years is thus shown to be over 58 per cent., while wheat prices in the same period have fallen only 18 per cent. It will be seen that the passenger rate shows a higher figure in 1896 than in 1867, but the rate in that year was exceptional. Comparing with 1868, the actual cost of passenger travel has been reduced 23 per cent., and the facilities and comfort provided cannot be compared with the conditions of thirty years ago."

The journal referred to concludes that these figures prove conclusively that a greater loss was sustained by the railroad in the decline of prices. Though the figures seem to show this, the great decline in freight during the past thirty years does not prove that the farmers of the United States are not now paying exorbitant freight rates, for even present rates may be high. But this is neither here nor there. Our only object in giving the above figures is to show the great advantage the American farmer has obtained by a reduction in freight rates over his Canadian competitor. Though we have no data to the contrary, we do not think the same favorable showing can be made in behalf of the Canadian railways. We venture to state that, while the prices of Canadian farm products have declined considerably during the past decade, there has been no corresponding reduction in railway freight rates. It has been shown in these columns that the Canadian shipper has to pay \$6 per head more to send his cattle to Great Britain than the shipper in the United States, and we feel sure that a comparison will show as wide a difference in the carrying of grain.

Some Important Agricultural Experiments.

Some interesting experiments along the line of cross fertilizers have been carried on for the past eighteen years by a couple of Lancashire farmers, Messrs. John and Robert Garton, which should prove of value to agriculturists all over the world. Though these experiments were begun in 1880 it is only now, after eighteen years of careful and painstaking labor, that they are able to announce a successful solution. A correspondent of the *London Chronicle* who recently visited the farm of Messrs. Garton says:

"I spent a day during the present week at Newton-le-Willows, and saw enough to convince me that a work was being carried out destined to have a remarkable influence over the future of agriculture. . . . Already they have succeeded in producing varieties of wheat the average weight of the grain of which is sixty per cent. heavier than the average weight of grains of wheat in ordinary cultivation. With oats they have been even more successful. I saw a field of black oats growing at Newton which was just ready to be harvested, and the grains were just as much finer than the best Poland white oats as these latter are larger and finer than ordinary Tartarians. Already they have varieties of wheat and oats which promise to yield thirty or forty per cent. more per acre than ordinary varieties, and so increase the national production by that amount."

To show how far-reaching and complete the work of these investigators has been, it is only necessary to point out that the whole world has been ransacked for specimens of different kinds of cereals, every one of which has been carefully grown, and its peculiarities noted through several seasons. Nearly 350 varieties of wheat have been collected, including varieties from every wheat-growing country in the world. One hundred varieties of oats have been got together, as well as a large number of varieties of barley, from every country where these grains have been grown. In addition, every plant or weed analagous to the three varieties of grains already mentioned have been secured. To show the value of some of these weeds, the writer above quoted says: "The ordinary British oat has a thick and tough hull. When oats have to be prepared for human food this hull has to be removed by a process which impairs both its flavor and its value as a food stuff. But the

common wild oat in China, which is very hardy and prolific, growing in any soil, and producing a large quantity of grains, has this peculiarity, it has no husk or hull. By crossing several varieties of British oats with this Chinese variety an oat has been produced which has no hull at all, and it can be used at once for preparation as human food. It has a beautiful bright yellow grain, which looks very much like an elongated corn of the finest white wheat." But we have not to depend entirely upon the newspaper reports regarding the importance of this work. Dr. Goodfellow, Professor of Physiology at the Bow and Bromley Institute, and Prof. Jago, another scientist, both report favorably upon the new grasses and cereals produced by these investigators, and other experts are now taking up the same line of work.

However valuable the work carried on by these investigators may prove to the agricultural world, there is one lesson from their labors that investigators in other countries should take home to themselves, and that is, that it takes time to get complete and satisfactory results in carrying on nearly every kind of experimental work. The tendency to hurry forward experiments and to obtain quick results is more marked among American experimentalists than any other class of investigators. From the number of bulletins which some of the agricultural experimental stations of the United States turn out annually, one would think their professors did nothing else but prepare copy for the printer.

The Live Stock Outlook in Great Britain

The Mark Lane Express, in a recent issue, points out that, while early in the season, or last spring, the outlook for live stock was good, now the prospect is rather a gloomy one. The reason for this marked change is the exceedingly dry weather of August and September. So severe has been the drouth in nearly all parts of Great Britain that pastures have dried up, causing a scarcity of feed for live stock. The sheep breeders are mentioned as suffering more than any other of the live-stock men. In the spring they were quite jubilant regarding the outlook, but they are not so now. In one month the price of sheep at some of the fairs dropped 7s. to 8s. per head. This in the face of the fact that a month or two ago extremely high prices were paid for rams, a case in point being that of the Lincoln ram which sold for 1,000 guineas. But these were sold for breeding purposes, and would bring much higher prices than feeders.

A somewhat similar condition of things exists in connection with lean or cattle for feeding purposes, though not to so great an extent. These have declined in value because of the scarcity of fall feed. The drouth has also affected many dairy herds, and a short supply of milk is the result. Though this condition of things is bad for dairy farmers, it is looked upon as even worse for cattle grazers, as most of them bought in their lean steers and dry cows far too high some months previous, when, owing to the rich pastures and abundant grasses, there was an extra demand, which caused values to go very high, though the meat itself was selling badly. Beef since then has fallen in value, and it is now feared that many farmers will be compelled to dispose of their fat cattle for about the same money, if not less, than they gave for them when lean.

The same journal points out that graziers have had bitter experiences of a similar nature in recent years and that they may find their occupation entirely gone if they continue to follow the old lines of buying in lean cattle to feed for beef. The imports of dead meat are getting larger every year and there does not seem to be any prospect of beef rates getting permanently higher than they are at present. As a solution of the difficulty it is stated that consumers demand small joints not too much overlaid with fat, and that they will pay a higher price for such than for the heavier beef, which is usually brought to market. To meet this demand graziers are advised to take all calves bred by purebred bulls from the dairy farmers when a week or ten days old and

rear them on milk substitutes and fatten while in a state of growth so as to make "baby beef" at from eighteen months to twenty-four months old. This is one of the ways which the cattle feeders of Great Britain have of meeting the competition from Canada, the United States, and Argentina in beef production. Whether it will do so satisfactorily or not only time can tell.

Good Horses Scarce in British Columbia

In the United States Consular Report from Vancouver, B.C., the following appears: "From observations in this province I am led to believe that there is a field here for the importation of well-bred horses, cattle and sheep from the United States. The horses in this vicinity are nearly all undersized and very poorly bred. Good driving horses are very scarce, and good draught horses seem to be almost unknown. It seems to me there is a chance for the importation into British Columbia of a considerable number of stallions of good blood, to be used to improve the native stock. It is also probable that a market could be found here for a limited number of well bred brood mares if the prices were reasonable. I understand that animals imported for breeding purposes can be brought in duty free under proper customs supervision."

The *Vancouver World*, in discussing the horse market in that province, also says: "But the price of first-class ones in the coach and draft classes was always good, and dealers report a great scarcity of those in Eastern Canada. It is with difficulty that a decent shipment can be collected, simply because the country has been drained of its best material, and the great majority of farmers have stopped breeding them, thinking that because there has been almost no market for second-grade horses for a few years it was not profitable to raise any at all. Those who follow the rule which should be the guiding one as regards all kinds of stock, namely to raise nothing but an A1 article, are now reaping the benefit. . . . What the province wants in this line is the introduction of more pure-bred sires to improve the stock." That the Americans are considering the advisability of sending horses into our country when we have the means of producing all the horses we require does seem strange. But there is evidently a scarcity of good horses in British Columbia, and if Eastern Canada cannot supply them they will have to come from elsewhere.

The Endless Chain of the Farmer

The following paragraph taken from the *Farmer's Voice* contains a point in farm practice that every farmer should weigh well:

"Asked why he bought so much land, one farmer, so tradition has it, replied. 'To grow more corn to feed more hogs.' 'Yes, and what then?' 'Why, to sell the hogs and buy more land.' This is too often the endless chain of the farmer, but never was the practice more absurd than in the light of modern education and tendencies. To-day it is the intensive farmer who is the successful farmer. One man who had grown well-to-do on a ten-acre plot just out of Chicago recently told a friend that the addition of ten acres more had all but ruined him. 'I made money on ten, but when I came to make twenty acres pay that was a different proposition—I spread myself out too thin,' he said. The personal care, that attention to every detail, which had won such handsomereturns from ten acres, could not be given to twenty—it was physically impossible—and the result was the deterioration of the whole farm."

Is it not a fact that many farmers are to-day working too much land and are spreading themselves out over too large an area? It is not the acres which a farmer possesses which makes him a successful farmer, but what he gets out of each acre. The "land poor" farmer is the poorest kind of a farmer and if he goes into debt for land when he has already enough for all practical purposes he runs a great risk of making a failure of the whole thing. Success or

failure will depend upon what he gets out of each acre of land and how he conserves the productive power of his land. It will pay much better to work fifty acres of land well and have it yield a good crop than to work one hundred acres poorly and obtain only half a crop.

Squab Farming

At one or two points in the United States squab raising is carried on with a good deal of profit. Squabs are young doves or pigeons, and are esteemed great delicacies in epicurean and midnight luncheon circles. Four weeks after the young birds are hatched they become marketable as squabs. The birds are in full feather, but not yet able to fly. They are killed by inserting a sharp knife point into a vein in the throat. When the flesh is still warm the feathers are plucked out, the crop is washed out, and the denuded body placed in cold water till ready for shipment. Squabs, dressed, ready for market, weigh about one-half pound each, and the great market for them is New York. They command from \$1.50 to \$3.50 per dozen, and there is money in the business at these figures.

The best kind of doves for squab purposes is the homing pigeon. This is not due to any particular delicacy of the flesh, but to the fact that homers are the best breeders, are diligent in properly caring for the eggs during the incubating period, and keep their young well fed. They bring out six to ten broods a year, each of two doves, and often eggs are in the nest for hatching before the preceding brood has developed to the squab age. The doves usually rest two months in the year, but as there is no recognized season for resting the market can be supplied the year round.

Sunlight in the Stable

Many Ontario dairymen have heard John Gould, of Ohio, at the dairymen's conventions discuss the care and treatment of the dairy cow, and know how competent he is to deal with the question. The following article from his pen, published in a recent number of *The Country Gentleman*, on the above subject, will therefore be read with profit by every farmer and dairyman:

"As it is a custom of mine to pay some attention to the window lighting of the many stables that I see in the course of the year, wherein dairy cows pass most of the winter months, I am struck times without number with the little regard which is paid to the proper lighting of a stable, and the little attention these men seem to pay to the value of sunlight in their stables. The usual rule is to put in a few small windows along the northern walls—few of any kind or size. In a large new barn which I recently visited, the semi basement stable, in which more than forty cows were tied, had no light admitted from north, east, or west sides save when the doors were open, and only four small windows on the south side. There seems to be a prejudice against admitting light full and free into a stable, a belief that comfort in a stable consists of making it dark and without ventilation, and then the owners wonder about a great many things that happen while their cows are in the winter stables.

