

AN INTERESTING LETTER AND SOME QUESTIONS.

THOS. MALCOLM, Bruce Co., Ont.:—"Find enclosed \$1 for renewal of the ADVOCATE. I am well pleased with the paper. No farmer can read one copy of it carefully without being benefited. I have been much interested in the farm-house plan competition. I always save such copies for future references. Though the cost of the first-prize house is beyond the means of the majority of Canadian farmers, yet there are some things in it that are left out of the plan of the most of farmhouses, and that they might have had at very little more expense, and would have added very much to their comfort all through life, but the fact is they never knew of such a luxury.

"Now there is a question I would like to see discussed in your paper, or at least the opinion of some reliable person who has had experience with heating a dwelling house with steam from a steam boiler stationed, say, one hundred feet away from the house. I think there are a good number of dairy-men throughout Ontario who might well afford (and I think it would prove a profitable luxury) to build a dairy building either between the house and the barn or at a right angle to both, having it as near to both as the insurance company will allow, and place a, say, eight-horse-power boiler and engine in it. This engine, besides doing the work required to be done by it in the dairy, by using a wire rope or cable and pulley it could be used for a power for the barn, cutting ensilage or straw, crushing grain, pulping, etc., while on the other hand the dwelling house could be heated all the winter, and bath rooms could be supplied with hot water, which would be a very important item. Also a steam pipe might be laid into the stable, which would steam all the feed for cattle and hogs.

1. "What loss of steam would there be carrying it, say, one hundred feet? 2. Can it be carried better over land than underground? 3. What would be the cost per foot of covering the inch-pipe with asbestos, say 1 1/2 inches? 4. Are the "blowers" now made for elevating ensilage used anywhere for conveying cut straw and hay to different parts of the stables? Does it work well on a horizontal pipe. Would much less power be required?"

[In our Christmas number, just issued, reference is made in our description of Messrs. A. & G. Rice's dairying operations, on page 695, to a system of utilizing steam similar to that proposed by Mr. Malcolm. In addition to that we invite a free discussion of the subject in our columns, especially to the questions asked.

1. After the pipes get warmed up there is practically no loss of steam in carrying steam considerably more than 100 feet.

2. It is better to carry the pipes under the frost line than over ground. In arranging this it is necessary to allow for extension of the pipes endwise, which will take place to the extent of several inches when the pipes become heated, and recede to the original length when cooled again.

3. It costs from 10 to 15 cents per running foot to cover such a pipe as would be necessary in a system of this sort.

4. Blowers that elevate cut green corn successfully, will drive cut straw or hay a considerable distance through pipes in any position. It requires a little less power to blow dry chaff than green corn, but the position or slant of the pipe would make very little, if any, difference to the power required.]

STERILIZING OF MILK.

J. O'N., Little River:—"Would you be kind enough to let me know in your next issue in regard to the sterilizing of milk? I wish to know what would be the cost of a sterilizer that would sterilize about fifteen to thirty quarts of milk per day?"

[It occasionally happens that the term sterilization is used when pasteurization is intended. The former requires 212 degrees Fahr. of temperature, which kills all germ life; while 165 to 185 degrees Fahr. is the pasteurizing temperature, which it is claimed destroys all infectious bacteria, and many of the other sorts. Pasteurizing milk not only protects the consumer from infection from contagious bacteria, but it also appreciably increases the keeping quality of the milk. For a small quantity of milk, as is required to be treated by J. O'N., a satisfactory method would be to use a deep, narrow tin can, say eight inches in diameter, and sixteen to eighteen inches deep. To pasteurize the milk place it in this can and set it in a vessel of hot water near the boiling point. Use a floating thermometer in the milk, keep the milk stirred, and allow it to rise to as high a temperature as desired. For complete sterilization it should remain at 212 degrees for several minutes, but for pasteurization, which gives a relative freedom from bacteria, the milk should be held at 165 degrees for about twenty minutes.]

CANADIAN OR AMERICAN CORN.

J. C. K., Norfolk Co., Ont.:—"Would you kindly advise me which is the better corn for feeding hogs and cattle, the Canadian or American?"

[We are not aware that there is any appreciable difference though many of our large feeders prefer the American corn, especially what is called "old," being dry and not liable to heat in the bin, as is often the case with new corn. You will probably find it difficult to obtain Canada corn in sufficient quantity. Old corn is a cent or two dearer than new per bushel. We have found no record of tests a experiment stations to determine the comparative merits of Canadian and American corn.]

CHARACTERISTICS OF LONG-WOOLED BREEDS OF SHEEP.