A stable should be as light as the sun can make it, and the windows so large that the sunlight can fall on the cows and floors, and, if one is afraid that there will be too much falling of temperature during the cold nights by refraction, put outside storm windows on, the air space enclosed by which is a sufficient protection. One of the finest dairy herds I ever saw was actually basking in sunlight. There were large windows with outside storm sashes, the temperature was kept very even, and ventilation was secured by flues and dampers—not by either cracks in the walls or open windows.

The testimony everywhere is that the men who have these well lighted stables are warm in their praise. In my barn I would no more think of going back to the dark little

windows than of readopting the 1850 plan of letting my cows sleep in the wood lot in winter. The verdict everywhere is that the cows are better cared for, do better, and are in better health and strength for the abundant light. A cow with the sunlight falling on her in the stable is having all the advantages of a sun bath, and thus escapes zero weather. In the well-lighted, sunny stable there is a dryness to the air and freedom from staleness or disagreeable smells, which repay one over and over for the little outlay.

I emphatically believe that the cow stable should never be a sub-basement affair or be walled in on the north side with a windowless stone wall. Stables should run north and south and be so arranged that the morning sun comes in on that side, the noon shines in the south end window, and in the afternoon the west windows should get their share. My dairy barn is built this way, and I regard it as a capital plan, though the windows are not extremely large. With sunlight and absorbents I have not the least difficulty in keeping a warm, dry stable, and I know there are very few bad bacteria lurking about. It is not warmth and light that kills cows in their stable life. These are the conditions of June life, ideal days for the cow.

Make the stable warm, comfortable and provided with plenty of air—without drafts—and a clean floor, absorbents to prevent slops, and road dust and land plaster as disinfectants, and deodorizers, and with sunlight falling into the stable and upon the cows, why should not health prevail and summer conditions of production? The dairy gospel of this and that is preached, but an emphatic recognition of the value of sunlight in the stable has never been insisted upon as it should be. Good dairying requires sunlight. It requires a large measure of it poured into a man's brain, so that he can see the kind of cows he has, their feed, and care, and compare these with what good dairying should be, and may be, if lighted up with dairy intelligence and studious care."

How to Make Cement Floors

By Waldo F. Brown, Ohio

I speak from an experience of several years in the use of this material (cement), as all of my stables are floored with it, also a feed room, barn cellar, a hog and poultry house, and I have also 500 square feet of outside walk. I have failed to find a single objection to it. Some have suggested that it was too hard for horses' feet, others that it was too cold for animals to lie on; but, in answer to both of these objections, I would say that we keep the stables bedded so thoroughly that the horses' feet rarely touch the floor, and it makes it sufficiently warm. It is the cheapest floor, durability considered, that can be made, costing in a hog or poultry house less than a common plank floor; but in a horse stable, where a topping of one inch is needed, about the same. I have rarely had a plank floor in a stable that would last five years without repairs, but a floor laid of good cement will last for generations. I would never lay a floor of the cheap grades of cement, as if laid with such material it usually breaks and does not give satisfaction, and, while such cement can be bought for about \$1.25 a barrel, it costs about as much to make a given amount of floor from it as with Portland cement, costing about \$3.00 per barrel, for: with the latter eight barrels of gravel, or five of gravel and five of broken stone, can be used with each barrel to make the concrete foundation, and two barrels of sand to each barrel of cement for the topping or finishing coat, while with the cheap grades of cement only three parts of gravel to one of cement should be used in the foundation, and equal parts of sand and cement for the finishing coat, so that an equal amount of money invested in the two kinds will produce about the same amount of finished floor, and, while the work from the cheap grade of cement would be injured by the extreme cold, the Portland cement will endure any degree of temperature, in proof of which I will state that scores of miles have been laid with it in St. Paul and Minneapolis, where the mercury often

registers 30° to 40° below zero. Experts charge from \$3.00 to \$5.00 per day for laying cement floors, but any farmer who will follow the directions given here can make as good a floor as is needed, and need not pay out any wages for skilled labor. In localities where stone is expensive the foundation of any building can often be made of cement much cheaper than with masonry, and if I were building a basement barn I would first make a floor, excavating where the posts are to stand to a solid foundation, and filling with concrete, and then set the posts directly on the floor or on a raised pillar of cement, which can be made by using a frame or box of the height that the pillar is wanted. There should be six inches of good gravel or finely-broken stone as a foundation before the laying of the floor begins, and then in the horse stable five inches of concrete and one inch of topping; in the cow stable, three inches of concrete and one-half inch of topping and the same for a hog house, carriage house, or a coal house, and a still lighter topping in a poultry house.

HOW THE CONCRETE IS MADE.

The concrete is made by mixing eight parts of clean gravel with one part of Portland cement. Or, if finely-crushed stone is used (no piece larger than one inch in diameter) for the concrete, ten or twelve parts can be used to one part of Portland cement.

This concrete should be mixed thoroughly dry, shovelling it over three or four times and then at the last mixing be sprinkled from a fine rose watering pot, enough to thoroughly dampen it, when it is ready to use. We lay the floor in sections, three or four feet wide, so that we can easily reach across it to trowel it. We put up a 2-inch piece and stake it to make the width needed, wheel the dampened concrete in, spread it evenly two inches at a time and ram solid, and so continue until within one inch of the top in the horse stable, or one-half inch for the cow stable or hog house. The top coat is made with two parts of sharp, clean sand and one of cement, thoroughly mixed and tempered, and liquid enough so that it will flow readily. See that the corners and edges are all well filled in and in the horse stable make the floor perfectly level, but in the cow stable give a fall of one inch from the manger to the manure ditch, which should be five feet. To prevent slipping, at the back of each stall make grooves, for two feet in the soft mortar, running crosswise four inches apart, and the same across the doorway where the horses step in. We make these grooves by laying down a broom handle and tapping with a hammer until it is bedded half its diameter.

When a section of the floor is laid, carefully take up the edge piece, moving it to the same distance and lay another section and so continue until the floor is finished. Keep the building closed so that no stock, or even chickens, can get in while the cement is soft; but it will harden in about twelve hours so that it can be walked over. Sprinkle thoroughly with a watering pot twice a day for ten days, when it will be hard enough to put the horses in it.

As you make the floor set blocks in at the proper angle where the studding are needed to partition the stalls, and after the mortar has hardened take them out and it will leave a mortise for the foot of the studding. In addition to the durability of the cement floors there are several other advantages. They afford no harbor for rats, save all the liquid and never become saturated so as to give off offensive odors in the stables as a plank floor will.

We make the floor in the cow stable five feet long from the manger back to the manure ditch, then if we have small cows we put an extra board next to the manger to keep them back six or eight inches, so as to reduce the length of the stall. I prefer a manure ditch two feet wide at the top and twenty inches in the bottom, this gives a slope of two inches each side of the ditch, which we make eight inches deep. The door to the cow stable should be directly at the end of the ditch and then the cows will always walk in through the ditch to their stalls. Back of the manure ditch we make a walk also of cement, two and one-half feet wide and on a level with the floor on which the cows stand. There are

two advantages in a manure ditch of these dimensions, first, that cows will rarely soil the walk, second, although it is best usually to clean the ditch every day, in case of bad weather or extra work, it can be left one or more days without cleaning by simply adding more bedding, as we always bed the ditch as well as the floor. Our manger has a cement floor raised a few inches higher than that on which the cattle stand and is made six feet wide with a row of sock at each side of it. NOTE.—In Canada good results have been obtained by the use of the Thorold cement made at Thorold, Ont. ED.



Money in Lambs—How to Get It Out

Joseph E. Wing, in "Ohio Farmer."

Here is the practical thing to do in Ohio to-day: Get your ewes to dropping their lambs early in the season. Get them to drop them by September if you can; if not, as soon thereafter as possible. Don't say that you can't manage this, you can if you will set about it right. I have Shropshire ewes in the barn to-day, with lambs by their sides, and they lambed in February this year. Their lambs sold in Buffalo in May at a weight of eighty pounds—but I will tell of that later. From this time on I will have lambs coming in almost a steady stream and by New Year's nearly all the lambs will be in sight. What then? Shall we keep them doing well until grass comes and turn them out? Not by a jug-full. Those lambs will be encouraged to eat as soon as possible. That means at an early age, too. Few people realize how early a lamb will learn to eat. They will have a place where they can run to ground to feed, cracked corn and oats and bran, and a little oil meal and clover hay. They will not run out much unless a short time each fair day to rape sown in the corn—for health more than food. Those lambs will do to ship to the New York market during the winter, and Mr. Miller has told what they will bring, say \$5 to \$7 each. And the later ones need not be sent dressed. Last spring we made a shipment that was sent alive to Buffalo and that averaged there eighty pounds, born in February, and they brought us \$6.50 per hundred pounds' live weight. That paid. It paid far better than any feeding that was done on Woodland Farm last year. The reason why it paid was that the food consumed was so small in proportion to the gain in flesh made. It will take three times the amount of feed to put a pound on an old sheep that it will to put it on a little lamb. It is all a clear creation, too. There is no buying your feeders in the fall; you simply take care of your ewes and each year cull them and put the best lambs in the place of the poorer ewes. It is easy in this way to improve a flock, using, of course, the best lambs to replace the aging ewes and the best sires that can be procured. These lambs will not be turned to grass at all and there will be no danger of their becoming seriously infected with any parasites if they are furnished with pure water and fed in decently clean troughs.

When the lamb crop is gone there will be only left the dry ewes and the few lambs that are reserved. These ewes will keep in good condition on very little grass during summer, and I know by experience that they will keep strong and healthy when sheep that happen to be suckling their lambs under the same conditions will simply go to pieces. The lambs that are reserved should on no account be turned with the ewes, they will not thrive on the old pastures; rather let a piece of meadow be partitioned off to them; somewhere, clover or timothy, or alfalfa, almost anything but the infested areas.

The wool on the ewes will not pay their keep, not at present prices, but it will half pay it and perhaps more. The lambs will average the breeder \$5 each clear of shipping expenses, and the clear gain above cost of feed and all will not be much short of \$2.50 per ewe. When it is remembered that the feed is all consumed at home and the manure left to enrich the farm, and that the taking care of these ewes and their lambs is a pleasure and no great

amount of labor, it is not hard to see that it is a profitable and a practical operation. And for this class of mutton there is great and unceasing demand.

There are several things that may be done to hasten the breeding of ewes in summer. One of these things is to wean the lambs early. This is most important. Another is to relieve them of their fleeces in August and to give them a little better food than they have been accustomed to. All the fleeces of the ewes on Woodland Farm were taken off in March and again in August.

There is much gain in this practice. The ewes pick up surprisingly after being shorn in August. True, the flies bother them for a few days, but it is soon over. The wool sells for a little less money, not much. Ours sold this fall for twenty cents. By cold weather there is an abundance of wool on them to keep them warm. They must be sheltered in any case in winter.

What are the advantages of this practice? It produces meat at the lowest possible cost that sells at the highest possible price. It is a regular profession that once engaged in may be followed right along indefinitely with a reasonable certainty of results. True, sometimes the professional feeder will take advantage of extreme ranges of prices and make great profits, but at other times he will only escape bankruptcy by the skin of his teeth.

The mutton industry in Ohio is only in its infancy. The days of mature mutton are nearly numbered. Lamb is king and spring lamb is absolutely monarch. Nor will any event be apt to change this condition. Civilized men of the Anglo-Saxon race love mutton and eat it in ever-increasing amounts. And lamb mutton is the most delicious of all delicacies. We have after careful thought decided to make the production of lambs an increasing business on Woodland Farm the speculative feeding of other men's lambs a decreasing one.

Preservation of Eggs

A fresh-laid egg is never improved by age, but its good qualities may be preserved, if not wholly, almost wholly, by suitable handling. Eggs should be gathered from the nests at least once every day. An egg may deteriorate for food purposes in one or two ways: It may change unfavorably for food purposes by the beginning of the process of hatching; and it may decay through fermentation started at the pores of the shell. Any moisture on the shell hastens the beginning of decay in that way. An egg may look well when examined by candle light in the usual way, and still be slightly stale inside. Some egg merchants detect whether they are quite fresh-flavored by breaking some, emptying the contents out and smelling the inside of the shells.

If only a few eggs in the lot are discovered to be stale that will cast discredit on the whole, and very greatly reduce the selling price. Immediately after the eggs are collected from the nests and cleaned they should be put in a cool place until they can be despatched to market.

Great care should be taken in packing eggs not to use any substance which has in itself a disagreeable odour or flavour, as that will likely be imparted to the eggs. The keeping of eggs packed in musty straw or musty bran will impart that disagreeable quality to them.

A New Remedy for Milk Fever

It is well known that up to the present time there has been no remedy for milk fever that could be depended upon. Where the attack is anyways severe about seventy-five per cent. of the cows die. It now seems that all this is to be changed by the introduction of a new remedy. A veterinary surgeon of Kolding, in Denmark, by the name of Schmidt, has published a new method of treatment for milk fever which, if the testimony of several veterinary surgeons of Europe be relied upon, is the most effectual remedy yet discovered. It is reported that four cases out of five recover under this treatment.

As the infective element is located in the milk glands, the remedy is applied to the glands direct through each teat. For this purpose an injection tube, with a silver milking syphon, is used for the introduction of a solution of iodide of potassium of such strength as the urgency of the case may appear to demand. Often a solution of half a drachm of iodide of potassium to two ounces of distilled water is sufficient. It should be injected into each teat carefully, directly into the quarter affected. Sometimes a solution of double volume may be necessary, that is, one drachm of the iodide to four ounces of distilled water, to be injected through each teat. This treatment is usually followed by administrations of a brisk saline cathartic, followed by the administration of chloralhydrate in two or three-drachm doses, according to the excitement of the patient.

This treatment was introduced into England last spring, and quite a number of cases have been treated with favorable results. It is well to have some person perform the treatment who has some skill in such matters, as there is a liability to injure the milk secreting vessels in using the injection.

CORRESPONDENCE

Ontario Winter Wheats versus Manitoba No. 1 Hard

To the Editor of FARMING:

The clean-cut difference which has been made between the price of Western Fife wheat and that of Ontario-grown winter wheats has been the cause of much local discussion as to what constitutes a first-class milling grain, and why we cannot produce a wheat with as good milling qualities and one that will bring as high a price in our local markets as the No. 1 hard Manitoba wheat.

We are prepared to admit that the flour made from Western wheat is much stronger than that made from our large-yielding, starchy, winter varieties, and that a liberal supply of wheat which is rich in gluten must be used with our wheat in order to keep up the strength of the flour. The gluten content of the best Fife is about 15 per cent., while that of the most popular Ontario varieties would not exceed 8½ per cent. I say most popular varieties, because it is to those varieties from which we can obtain the largest profit that we naturally turn our attention.

Now we have some excellent varieties of hard winter wheats, such as are almost, if not quite, equal in gluten-content to the high-priced Western sorts. These wheats have been pronounced by some of our best millers to be equal to the Fife wheat in milling qualities, but when they are offered on our markets they do not command a price according to their actual value—a price which will compensate the producer for the deficiency in the yield. It has been clearly shown that the varieties of our wheats which possess the best milling qualities—those which are rich in gluten—are wheats which cannot be forced to produce so large a yield as the soft, starchy sorts. There seems to be a natural law which tends to keep in equilibrium the amount of nitrogenous matter which may be removed from a given area of land by our wheat plants. With a large yielding soft wheat or a much smaller yielding hard, red wheat the total amount of crude gluten obtained per acre of land remains practically equal, and it can very plainly be seen why it pays us much better to grow the soft wheats unless there is more discrimination made in the price paid than there has been done in the past.

When marketing our wheat we feel as we do when marketing our bacon hogs—that the buyers should shoulder the blame and reserve their vocal abuse. If they set the price, surely it is our privilege to arrange the supply according to our best interests, and the only assurance we can give them is that, until they see fit to pay us for our wheat according to its gluten-content, or according to its milling qualities, we will continue to grow those varieties from which we receive the most profit.

RURAL SKETCHER.

PRINCE EDWARD ISLAND COLUMN,

A largely attended meeting of the Prince Edward Island Horticultural Association was held recently, at which some interesting addresses were given by influential farmers. The Association will send each member the annual report of the Ontario Horticultural Society, and *The Canadian Horticulturist* for one year. A trial shipment of 100 barrels of Prince Edward Island apples will be sent to England as soon as it can be got ready. This shipment will consist of the following varieties: Wealthy, 25 barrels; Alexander, 25 barrels; Golden Russets, 25 barrels, and 25 barrels embracing Kings, Ribston, Pippins, Northern Spys, and Gravensteins.

The fruit growers of the Island are enthusiastic in regard to the outlook for fruit, and are of the opinion that as good a quality of fruit can be grown on the Island as anywhere in Canada. The splendid collection of fruit exhibited at this convention is an evidence of this fact. The climate seems to be well suited to the growth of fruit, and by having direct shipment connection with Great Britain a good trade can be worked up.

In the discussions which took place the questions of spraying and packing were thoroughly ventilated, all the fruit growers approving thoroughly of the former, and advising great care in the latter. Lieut.-Governor Howlan is a thorough believer in the work that the association is doing, and is confident that the fruit industry of the Island will become of great importance.

ROUP.

A wet fall is prolific of roup. This is especially true when it follows a very dry spell. Fowls at such a time are very susceptible to colds, and the condition brought about by a cold is such a one as promotes the rapid increase of the bacteria that develops into roup, for beyond a doubt it is a bacterial disease.

Even in the best-kept flock roup will appear under the climatic conditions that now prevail over a large part of the country. The question of dealing with the disease is one that has not been settled in a very satisfactory manner. It is a disease that manifests itself in so many different forms at the beginning that it is hard to prescribe for every individual case in a general way.

Where roup appears the affected fowls should be at once removed from contact with those that are well, for after a certain time it becomes contagious. If a fowl is discovered with its nostrils stopped with mucous, or with froth in the corners of its eyes, or gasping for each breath, a convulsive motion of the throat being observable, or if a fowl is heard to sneeze, it is time to begin operations without delay. If the disease is taken in hand during its

early stages a teaspoonful of glycerine and turpentine, half of each, poured into the mouth and rubbed around the head will usually effect a cure, two or three doses being sufficient in most cases. If the disease has got bad and cankers appear in the throat it is diphtheritic roup and the cankers must be swabbed with a weak solution of sulphate of copper (bluestone, blue vitriol) three or four times a day until the cankers disappear.

If the case is a bad one before being discovered, and this is often the case, there is nothing so safe as killing the fowl and burying it at a distance from the poultry run, or better, burning it. A fowl that has once had the roup is more liable to another attack than one that has not. There is reason to think that a hen that has had a bad case of roup has lost her value as a layer and should be disposed of as soon as healthy again. — *Farmers' Voice*.

THE VALUE OF KEEPING A MILK RECORD.

A dairyman of wide reputation concluded to adopt the daily milk record, rather because of those who advocated it than from any conviction of needing it himself. His herd was of his own breeding; had handled every cow from birth; he and his sons did the milking, says an exchange. Before beginning the record he made note of the joint opinion of himself and sons as to the half dozen best cows in the herd and an estimate of their season's milk yield. When the year's record was completed it was found that in order of actual merit the cows stood thus: First, his fifth; second, a cow not on his merit list; third, his fourth; fourth, his first; fifth, his sixth; sixth, like the second, and his second and third still lower on the list. These facts were verified by subsequent records. Still more remarkable, this experienced owner proved literally "by the book" that about one-fourth of his cows were being kept at an actual loss, while the others barely paid their way.

SORE MOUTH AMONG CATTLE.

A few weeks ago a disease, commonly called sore eyes among cattle, assumed an epidemic form in many parts of the state.

Now several localities are reporting another disease called sore mouth, or sore foot and mouth. This disease made its appearance in the state in the fall of 1891 and 1892. Since that time very few cases have been seen. It is a disease that attacks cattle of any age, and in a few instances attacks horses.

It occurs among animals on pasture, and is supposed to be due to some condition of the grass. It is not known to be contagious, but it is a good policy to separate the diseased and affected as a safe precaution.

The symptoms are as follows: The animal ceases eating, stands and fre-

List of Premiums

For Three New Yearly Subscriptions at \$1 each we will send you any one of the following articles:

A Splendid Bagster Teacher's Bible, self-pronouncing, long primer type, fine Morocco divinity circuit binding. Publisher's price \$3.

An Up-to-Date Watch, solid nickel, open face case, stem wind, pendant set, and an excellent time-keeper. Price \$3.50.

A Combination Repair Outfit, comprising a full set of tools for boot, shoe, rubber and tinware repairing, same as advertised for \$1.75.