SUBSCRIBER, Lambton Co., Ont.:—"What are the true points of the following breeds of sheep: Lincoln, Cotswold, Leicester? Which is supposed to be the largest breed? I would like a little information on the breeding, feeding and care of pure-bred sheep for show purposes.

[There is but little difference in the size of the best specimens of the three breeds when fed for show purposes. They are all large enough. There is but little difference in the quality of the wool in flocks where they have been carefully bred with a view to producing fleeces of fine fiber and of uniform quality all over the body. Leicesters and Lincolns have uniformly white faces and legs, and the former are free from wool on face and legs. Lincolns may have, and many do have, wool on forehead and legs, nearly as much as Cotswolds. The latter should have wool on forehead, and most of them have more or less wool on their legs, and their faces and legs may be white or gray or mottled.

The requirements for success in raising show sheep good enough to win are good, roomy breeding ewes, a vigorous ram, typical of the breed, with strong constitution and sex characteristics; lambs born in February or early in March, liberally fed with oats, bran, clover hay, roots and grass; the yearlings and older sheep shorn in March or early in April, and washed with, or dipped in, a solution of one of the prepared sheep dips on the market; a light feeding of grain during the spring months when grass is flush, and heavier grain-feeding, oats and bran principally, with a small proportion of peas and nutted oil cake when fresh pasture fails. When hot weather and flies come, keep in darkened shed during the heat of the day, feeding some succulent food, and turning out to grass in the evening.]

GAS LIME ON LAND.

S. N. CULVER, Norfolk Co., Ont.:—"I have taken your paper for a number of years, and I am very much pleased with it. I would like your opinion of gaslime. Is it a benefit or a damage to land?"

[Gas lime varies considerably in composition, but essentially consists of a mixture of slaked lime and calcium carbonate, together with sulphates and sulphites of lime. These latter compounds are injurious to plant life, so that gaslime, if applied to land, should be exposed to the air, the action of which is to convert these poisonous substances into sulphate of lime (land plaster). It should, if at all, be applied in autumn, but its value is so small that it is not worth hauling more than a few miles. In fact, except on sour soils or heavy clay, lime in any form is of doubtful benefit as manure.]

MARKETS.

FARM GOSSIP.

Co-operative Dairying in the Counties of Frontenac and Addington.

The second season's report of the Pitworth Cheese and Butter Co. shows a very satisfactory increase during 1899. Milk rec'd 1,025,585 lbs., from which 56,509 lbs. of cheese was made; cash rec'd \$3,139.13; the company were paid at \$1.50 per 100 lbs. for making, \$1,447.68. Av. paid patrons per 100 for milk 75 cts. the average lbs. of milk for 1 lb. of cheese was 10.636, and the average sale for the season was 94 cts. per lb. for cheese. The company drew the milk, the stockholders deliver the cheese at the railway station.

Chatty Stock Letter from Chicago.

FROM OUR OWN CORRESPONDENT.

Following table shows current and comparative live stock prices:

	Extreme prices now.	Top Prices		
		ago.	1898	1897
Beef cattle.				
1500 lbs. up.....	\$5 40 to 6 00	\$6 35	\$5 85	\$5 50
1350 to 1500 lbs.....	4 75 to 6 65	6 75	5 95	5 40
1200 to 1350 lbs.....	4 40 to 6 00	6 35	5 70	5 40
1050 to 1200 lbs.....	4 00 to 6 25	6 35	5 65	5 00
900 to 1050 lbs.....	3 90 to 6 00	5 50	5 40	4 85
Hogs.				
Mixed.....	4 05 to 4 60	4 32	3 85	3 72
Heavy.....	4 05 to 4 60	4 35	3 85	3 72
Light.....	4 00 to 4 52 1/2	4 25	3 77	3 70
Pigs.....	3 25 to 4 35	3 90	3 50	3 60
Sheep.				
Natives.....	2 60 to 5 00	4 75	4 25	4 85
Lambs.....	4 00 to 6 25	6 00	5 35	5 90
Western lambs.....	5 25 to 6 10	5 90	5 00	5 60

The general cattle situation is favorable to producers. Best ripe cattle would sell at \$7. None are coming.

Actual receipts at five markets for 1899 with totals for 1898:

	Cattle.	Hogs.	Sheep.
Markets.			
Chicago.....	2,514,446	8,721,526	3,682,333
Kansas City.....	1,912,019	2,329,073	953,241
Omaha.....	837,563	2,216,482	1,086,319
St. Louis.....	683,908	1,800,942	1,086,984
St. Joseph.....	394,950	1,401,794	258,393
Total 1899.....	6,242,976	17,490,885	6,399,769
Total 1898.....	5,965,801	17,993,711	6,212,178
Increase.....	276,175	796,974	187,591
Decrease.....		798,236	

The date of the meeting of the Exposition Classification Committee has been changed from January 8 to January 29, to suit several members who could not be present before.