Feeds and Feeding, by Prof. W. A. Henry, Dean of the College of Agriculture of Wisconsin. The best book for stockmen published this year. Price \$2.

Wells' Handbook for Farmers and Dairymen. Every farmer and dairyman should have it. Price \$1.50.

The Alexanderwerk Meat Chopper. Indispensable in every household. Price \$2.

A Nickel Alarm Clock, guaranteed movement. Price \$1.50.

A Carving Set, comprising knife and fork of best steel. Price \$2.

For Two New Yearly Subscribers at \$1 each we will send you any one of the following articles:

32 Ear Labels for sheep or swine, with name and number. Price \$1.

Dr. Carlin's Receipt Book and Household Physician, containing more than 6,000 valuable receipts, treatises on the care and management of cattle, sheep, swine, poultry, bees, etc., and on the treatment of nearly every known disease. Regular price \$1.50.

A Curry Comb and Brush, best quality. Price \$1.

Your Own Subscription Free for one year.

For One New Yearly Subscription at \$1 we will send you your choice of one of the following articles:

Two Milking Tubes. Every dairyman should have them. Price, each, 25c.

A Two-Bladed Pocket-Knife, brass lined, horn or ivory handle, best steel. Price 50c.

16 Ear Labels for sheep or swine, with name and number. Price 50c.

A Curry Comb and Brush. Price 50c.

Your Own Subscription Free for six months.

Five New Trial Subscriptions at 20c. will count as one new yearly subscription.

Blanks, envelopes, and any number of sample copies desired, will be sent to you on application.

All Premiums are sent the same day as order is received. Send your orders early, as Premiums can only be furnished while the supply lasts.

If none of the premiums are wanted, we will allow a cash commission of 40c. for each new yearly subscription, or 10c. for each new trial subscription at 20c.

Address—

FARMING,
41-46 Richmond St. West,
Toronto, Ont.

quently champs the jaws, and saliva drips from the corners of the mouth. The muzzle has a peculiar brownish hue, which extends to the nostrils and to the inside of the lips. The inside of the lips, gums, pads and sides of the tongue become reddish. The tongue swells, sometimes to such an extent as to keep the mouth open. There is a very disagreeable odor about the mouth. After a few days the membrane peels off the gums, lips and tongue in patches, leaving them raw. There is often lameness and soreness of the teats. The disease runs its course in from six to ten days, during which time the animal will be unable to eat anything hard. The bowels are usually constipated.

The treatment is to apply an astringent wash. Tannic acid, one-half ounce; borax, powdered, one ounce; glycerine, eight ounces, and water sufficient to make a quart, has been recommended. A saturated solution of boric acid is good. Creoline—one-half ounce to a quart of water—is also good. Make gruels and sloppy feed for diet.

In a few cases this disease has been reported as black tongue. This is a mistake, as black tongue is one form of anthrax.

A. W. BITTING, D. V. M.,
Veterinarian of Purdue Agricultural
Experiment Station.—*Press Bulletin.*

Some Great Combinations.

If you want any of the leading CANADIAN OR AMERICAN PAPERS, combine them with FARMING and save from 25 to 75 per cent.

READ OUR GREAT COMBINATION OFFER.—We will send FARMING UNTIL THE END OF 1899 together with any of the papers in the following list for one year at these remarkably low rates:

	Regular Price	With FARMING
Canadian Magazine.....	\$2 50	\$2 50
Toronto Weekly Globe.....	1 00	1 45
Toronto Weekly Mail and Empire.....	1 00	1 40
Farm and Fireside.....	1 00	1 40
Montreal Daily Witness.....	3 00	3 00
Montreal Weekly Witness.....	1 00	1 60
Toronto Morning World.....	3 00	3 00
Family Herald and Weekly Star —with great premium picture.....	1 00	1 75
London Weekly Free Press....	1 00	1 75
London Weekly Advertiser....	1 00	1 40
Ottawa Semi-weekly Free Press	1 00	1 60
Ottawa Semi-weekly Journal..	1 00	1 55
Ottawa Semi-weekly Citizen..	1 00	1 50
Ottawa Morning Citizen (daily)	3 00	3 00
*Hamilton Semi-weekly Times	1 00	1 60
*Hamilton Semi-weekly Spectator.....	1 00	1 60
Brantford Weekly Expositor..	1 00	1 75
*Citizen and Country.....	1 00	1 50
Hoard's Dairyman.....	1 00	1 75
The Breeders' Gazette, the leading publication of its class in the United States.....	2 00	2 00
Rural New Yorker.....	1 00	1 50

Papers marked thus * will be sent until the end of 1899—other papers for the year only—but FARMING will be sent until the end of 1899 for the price mentioned in every case. Address FARMING, Toronto, Canada.

WONDERFUL AGRICULTURAL MACHINES.

A few weeks ago we gave a description of the Romaine Automatic Agricultural Machine. This machine seems to be adapted for cultivating large tracts of land. In the States on the Pacific slope a wonderful machine in the shape of a combined harvester and thresher is largely in use. The width of the cut is forty-two feet, and this width is cut in ordinary grain standing up well, where the grain is heavy and lodged and runs over fifteen sacks to the acre twenty feet of the header is detached, making the width of the cut only twenty-two feet. The height of this combined harvester is twelve feet six inches, and the extreme length of the outfit, including engine

and separator, is sixty-five feet two inches. The extreme width, including separator and header, is sixty-four feet four inches.

It requires eight men to operate this outfit as follows: One engineer, one fireman, one man to haul water and coal, one separator man, one header tender, two sack-sewers, and one sack-filler. When the grain stands well, and water and fuel convenient, and where grain averages seven to eight sacks per acre, this outfit will cut 120

HILLVIEW STOCK FARM

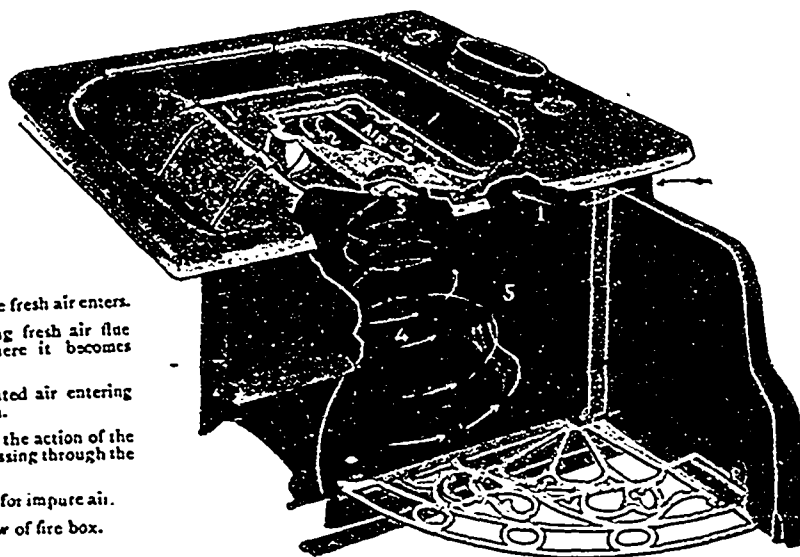
WE are now offering for sale a very fine SHORT-HORN BULL CALF, 7 months old, bred by Arthur Johnston, Greenwood, Ont. Also one 17 months old AYRSHIRE BULL. Both first-class animals. For prices and particulars address

R. E. WHITE, Perth, Ont.

Souvenir Range

With Aerated Oven

An old adage, perhaps a little inelegant, but they say none the less truthful, has it that the way to reach a man's heart is through his stomach. It is true, at any rate, that the man who has his daily meals served to him poorly cooked will soon lose what sweetness of temper he does possess.



The bread in the oven; the roast of beef; the delicious turkey; the toothsome pudding are never spoiled in the cooking if the good wife has a Souvenir Range installed in the kitchen.

These things are possible, because the Souvenir is the only range made with an aerated oven. Our illustration is suggestive of the advantages that come from this oven. It is just the opposite of an air-tight or old style oven, for the air circulates freely all through it. The impurities that gather in cooking food are made to pass out into the exit flues connecting with the chimney, and none is allowed to escape into the room. In a word, the aerated oven produces fresh, not foul or impure air—it forces a rapid circulation of fresh heated air in exactly the same manner as we airify our lungs. All the natural juices of the food are retained and only good cooking is possible.

\$155
IN
PRIZES

We want to influence Canadian housewives to tell their sisters the good time they have with a Souvenir Range, and are offering \$155.00 in prizes for those who will write the five best essays on the Souvenir Range and its aerated oven. Circular giving particulars of contest and a booklet describing very fully the good points of the Souvenir will be given free on application to any of the agencies of Souvenir Ranges anywhere in Canada, or will be sent direct on application to the manufacturers.

THE
GURNEY-TILDEN CO.
(Limited)
Hamilton, Canada.

..ROBES..

Send in your order for a choice new Robe. We prepay express in Ontario, and guarantee you first-class quality. You can save money by buying direct from the Farmers' Co-operative Store.

GREY GOAT ROBES, full skins, nice lining, well made and good color, size 42x66, price \$5.25.
 Size 32x66, price \$4.75.
BLACK ROBES, 42x66, price \$7.50.
 " " 52x66, " \$9.00.
 " " 60x68, " \$11.00.
INDIAN BUFFALO ROBES, something extra, looks like genuine Buffalo. This skin is soft and pliable, with a heavy fur, and a fancy lining, price \$12.00.

SASKATCHEWAN BUFFALO ROBES, the best Robe on the market, both wind-proof and water-proof. Every man who has them recommends them. Special price, size 51x52, \$7.25.
 " " 51x62, \$8.50.

Cash with order, and we deliver goods to any express office in Ontario; 25c. it robe off to outside points.

Keep these prices for future reference.

THE PEOPLE'S WHOLESALE SUPPLY CO.,

R. V. MANNING, Manager.

144-146 King St. East, Toronto

acres per day. If the yield is greater than this the number of acres which can be cut is less. These combined harvesters can be operated successfully and profitably in all countries where the climatic conditions are favorable, and where horse harvesters and headers are used. With these two great machines, one cultivating and preparing the land for the seed, and the other harvesting and threshing the grain, it is possible to operate large tracts of land such as our western prairies at comparatively little cost.

FATTENING TURKEYS.

Too much stock reaches the market only half fattened. A lean carcass is satisfactory neither to grower, marketman nor consumer. A well fattened bird not only weighs more, but brings more per pound. Turkeys must be fed all they will eat after the middle of October if intended for the Thanksgiving market. Corn should be the basis of fattening food, both in the kernel and ground. Cornmeal mixed up with boiled potatoes is a great fattening food. Milk is a great help. Feed in troughs numerous enough for all to get a chance at the food. Do not feed much sour food of any kind. If their bowels get out of order give them scalded milk. The birds which are not full grown at Thanksgiving should be kept for the Christmas and New Year's market.—*Mass. Ploughman.*

PULLING HORSES.

A contributor tells how he cured a horse of a confirmed habit of pulling by giving him a slack rein and letting him cover as many miles as he wanted to, pulling him down whenever he started to run. He adds that he always thought when he saw a pulling horse that there was a fool horse at one end of the reins and fool driver at the other.

The habit of pulling is a most uncomfortable one for both horse and driver, and it is one that no colt should ever be encouraged in. Once a horse becomes a puller he gets so accustomed to feeling a tight bit in his mouth that as soon as the strain is slackened he becomes excited and pushes ahead until he finally breaks into a run.

Nine times out of ten the habit is formed by vicious methods while training the colt. The trainer holds hard on the reins and touches the colt up with the whip in order to make him get his head up and make a lively appearance. If the colt is cold-blooded and not at all excitable this may not produce much effect one way or another, but if he is of a nervous disposition he will pull away at the bit, and before long becomes convinced that that is what is expected of him, and the result is a most uncomfortable driver for himself and for the man who drives.—*Rural World*

EASTERN ONTARIO POULTRY ASSOCIATION.

The Eastern Ontario Poultry Association will hold its next annual meeting at Brockville, Ont., the last week of January, 1899. A good local association has been organized at Brockville, and it is the intention of the promoters to make the show a record-breaker, which they should have no difficulty in doing, as there is a large number of poultry fanciers in that locality.

CLEVELAND HORSE SHOW.

The Cleveland Horse Show, which takes place during the week commencing Nov. 7th, promises to be an event of unusual interest. The president informs us that arrangements are being made to have some of the horses used by Roosevelt's rough riders at the show. This should prove an interesting feature. The show takes place during the week preceding the New York Horse Show.

MEDALS AWARDED.

The Windsor Salt Company, of Windsor, Ontario, donated three medals to be awarded for the best exhibit of cheese at the Industrial Fair, Toronto; the Western Fair, London; and the International Exhibition, St. John, N.B. These medals were awarded as follows: Industrial Fair, Toronto, to A. F. Clark, Poole, Ont.; Western Fair, London, Murdoch Morrison, Harriston; International Exhibition, Alberton Dairy Association, Alberton, P.E.I. Although the Windsor Salt Co. made no restriction as to what salt should be used in the cheese exhibited, yet the three medals were awarded to parties who used Windsor salt. This company have now issued medals for the last three years for butter and cheese, making no restriction whatever with regard to the salt to be used, and in every case the parties to whom the medals were awarded have been users of Windsor salt.

BOOKS AND BULLETINS RECEIVED.

Report of the Iowa State Agricultural Society, containing a complete report of the society's doings for the year 1897. Secretary, A. S. Fowler, Des Moines, Iowa.

Journal of the Royal Agricultural Society of England, third series, volume the ninth, part III., containing a full report of the Birmingham meeting, including ten diagrams and illustrations.

Publishers' Desk.

The Dake Engine.—Our readers are requested to read the advertisement of the Jencks' Machine Company, of Sherbrooke,

A VERY DESIRABLE IMPROVED

FARM FOR SALE

BEING parts of Lots 125 and 126 South Talbot Road, Township of Bayham, County of Elgin. 185 acres—about 115 cleared and in a good state of cultivation. Good orchard and small fruits. Frame barn, 40 x 100. Good stabling and accommodation for cattle and horses, sheep and swine. A 150-ton silo. Vegetable and milk cellars. Outbuildings and fences in first-class condition. Good water, and all conditions requisite for success in farming or cattle raising. Price moderate and terms to suit.

E. A. GARNHAM,

STRAFFORDVILLE, ONT.

THAT WONDERFUL CHURN.

H. T. Marshall writes us as follows: "I want to add my testimony to the list of those who have used the lightning churn. It does all that they claim for it. You can churn easily in one minute, and get a larger percentage of butter than with ordinary churns. I never took the agency for anything before, but so many of my neighbors wanted churns that I ordered thirty and they are all sold." Other farmers can do as well as Mr. Marshall. No farmer can afford to be without one of our churns. By using it he can make 25 per cent. more butter than with his old churn. Any intelligent farmer can easily sell four or five churns every week in his own township. Every one who sees his churn will want one like it. We will mail circulars and full particulars on demand. Mound City Churn Co., Ozark Bldg., St. Louis, Mo.

BUY

 THE BEST

For Dairy or Table Use

IT IS UNEQUALLED.

Salt on the Farm

for wire worm, joint worm, army worm and all insects that destroy crops. Salt is the best insecticide. It is also a fertilizer.

TRY IT.

R. & J. Ransford,

CLINTON, ONT

Que., and to carefully examine the cut of the engine which will be found here. The cut will give a better idea of the extreme simplicity of the machine than could be formed from any description of it. If further information is required send to the manufacturers or their catalogue.

A Good Stock and Dairy Farm.—The farm advertised by Mr. E. A. Garnham in this issue is situated in as good a locality for successful farming as can well be found in Ontario. It is on the Talbot gravel road (good at all times) and the gravel road from Ingersoll to Port Burwell, eight miles south of Tilsonburg and eight miles north of Port Burwell, within five minutes' walk of the railway station, church, schoolhouse, post office, stores, town hall, clerk's office, etc., and convenient distance by rail from Brantford, London, Woodstock, Ingersoll and all the best markets in one of the best districts in Canada.

A Good Feed Boiler is absolutely indispensable to every farmer, and one which is designed and manufactured expressly for this purpose will save its cost in an extremely short time. The Waterloo Manufacturing Company, of Waterloo, Ont., are advertising one in this issue which has been tested by scores of the readers of FARMING and found to be satisfactory in every particular. We can recommend it as one of the best and most convenient cookers in the market.

Stock Notes.

MR. W. R. BOWMAN, Mount Forest, is offering Shropshire ram lambs and Yorkshire and Berkshire swine for sale in this issue. The prices he quotes in his advertisement should be an inducement to intending purchasers.

MR. JAS. TOLTON, of Walkerton, finding that he has more bronze turkeys in his flock than he can conveniently handle, is offering choice pure-bred stock for sale at a bargain. Mr. Tolton's turkeys are all right, and whatever representations he makes regarding them can be relied upon.

MR. ALFRED LAHMER, of Edgely, Ont., recently sold a very fine gelding to Messrs. Cherry & Sheridan, of Toronto, for shipment to England. He is four years old, tips the beam at 1,700 lbs., and is said to be one of the best young horses ever shipped from Toronto. Mr. Lahmer makes a specialty of breeding heavy draught horses, and always has a stock of them on hand. He also breeds light Brahma fowls and purebred Duroc-Jersey swine, and at one time was a well-known prize-winner at the leading fairs.

THE regular annual meeting of the members of the American Aberdeen-Angus Breeders' Association will be held at the Leland Hotel, Chicago, Ill., on Nov. 9th, 1888. Members who will not be able to attend, and who are desirous of voting, should write to the secretary, Thos. McFarlane, Harvey, Ill., for a blank form of proxy.

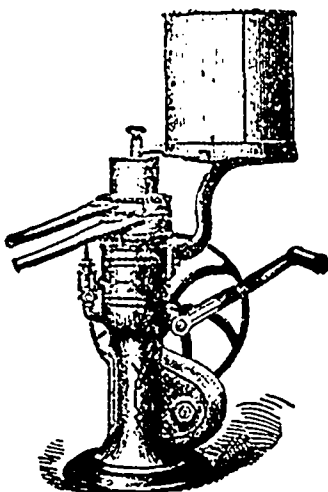
TROUT CREEK FARM.—A representative of FARMING recently visited Trout Creek Farm, the property of Mr. W. D. Flatt, near Millgrove, Ont., and about six miles from Hamilton, on the Guelph road. Mr. Flatt was found to have a well-balanced herd of some sixty or seventy head of choice Shorthorns, well-bred, well-selected, and with unquestionable ancestry, imported from the best herds in England and Scotland, having excellent pedigrees and all the characteristics of the most popular type of the breed. Mr. Flatt just now has a number of excellent young cattle to dispose of, among which are ten young bulls from five to eleven months old of the Mina, Nonpareil, Missie, and Strathallan families, and a wonderfully smooth, even lot. He has also a number of equally choice young heifers and cows, some of which are now in calf. A portion of the latter have been bred to the imported bull, Golden Fame, one of the most promising young bulls we have yet seen. He is of a beautiful red color, with mellow hide, typical, well-finished head, strong horns, clean throat, ample length of body, as level as a die in its outline, short legs, smooth hips, low banks, heavy thighs, a commanding style. He is sprightly and active, and a grand bull in every respect, being kept only in moderate condition, as he has been used in the herd exclusively up to the present time. That stock from Mr. Flatt's herd is in considerable demand is evidenced by the number of sales he has recently made. Amongst these are the following, made during the past week: To Mr. D. L. Halstead, of Rennslear, Ind., he has sold Daisy of Strathallan 11th, 27599; May Queen, Vol. XV.; May Beauty, 27943; Strawberry 11th, Vol. XV.; Ury Anne 2nd, 26111; Strawberry 10th, Vol. XV.; Joan 8th, 28354; Dolly's Pride, Vol. XV.; Beatrice McDuff 2nd, Gold Stick—22916.—To N. P. Clark, of St. Cloud, Minn., Mina 2nd, Vol. XV., and Jolly Jilt 2nd, Vol. XV. Mr. Flatt's business address and home is in Hamilton, where all communications should be sent. He will be pleased to meet visitors and intending purchasers at the station of the G.T.R. or C.P.R. at any time, if notified.

During OCTOBER and NOVEMBER we offer:

Shropshire ram lambs of No. 1 style and breeding, weighing 100 lbs., at \$10.
Yorkshire and Berkshire boars, fit for service, at from \$12 to \$15.

W. R. BOWMAN, Mount Forest.

Only 20 Cents.. For FARMING for the Balance of the Year.



National Cream Separators

No. 1—330 lbs. \$75
No. 2—600 " \$125 **HAND or POWER**

Perfect Skimmers Easy to Run and Clean.
Saves Labor—Makes Money
The Best and Cheapest in the Market.

SOLD BY
The CREAMERY SUPPLY COMPANY
Guelph, Ontario.

N.B.—We furnish all kinds of Creamery and Dairy Supplies. Send for Catalogue.