Mr. Chas. Gudgell says Shorthorn and Hereford breeders have about come to the conclusion that it is time for the breeders to stop fighting one another and present a solid front against their common enemy, the scrub.

Cattle feeders have evidently been in an unusual hurry to realize on their cattle. Buyers say there is considerable com-

plaint about the way cattle are "killing out." The high-priced cattle that are selling at top prices these days are dressing a smaller percentage than for years past. The cattle look all right on the hoof, but they are lacking and don't seem to be finished as they usually are.

The New Year's first week's receipts of cattle reached nearly 52,000, the largest for the first week of the year in over five years. A year ago this week only 33,047 were received. Prices during this week were the highest for January in fifteen years, or since 1885. The top for carload lots was \$4.64, against \$4.30 last January, and \$5 for a top in January, 1899. A lot of four head sold at \$4.65, and a bunch of 55 branded westerns of prime quality, 1,532 lbs., sold at \$4.60. Some Texas-bred and Texas-fed cattle sold at \$5.30 to \$5.50, the highest price on record for Texas cattle in January.

Here was a sample of one large business in the Chicago hog market: Drovers of packing hogs averaging 184 to 181 lbs., cost \$4.35; 220-lb. butchers' \$4.44; 234 to 232 lbs. \$4.43; 135 lbs. \$4.23, and 85 lbs. \$4.

A hog-man says the average weight of hogs is lighter than usual for this season of the year, offerings being largely of last spring and summer pigs, weighing 180 to 230 lbs. He thinks prospects favorable for good hogs to sell here next week at \$4.25 to \$4.50.

A Chicago concern bought six "doubles" of sheep for export the past week, against 27 "doubles" the corresponding week last year. They cost \$4.50 the past week, or about 50c. more than a year ago.

The lot included 776 Western sheep, averaging 138 lbs., being the first sold here on export account since last June. The demand from this source will help the market later on. Western lambs sold this week at \$4.25, the highest in about five months, 65 cents higher than a week ago, \$1.25 higher than a year ago, and within 75 cents of the top for Western lambs during 1899.

Toronto Markets.

The light supplies for the last two weeks made trade a little more active, with prices steady. Well-bred and well-finished export cattle would command ready sale at good prices, but very few choice heaves are offered at present.

Export Cattle.—This trade shows a little more strength. Some dealers have bought their export cattle out of the feeders' hands and shipped direct to the seaboard. Heavy export cattle sold at \$4.50 to \$4.50 per cwt. Mr. W. H. Dean bought two loads of export cattle at \$4.12 1/2 to \$5.00 per cwt. Choice loads of export cattle sold at from \$4.75 to \$5.12 1/2 per cwt. Mr. T. S. Colwell sold eight cattle, 1,275 lbs. each, at \$5.00 per cwt.

Butchers' Cattle.—Choice butchers' cattle in demand; weighing 1,000 to 1,100 lbs. meet ready sales. They must be equal in quality to export cattle well-finished, blocky animals for top price, \$4.50 per cwt. Good butchers' cattle, 1,100 lbs. weight, in good demand, will fetch \$4.40 to \$4.50 per cwt. Mr. James Harris bought 80 mixed butchers', at an average of \$4.25 per cwt.

Feeders.—Choice well-bred feeders, weighing from 1,000 to 1,100 lbs. each, were in demand; the price firm on these offered, from \$3.75 to \$3.85 per cwt.; \$4.00 was paid for a few short-kept well-bred steers. Light feeders, weighing from 800 lbs. upwards, are wanted, at \$3.75 per cwt.

Stockers.—The stocker trade for Buffalo quiet. Yearling steers at \$2.00 to \$2.75 per cwt. Heifers, black and white, sold down to \$2.00 per cwt. One load of stockers averaged 500 lbs. per head.

Bulls.—Quite a number of stock bulls on offer, and sold at from \$2.75 to \$3.00 per cwt. A few choice export bulls reached 4 1/2c. per lb. Mr. A. McElroy, Thorndon, Ont., sold two bulls, 1,600 lbs., at \$4.50 per cwt.

Sheep.—The sheep trade is quite firm, at \$3.50 to \$3.75 per cwt. for ewes, and bucks, \$3.00; choice wethers, \$4.25 per cwt. We notice quite a few lousy sheep coming forward these last few weeks. Farmers should attend to dipping their sheep before attempting to fatten them, which would render their feeding an easier process. Not only that, but when sheep come to market itching and digging themselves, scab may be suspected and the trade quarantined.