HELDERLEIGH FRUIT FARMS AND NURSERIES
—400 ACRES—

Situated at the base of the Mountain in a warm and sheltered valley where trees arrive at full maturity. Having over 125 acres planted in fruit, I have unusual facilities for knowing the value of the different varieties and establishing their purity. Everything is **GUARANTEED TRUE TO NAME** or purchase price refunded. I have for the fall of 1897, and the Spring of 1898, a complete line of Trees, Shrubs, Vines, etc., both fruit and ornamental.

Write for a Catalogue which is furnished **FREE**, and which contains over ten pages of closely written matter about the various **PESTS** that trouble fruit growers and means of preventing their ravages.

Buy **CANADIAN GROWN STOCK** only, and thus escape the dreaded San José Scale so prevalent in the States. There is no more reliable, healthier, hardier, or more complete assortment than mine.

Good reliable salesmen wanted in a number of fine townships, to start work at once. Complete outfit free.

Address **E. D. Smith, WINONA, Ont.**



GRIFFITHS VETERINARY MENTHOL LINIMENT



CURES

Sprains, Curb, Founder, Strained Tendons, Spavin, Founder, Swellings, Soreness, Inflammation, Chapped Hocks, Splints, Wind Galls, Coughs, Colds, and Sore Throats. A wonderfully healing application, and

IT NEVER BLISTERS

12 Hastings St. W., Vancouver, B.C., Dec. 17, 1897.
Messrs. Griffiths & Macpherson Co.—Gentlemen,—I consider your Menthol Liniment unequalled for horse. One of mine had a bad sprain on the left leg, which was swollen to an immense size. Griffiths Liniment was applied two days and the swelling and soreness left it. I have tried many different liniments, but never found anything to equal yours. Yours truly, R. R. RYCHIE, General Trader and Commission Merchant.

Veterinary Size, 75 cents.—At all Druggists, or upon receipt of price. The Griffiths & Macpherson Co., Toronto.



✻ ✻

Mailed to any address on trial, every week from now to January 1, 1899, on receipt of only Ten Cents

(Silver or Stamps)

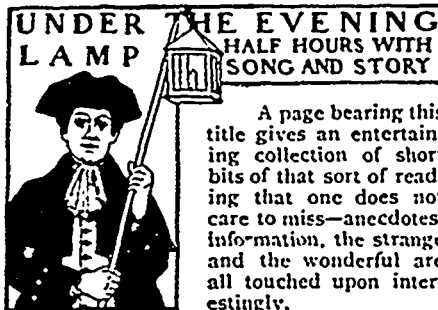
THE SATURDAY EVENING POST has been published weekly since 1728—170 years—and is unique in illustration and literary excellence.

AMERICAN KINGS AND THEIR KINGDOMS

Will tell the stories of the several greatest money-monarchs of our country—how they acquired and how they retain their power.

THE POST'S SERIES OF PRACTICAL SERMONS

By the great preachers of the world; it gives real, personal non-sectarian help toward better living.



A page bearing this title gives an entertaining collection of short bits of that sort of reading that one does not care to miss— anecdotes, information, the strange and the wonderful are all touched upon interestingly.

THE PASSING OF THE OLD NAVY

Two charming articles on the romance, antique customs and duties of the old trading-vessels, the progress of modern naval science, and how invention has killed much of the poetry of sea life. One of the best American illustrators of marine life is now painting pictures that will accompany this series.

THE PERSONAL SIDE OF AMERICA'S GREATEST ACTORS

A series of articles portraying our best-known actors in their home life, and showing its relation to their struggles and successes. The series will open in an early number with the "Personal Side of Sol. Smith Russell," to be followed by four others, profusely illustrated by photographs and original drawings.

The regular subscription price of the Post is \$2.50 per year. It is offered on trial for so small a sum simply to introduce it.

There are 16 pages every week, the same size as THE LADIES' HOME JOURNAL, and as handsomely illustrated and printed.

The Curtis Publishing Company
Philadelphia

THE BOOK OF THE WEEK

Will deal with the week's foremost offering from American publishers—an extensive review will be given in many cases, a reading from the book itself, a brief story of the author's life—all fully illustrated.



The Ontario 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.

LIST OF STOCK FOR SALE.

THE DOMINION CATTLE BREEDERS' ASSOCIATION.

Shorthorns.

Birrell, DavidGreenwood 11 young bulls and 6 females one year and upward.
 Bonnycastle, F. & Sons.....Campbellford Bull calves; 20 cows and heifers.
 Douglas, Jas.....Caledonia 13 bulls, 6 to 13 months; young cows and heifers.
 Fairbairn, H. K.....Thedford..... 2 young bulls 9 to 13 months; 5 heifers, 2 and 3 years; also yearlings.
 Leask, Jas.....Greenbank 2 bull calves.
 Milne, David.....Ethel..... 15 bulls and 32 cows and heifers.
 Rankin, S.....Fairview 4 bulls, 9 to 12 months.

Ayrshires.

Stevens, W. S..... Trout River, Que..... Bull, 5 years.

Jerseys.

Willis, W.Newmarket..... 2 bulls, 6 to 12 months; yearling heifers, all A.J.C.C

Herefords.

Smith, H. D.....Compton, Que..... Bull calves.

THE DOMINION SHEEP BREEDERS' ASSOCIATION.

Shropshires.

Copeland, W. ETeeswater 2 shearling rams; 4 ram lambs.

Dorsets.

Hunter, J.....Wyoming..... 10 ram lambs; ewes.

Cotswolds.

Bonnycastle, F. & Sons.....Campbellford..... Ram; 15 ram lambs; 20 ewes and ewe lambs.
 McCrac, Wm.....Guelph..... Stock, all ages.

Oxford Down.

Birdsall, F. & SonBirdsall..... Stock, both sexes.

THE DOMINION SWINE BREEDERS' ASSOCIATION.

Berkshires.

Allan, E. E.....Vernonville..... Young stock, both sexes; boar, 28 months.
 Bowman, W. R.....Mount Forest..... 5 boars 6 weeks to 12 months
 Bonnycastle, F. & Sons.....Campbellford 30 head, 4 to 5 months.
 Colwill Bros.....Newcastle..... 30 boars and 5 sows, 4 to 12 months; 15 young pigs, both sexes.
 Rusnell, Francis.....Cedarville 30 head, 1 month to 6 weeks 4 boars and 10 sows, 7 months.
 Smith, H. D.....Compton, Que..... 2 young sows.

Tamworths.

Colwill Bros.....Newcastle..... Boar, 8 weeks.
 Endaley, T. L.....Charleston, Ill..... 3 boars, 6 months; 4 sows, 6 to 10 months; 25 young pigs, both sexes.
 Holland, T. F.....Dereham Centre..... 6 sows; 20 pigs; 2 boars, 7 months.
 Matthews, R. J.....Durham Sow, 6 months; both sexes, 4 weeks.
 McCutcheon, HughGlencoe Young stock, both sexes.
 Prouse & Son, Wm.....Ingersoll 50 head, 6 weeks and over.
 Row, F.....Belmont 2 boars; sow; young pig; 6 sows, 6 months.
 Sargent, F. D.....Eddystone Pigs, both sexes.
 Smith, A. B.....Morrisburg 2 boars, 4 months.
 Smith, H. D.....Compton, Que..... 2 boars, 5 months.

Chester Whites.

Birdsall, F. & Son.....Birdsall..... Pigs, both sexes, 6 weeks.
 Chute, H. J.....Somerset, N.S. 2 boars, 6 months and 2 years; 20 young pigs,
 Row, F.....Belmont Aged boar; 2 sows, 5 months.

Yorkshires.

Bowman, W. R.....Mount Forest..... 15 boars, 6 weeks to 12 months.
 Caldwell Bros.....Newcastle 8 young pigs, both sexes.
 Latimer Bros.....Arkport, N.Y..... 6 sows and 4 boars, 4 to 6 months; 10 pigs, 2 weeks.
 McLelland, W. D.....Harrison 3 boars, 7 months.
 Rogers, L.....Cooksville 4 sows, 6 months; 20 pigs, both sexes, 2 months.
 Taylor, J. H.....Richmond Young stock.

Duroc-Jerseys.

McCutcheon, Hugh.....Glencoe 3 boars and 10 sows, under 6 months; sow, 2 years;
 Taylor, J. H.....Richmond 25 young pigs, both sexes.
 Young sow and boar; young stock.

Poland-Chinas.

Taylor, J. H.....Richmond 14 young sows; 2 boars; young pigs.

Essex.

Taylor, J. H.....Richmond Sow and boar.

AN ABRIDGED REPORT OF ENGLISH AND EUROPEAN EXPERIMENTS WHICH ARE OF VALUE TO CANADIAN FARMERS.

LOUPING ILL.

Principal Williams has been continuing investigations into the cause of the disease in sheep called Louping Ill. The results, which he gives in the Highland and Agricultural Society of Scotland's Report for 1897, confirms his previous conclusions that, unless ticks are present, there will be no Louping Ill. In Skye, where it seems there are two broods of ticks, there are two outbreaks of the disease, one in spring and the other in autumn. Occasional cases of the disease may be observed during summer and autumn even in the south, but these are exceptional, and due to late broods.

The following are his recommendations for the extirpation of the disease:

(1) The burning off or eating down by the cattle of all old and rough grasses which harbor ticks.

(2) The improvement of the land by dressings of common salt, lime, or both combined, or some cheap phosphatic manure such as basic slag.

(3) When the weather admits, to dip the sheep in a carbolic preparation; if this is impossible, to pasture the sheep on clean lands during the tick season.

(4) To remove the lamb, when a ewe with a lamb by her side is seized with the disease, as cultivations from such ewe's milk have revealed the organism in various stages.

IMMUNITY FROM DISEASE CONFERRED BY BLEEDING.

A Russian physiologist, Essipov, who has studied the effect of copious bleeding on the chemical composition and on the properties of the blood, has reached the conclusion that, when rabbits, guinea fowl, and pigeons are bled at the rate of 1/35 to 1/40 of the weight of the body, the blood of the animals acquires properties fatal to bacteria, which are especially characteristic in the case of the cholera germ. The immunity becomes gradually established, reaching its maximum in about twenty-four hours. Then it decreases. Not only does the blood fail to form a culture medium for the bacteria, but the entire animal becomes, for the time, immune, even inoculations failing to inoculate. The immunity is more pronounced in cases of frequent bleeding.

SNUFFLES.

A disease of young pigs sometimes observed, and by some called the snuffling disease, or the snuffles, is not very well understood. The nose and nasal passages are the parts involved. The pig has difficulty in breathing—acts as though the nose was stopped up—there is more or less of a catarrhal discharge, and eventually much deformity of the nose. It turns to one side or turns up. In very young pigs the disease is fatal in a large per cent. of cases. In older ones it runs more of a lingering course and the pig may recover.