Lambs.—Prices firm, at from \$4.00 to \$4.65 per cwt., with a trifle more for choice wethers for export, \$4.75 per cwt. Mr. S. Cook sold ten lambs at \$4.75 per cwt.

Calves were a poor lot. Very few choice veals on offer. They were in good demand, at from \$2.00 to \$2.00 per head, according to size and quality. Mr. W. Dunn bought nine calves at \$3.00 per head.

Milk Cows.—Fresh calved cows in good demand; springers wanted, at from \$25.00 to \$45.00 per head. Common and poor cows are not wanted; those on offer to-day dragged at from \$15.00 to \$25.00.

Hogs.—This market shows a slight falling off in deliveries for the past year. Complete returns are now available: 1899: January, 23,223; February, 21,313; March, 11,900; April, 11,664; May, 16,303; June, 22,747; July, 19,484; August, 24,693; September, 23,069; October, 25,601; November, 16,159; December, 25,192. Total, 300,328. For the year 1899 there were delivered at the Western cattle market 240,308, against 301,184 for the year 1898, being a decrease of 60,776. Mr. W. Harris requests us to again inform farmers that if they will make their hogs fat they must expect lower price. Fully one-third of the hogs offered to-day were over 200 lbs., and were culled at \$3.50; Choice singers—that is, long lean hogs of the right kind, not over 200 lbs. and not below 160 lbs.—were paid for at the top price of \$4.50 per cwt. Mr. A. Wiggins sold 45 hogs, uncured, at \$4.40 per cwt.

GRAIN MARKET.

Receipts of farm produce at the St. Lawrence market were large; 2,350 bushels of grain were delivered.

Wheat.—Firm; 350 bushels of red and white at 60c. to 70c., and 500 bushels of goose wheat at 71c. per bushel.

Barley.—A little firmer; 1,000 bushels delivered and sold at 45c. to 46c. per bushel.

Oats.—In good demand, and firmer, at 30c. to 31c. per bushel.

Seeds.—There is a good demand for choice seeds on this market, at the following quotations: Red clover, per bushel, \$4.25 to \$5.50; alsike, choice, per bushel, \$6.50 to \$7.00; alsike, good, per bushel, \$5.00 to \$6.00; white clover, good, per bushel, \$7.00 to \$8.00.

Hay.—Deliveries large; 40 tons per day for the last week, at from \$8.00 to \$10.00 per ton for timothy; mixed at \$6.00 to \$8.50 per ton.

Straw.—Easier at \$3.00 per ton.

Butter.—Offering small from farmers' waggons, at from 18c. to 20c. per lb.; very choice lb. rolls at 25c.

Cheese.—Market unchanged, at from 12c. to 12 1/2c. per lb.

Eggs.—New-laid eggs scarce, at 25c. to 28c. per dozen. Packed are quoted at from 15c. to 22c. per dozen; cold-stored (styled fresh) eggs are quoted at from 12c. to 30c. per dozen; No. 2 eggs at 15c. per dozen.

Poultry.—Receipts are very light, and demand not active. Turkeys are quoted at 9c. to 10c. per lb.; geese, at 6c. to 8c. per lb.; ducks, at 5c. to 6c.; chickens, at 5c. to 6c.

Dressed Hogs.—Market steady, and prices firmer. Select weights, in car lots, at \$5.25; in farmer's loads, choice bright stock, \$5.30 to \$5.50, according to quality. About 300 on offer, bought by Mr. Wm. Harris.

Hides.—The competition is still very keen, and the prices are kept firm or advancing. No. 1 green, steers, 60 lbs. and upwards, 11 1/2c. per lb.; No. 2 green, steers, 10c. per lb.; No. 1 green, cows, 10c. per lb.; No. 2 and 3, 9c. per lb.; calf skins, 10c. to 11c. per lb.; sheep skins, \$1.00 to \$1.10; wool, fleeces, 16c. per lb.; wool, unwashed, 9c. per lb.

We quote prices as follows: Export cattle, \$4.40 to \$5.12 1/2; butchers' cattle, \$3.87 1/2 to \$4.12 1/2; butchers' cattle, choice, \$4.25 to \$4.40; feeders, heavy, \$3.50 to \$4.00; stockers, \$2.00 to \$2.75; sheep, \$3.25 to \$3.65; lambs, \$4.00 to \$4.65; milk cows, \$15.00 to \$45.00; hogs, choice, \$4.50; hogs, thick fat, \$3.87 1/2; hogs, corn-fed, \$4.00; hogs, sows, \$3.00; hogs, stags, \$2.00.

January 11th, 1900.