Treatment is not satisfactory, and it is considered advisable to destroy all affected pigs. Prevention is the remedy. This trouble is infectious, and clean, dry quarters on high and dry ground will insure an immunity against disease.

Andalusians.

A lady living in the country, who kept poultry, had, among others, some Andalusian fowls. One day she had one killed for dinner, which proved to be very tough. "Rachel," she said to her servant, an elderly woman, who had been with her for some time, "what fowl is this? It seems to be a very old one." "Well, mum," replied she, "it's one of them there Antedeluvians."

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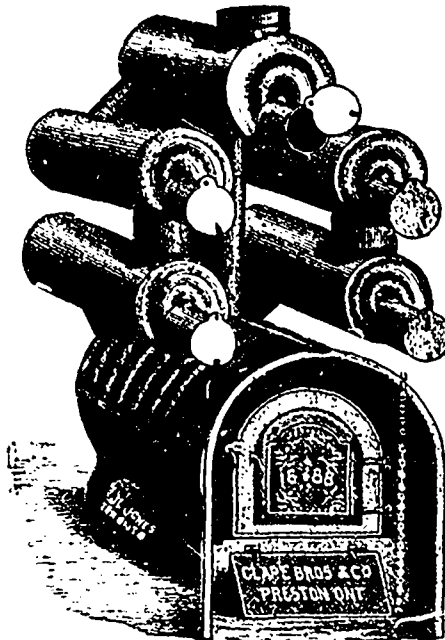
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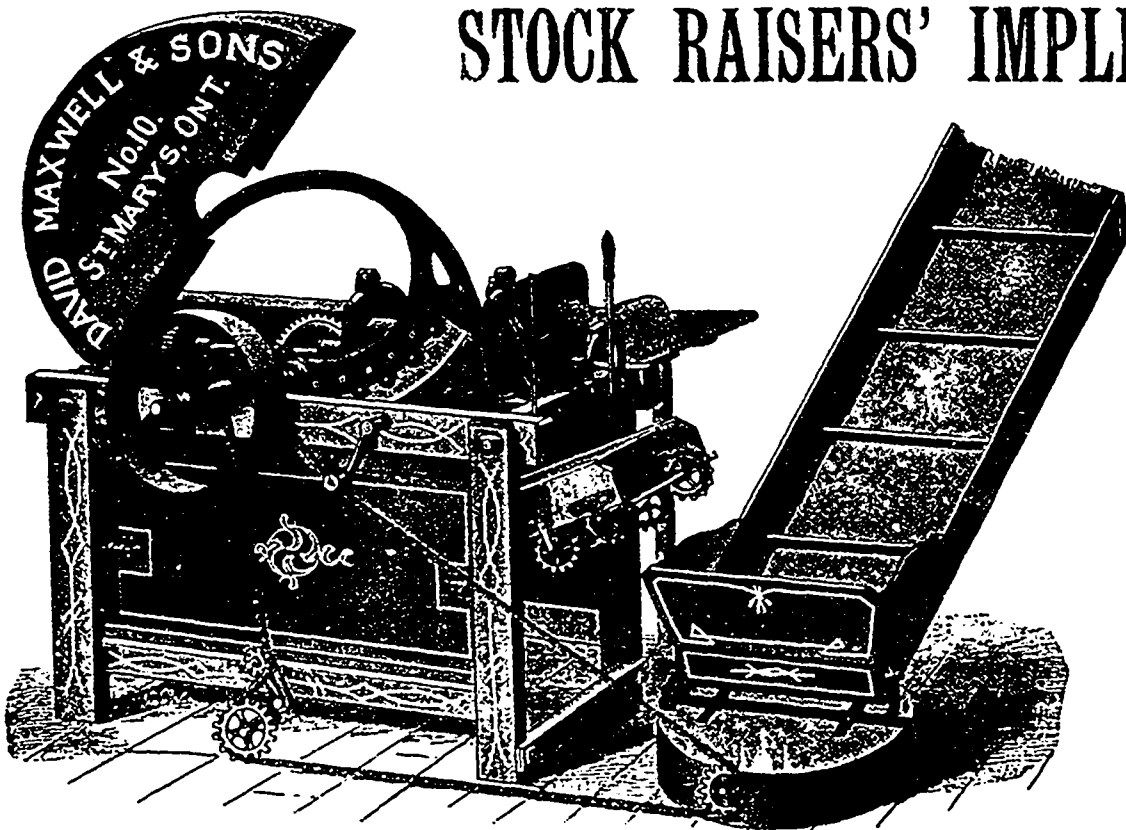
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DAVID MAXWELL & SONS

St. Marys, Ontario, Canada

MARKET REVIEW AND FORECAST.

Office of FARMING,

44 and 46 Richmond street W., Toronto.
Oct. 17th, 1898.

Canadian trade is particularly affected by changes in the weather, and, therefore, many lines of trade have been more or less affected by the changeableness of the weather during the past week or two. A big export trade is reported at Montreal, the largest for years at this season of the year. Until farmers begin marketing their grain a little more freely trade throughout the country and in the West will not be much brisker than it is at present.

Wheat.

The wheat situation shows considerable improvement over a week ago and the general firmness of the market at nearly all the wheat centres is one of the features of the week's trade. The London market remains firm at the recent advance. Spot supplies are reported to be limited and holders are consequently reserved in their offerings. Chicago, Cincinnati, and other Western markets are reported firm, and a decidedly better feeling prevails, which it is to be hoped will continue long enough to bring about a material advance in prices. The deliveries of wheat and other grains in Ontario and the West have been very small so far. But it is now hoped that, with an improvement in the situation will bring out more grain. To such an extent are farmers holding back their wheat in some sections that millers find it very difficult to fill orders. The price of Manitoba wheat has advanced 3c. at Fort William, and is quoted at 69c., 70c., 71c., and 72c. afloat there, which is equal to 77c. and 78c. at Montreal. No. 2 Ontario red winter wheat is quoted at Montreal at 73c. afloat. The Toronto market is firm at 64c. bid for white and red west. Goose wheat is steady at 62c. north and west.

Oats and Barley

The London oat market is firm at a further advance of 3d. per quarter of 320 lbs. At Montreal a good export trade has been done in oats, and much more would be done if freight room were available. Sales have been made during the week of No. 2 white at 28½c. to 28¾c. afloat at Montreal. The receipts of oats continue heavy. Oats here are quoted at 24c. west and 25c. east, and on the local farmers' market sell for 28c. to 28½c.

Barley is quoted here at 42c. to 42½c., middle freights, for No. 1, and on the local farmers' market at 46c. to 50c. per bushel. The Montreal market is reported steady at 50½c. to 51½c. for No. 1 malting barley. Feed barley is nominal at 40c. to 42c.

Peas and Corn.

The London market for peas continues steady, but prices seem to be too high for business to be done. Quotations are 25s. 6d. to 26s. c. i. f. for new white Canadian. The Montreal market is reported firmer under a better export enquiry, with sales reported at 61c. to 62c. afloat. New peas are quoted here at 52c. north and west, and on the local market at 56c.

The corn market here is reported firmer at 33c. for Canadian yellow west, and 37½c. for American, Toronto. A lot of corn has passed through Montreal during the week, and quotations there are 37c. to 37½c. afloat.

Rye and Buckwheat.

The Montreal market for rye is steady at 50c. to 51c. in store. It is quoted here at 42c. to 43c. north and west, and the local market at 46½c. The offerings of the new crops of buckwheat so far have been light. Quotations here are nominal at 33c., with 45c. on local market.

Bran and Shorts.

Offerings of Ontario bran at Montreal seem to be limited and is quoted at \$11.25 to \$11.50. Manitoba bran is quoted at \$10.25

to \$10.50, and shorts at \$14 to \$14.50. Bran here is quoted at \$8 to \$8.50 west, and shorts at \$12 to \$13 per ton west.

Clover and Timothy Seed.

On Toronto local farmers' market the quotations for these are as follows: Red clover, per bushel, \$3.25 to \$3.75; white clover, \$6 to \$9; alsike, \$4 to \$4.50, and timothy \$1.25 to \$1.35.

Eggs and Poultry.

An advance of 6d. per 120 is reported at the London market and the large supplies of Canadian eggs are readily absorbed. Canadian fresh eggs are quoted at Liverpool at 7s. to 7s. 6d. per 120 and an advance of 3d. to 6d. is reported at Glasgow. Large supplies of Russian eggs are looked for shortly, which may ease prices somewhat. New-laid eggs are reported scarce at Montreal, with sales at 18c. to 19c. Straight candled fresh stock bring 15c., and seconds 12c. to 14c. Prince Edward Island eggs sell for 13c. to 14c. A good local and export demand is reported. The offerings here have been fair, with quotations at 15c. to 16c. for strictly fresh gathered; 13c. to 14c. for held fresh, and 11c. for seconds. On the local market here fresh new-laid eggs bring 18c. to 20c.

Present indications are that a large poultry export business will be done this fall. One representative of an English firm who is in this country purposes buying 30,000 turkeys for the London Christmas market. Poultry offering here have not been large, and wholesale quotations are 35c. to 50c. for chickens, 40c. to 60c. for ducks, 6½c. to 7c. per lb. for geese, 11c. to 11½c. for young turkeys, and 9½c. to 10c. for ordinary stock. Locally, chickens bring from 40c. to 65c. per pair, spring ducks 50c. to 70c., and turkeys 9c. to 12c. per lb.

Potatoes.

Ten or twelve carloads of potatoes have come into Montreal during the week, and sold as low as 25c. per bag on track. They were, however, in poor condition. Good potatoes bring 50c. in car lots, and 60c. in a jobbing way. The market here is reported dull at 62c. to 64c. for cars on the track. On the local farmers' market they bring 65c. to 75c. per bag.

Hay and Straw.

There have been large arrivals of hay on the London market and Canadian clover mixed dropped from 64s. c. i. f. to 59s. to 60s. and lower prices are looked for. There has been a larger business in hay at Montreal during the week and owing to better enquiry an attempt was made to raise prices, but without avail as receipts were too large. There is a little better export demand, but cables have been below what the hay could be bought for on this side. Montreal quotations are as follows: Clover, \$4.50 to \$5, No. 2, \$5 to \$6, No. 1, \$6.50 to \$7 per ton. The market here is dull at \$7.50 for cars of baled hay on track. On the local farmers' market the quotations are \$7.50 to \$8.50 for timothy and \$5 to \$6.50 for clover per ton.

Fruit.

Some large sales of choice winter fruit have been made at Montreal during the week at \$2.75 to \$3 per barrel, with some lots selling at \$2.50. Some poor stock is being shipped in which does not reflect much credit upon the shippers. A barrel in one lot broke and showed the shipment to be made up of small and inferior fruit. Apples are quoted here at \$1.50 to \$2 per barrel wholesale. On the local market they bring from 75c. to \$1.25 per barrel.

Cheese.

Shipments of cheese from Montreal have largely increased during the past few weeks, reducing the deficit from 274,094 boxes on Sept. 9th to 149,735 boxes on Oct. 8th. Dur-

ing the past week shipments have been exceptionally large, but it is not expected that this will continue. Though there is a good fall make of cheese, it is not expected that the total make will equal that of 1897. The total shrinkage from Montreal and New York up to Oct. 8th was 379,282 boxes, as compared with the same period last year.

A special London cable to *The Trade Bulletin* of Oct. 13th reads: "A steady market has ruled since my last cable, with a good consumptive demand at the advance already recorded. Nice cool August cheese has brought 43s. to 44s. Finest Canadian Septembers are quoted at 45s. to 46s. Arrivals from your side are more liberal, and this is having its effect upon buyers." The Montreal market has declined ¼c. during the week. Towards the end of the week, though, the market was quiet, and a little better feeling was reported. The large shipments of the past week or two have greatly reduced stocks, and, as the factories have sold up fairly close, it is not expected that the market will take a slump for a time. There is a much healthier feeling to the market than at this time a year ago. There has been no business done on the local markets. Offers have ranged from 8½c. to 9c., but no sales are reported. Factorymen seem to be holding for something better.

Butter.

A steady feeling prevails on the London market, and stocks seem to be well under control, and with cooler weather and a good consumptive demand Danish has gone up 2d. Finest mild Canadian creamery is quoted at 98s. to 102s.; seconds, 92s. to 94s., and inferior, 75s. to 80s. Like cheese, large shipments of butter have been made during the past week or two, and the total shipments up to Oct. 8th are 45 packages more than for the same time last year, the figures being 181,618 packages for 1898, and 181,573 for 1897. This extra rush of shipments means that a large amount of the butter held in cold storage has gone forward, and should lessen stocks at Montreal considerably. A heavy make at the Ontario creameries is reported this month which may tend to ease values. Values have lowered from ½c. to ¼c. per lb. at Montreal during the week, and the top price reached has been 19½c. for finest Sept. creamery. There is very little American butter on this side of the line, and the total shrinkage in shipments from New York up to Oct. 8th is 124,652 packages, as compared with the same time last year.

Nineteen cents is considered to be a fair value at Montreal for finest creamery in boxes and quotations are: Choice creamery in boxes, 18¾c. to 19c., and in tubs, 18½c. to 18¾c. Good to fine in boxes, 18c. to 18½c., in tubs, 17½c. to 17¾c. Dairy butter is reported scarce and wanted, and brings from 14½c. to 15½c. Dairy butter is scarce here also, and the demand is good at 16c. for the best tub, and 11c. to 12c. for inferior. Creamery in boxes is quoted at 18c. to 19c., and in pound prints at 20c. to 21c. Dairy pound rolls on the local market bring 18c. to 20c., and in large rolls 14c. to 15c.

Wool.

The Boston wool market continues inactive. Market values here are the same. The movement in fleece is only of limited dimensions. Canadian woollen mills are taking large quantities of wool and appear to be storing up for the future.

Cattle.

The cattle situation in the West shows a little improvement, though not as much as one would expect from the small receipts in some places. The Chicago market does not show much change and those having cattle fit to sell are advised to sell as prices are not likely to be higher than they are now. Trade here has been fairly active for good cattle.

Export Cattle.—The demand for these has been rather slow. Choice heavy export cattle

sold on Friday at \$4.35 to \$4.50, and light cattle at \$4 to \$4.10. Choice heavy export bulls bring from \$3.50 to \$3.75 per cwt., and medium \$3.25 to \$3.40.

Butchers' Cattle.—The better grades of this class were a little firmer. Choice picked lots, equal in quality to best exporters, but not as heavy, bring \$4.15 to \$4.25; loads of good, \$3.60 to \$3.85; medium, \$3.35 to \$3.45; common, \$3 to \$3.12½; and inferior, \$2.75 to \$2.85.

Stockers and Feeders.—Einck Bros.' East Buffalo weekly circular of Oct. 12th says: "Supply of native stockers which originated mostly from Michigan were about 60 loads, and with about 75 cars of Canadas. Market ruled strong and active, with a good demand for the right kind." Choice heavy feeding steers here bring \$3.60 to \$3.75, with a few picked lots at \$3.50 per cwt. Feeding bulls bring \$2.60 to \$3. Buffalo stockers were firmer on Friday at \$3 for inferior, \$3.25 for medium, and \$3.40 to \$3.50 for choice lots. Stock bulls bring \$2.25 per cwt.

Culves.—These are higher on the Buffalo market. Prices here are unchanged, at \$3 to \$6 for the bulk, with choice heavy weights selling at \$7 to \$8 each, or \$5 per cwt.

Milk Cows are in demand at from \$23 to \$48 each.

Sheep and Lambs.

Sheep are firm at Buffalo under good demand. Lambs are reported steady. Canadian lambs have been selling well for top grades, which bring \$5.95. Choice ewe and wether lambs bring from \$5.75 to \$5.90. The prices for sheep are firm here at \$3.50 to \$3.65 for ewes, and \$2.75 for bucks. Lambs are firmer at \$4 to \$4.25 per cwt., or \$2.75 to \$4 each for extra weights.

Hogs.

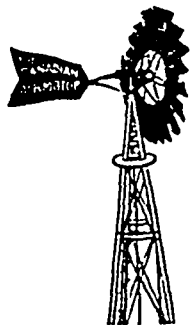
There has been a large supply of these at the Western markets and prices are easier. There have been large supplies on the market here during the week and prices are expected to be lower this week. Best bacon hogs bring from \$4.25 to \$4.37½ off cars for those not weighing less than 160 lbs., nor more than 220 lbs. Light and light fat hogs bring \$4 to \$4.12½ and heavy fat hogs \$4.15 to \$4.25 per cwt.

Buffalo Horse Market.

Oct. 13th.—The offerings were fairly liberal, in all 500 head. The market was about a repetition of last week's trade. There was a fair demand, and prices steady at the values of a week ago with a fairly good clearance. We quote: Good to prime draft horses, \$70 to \$125; common to fair, \$50 to \$65; teams, \$200 to \$325; good to choice drivers, \$65 to \$130; extra actors to speedy ones, \$140 to \$215; fair to good farm chunks, \$60 to \$75; and exporters' kinds, \$70 to \$105; common and general purpose horses, \$20 to \$40 per head.

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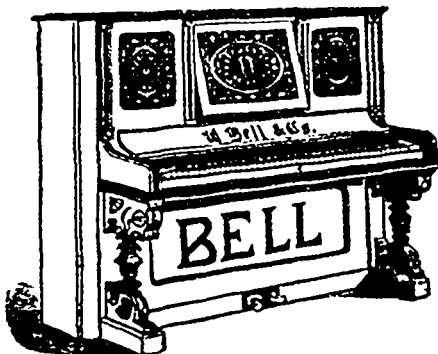
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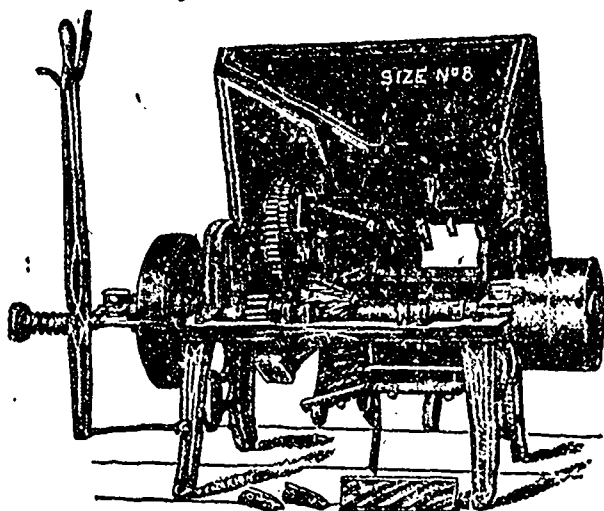
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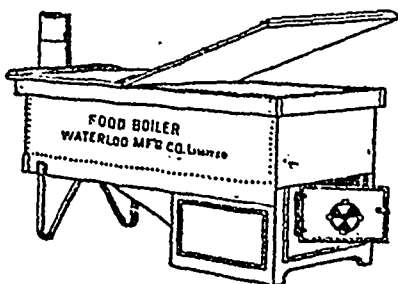
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June 10th 1898.

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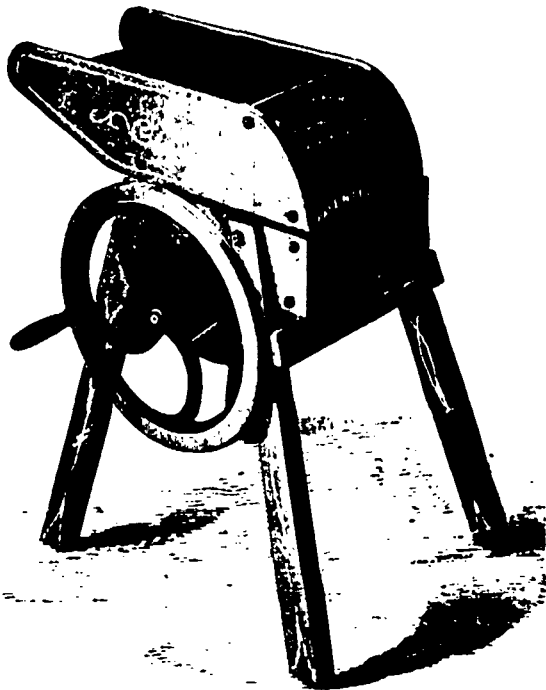
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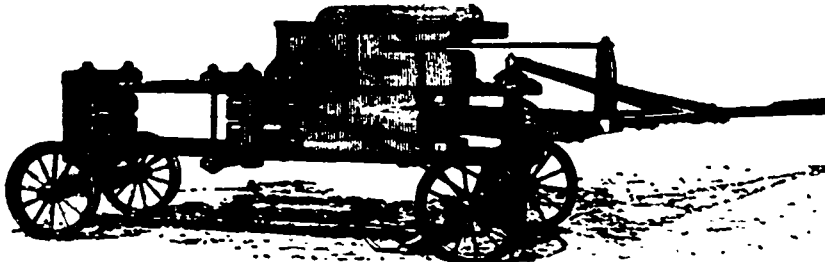
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