

clover hay, which is almost identical with the composition of horse beans, but we are not able to give just now the record of an actual analysis. The flat pea is a perennial, the roots standing an unlimited time when once thoroughly started. The young plants should be cultivated to keep the weeds down during the first year; after that they will take care of themselves. On this account the seed is sown in drills two or three feet apart; and if the soil is rich the more rapidly the plants will get beyond injury from weeds. It might make a fairly good substitute after the first year for horse beans in the "Robertson mixture," according to the favorable report of the Michigan Experiment Station, while the Ontario experimenter is less sanguine in its praise from his one year's experience with this crop for forage purposes. It was thought that a short growing season was not favorable to it.

SALT AS A FERTILIZER.

W. H. ELYEA, Grey Co.:—"1. Is salt that has been used for curing pork of any use to sow upon crops? 2. Is salt good for crops upon sandy land? 3. How much should be sown per acre? 4. What would it be worth per ton? 5. What height should the grain be when the salt is sown?"

[1. Yes. What is left is equally as good as that dissolved in brining the pork. 2. Salt supplies no essential plant-food constituents, and its value is still a disputed point, though it is admitted that where its use is favorable it is due to indirect action in aiding the decomposition of animal and vegetable matter, increasing the absorbing power of soils, and, by its reaction with lime, acting as a solvent for phosphates. It is most useful upon land where grain grows too rank and lodges. It seems to strengthen the stem and hinder its too rapid growth. It is, therefore, of least value upon sandy land for grain, although it helps mangels on light soil. 3. From 100 to 300 pounds on grain, from 300 to 500 pounds upon turnips and mangels. 4. Its value per ton as a manure cannot be definitely estimated, owing to its uncertainty of effects. 5. Before the grain is up, or before it is five inches high.]

TAR AND GRAVEL ROOFING.

"SUBSCRIBER," Virden, Man.:—"I would like information in regard to roofing with tar and gravel. Have heard much of such roofing, but have not seen it used." Perhaps some of our readers can enlighten "Subscriber."

DAIRY.

Cheese Branding.

The bill providing for the branding of Canadian cheese is making slow progress through Parliament. As introduced by Hon. Mr. Foster it did not provide for branding the month upon the cheese, but we understand that that will yet be done. According to the copy of the bill sent us, factories and creameries would be required to secure a registration certificate from Ottawa. As we have already stated, this will be very generally regarded as a needless piece of red-tape, for which, so far, we have seen no good reason advanced. It would involve expenditures for clerical work at Ottawa (printing certificates, etc.), which, if not falling upon the factorymen direct, would have to be paid for by the public. It was stated in the House that no fee was to be levied upon the factorymen. The registration feature, we fancy, will be somewhat difficult to enforce, if the bill be passed in that form.

Separator Cream.

"Here are two questions that we have been discussing amongst ourselves, and so far I have not heard or read a satisfactory answer. Assuming that more of the fat is extracted by a separator, is more butter made from it; that is, is the fat in the resulting cream more churnable? Or, supposing that five per cent. is extracted as cream by the separator, and also five per cent. by the deep-setting, will the separated cream, amounting to no larger proportion of the whole milk, make a greater amount of butter?"

The above question is proposed by our Manitoba correspondent, "Invicta," and was discussed at the recent Butter and Cheese Makers' Convention, held at the O. A. C. Dairy School, by Mr. Mark Sprague, Creamery Inspector and Instructor on Separator Work at the Provincial Dairy School.

It is a fact that as a rule the separator takes out .3 of one per cent. more fat than the gravity or deep-setting system, and this cream is equally as churnable as cream raised by the deep pails. This is found by testing the separated milk and the buttermilk produced by each of the two methods of separation. Mr. Sprague claims that not only is more butter made, but better butter, when the separator is used, for the reason that there is less opportunity for the cream to become contaminated from external influences.

A Successful Convention.

The Cheese and Butter Makers' Convention, announced in last issue to be held at the Guelph Dairy School on March 6th, was an unqualified success. There were gathered together a large number of wide-awake makers, eager to give and partake of lessons from each other's experience,

especially upon the troublesome questions in connection with their work. The whole afternoon and evening were taken up with pointed, practical addresses and discussions. Perhaps never was there more practical points brought out and less time lost in a convention of this sort. During the afternoon session the chair was occupied by Mr. A. F. McLaren, President of the Western Dairyman's Association, and in the evening by Mr. D. Derbyshire, President of the Ontario Creameries Association. Such a convention was first suggested by Secretary J. W. Wheaton, who did much to bring it to a successful issue. President Mills, Prof. Dean, and other officers of the O. A. College did all in their power to promote its interest. At the close of the meeting it was suggested that it be made an annual affair, which expression was heartily applauded. It cannot but be a great aid to the correction of many mistakes for makers to come together in this way just at the commencement of a season's work, when all are anxious to hold up and improve upon the already high reputation of Canadian dairy products. We would suggest that a similar meeting be held at the Strathroy Dairy School some time before it closes in the spring, for the benefit of the many makers in that locality. We would also suggest that as many patrons be induced to attend as possible. It is of the greatest importance that the patron and maker understand each other and each work in the other's interest—then this great interest shall advance with more profit to all concerned.

LIVE STOCK MARKETS.

Toronto Markets.

Cattle.—The market was very dull. The feeling is easy for anything but choice handy weight fat butchers' grades. The hog market is dull, at about last week's values shaded. There were 38 carloads all told—88 sheep and 2,000 hogs. A great many dealers present from Montreal to attend the meeting of the Dominion Live Stock Association.

Butcher's Cattle.—There was a good demand for best choice, but the quality offered was generally poor. One carload of good cattle sold to-day for 3c. A few extra choice brought 4c. for local consumption, but the quality of deals went about 3c. to 3 1/2c. per lb. A bunch of 3 head sold for \$102. A bunch of 23 head, weighing 2,340 lbs., realized 3 1/2c. per lb. One lot of 12 head, weighing 11,620 lbs., realized 3 1/2c. per lb. One carload of 1,000 lbs. average, 2 1/2c. per lb. One bunch, 11,000 lbs., fetched top price, 4c. per lb.

Export Cattle.—Very little will be done until the opening of navigation.

Stocks and Feeders.—The market is quiet, and prices are nominally unchanged, at from 2 1/2c. to 3c. per lb. for choice.

Sheep and Lambs.—There is nothing being done in sheep. Lambs are quiet at 4c. to 4 1/2c. per lb. Sheep, 2 1/2c. to 3c. per lb. The demand will improve after Easter.

Calves.—Offerings light; all sold; demand good for choice kinds. Prices rule 4c. to 5c. per head for good calves, according to quality.

Milk Cows and Springers.—Not many on offer; \$20 to \$35; only two deals reported.

Receipts heavy on a falling market; 2,000 on offer. Bacon hogs. Stores in moderate demand, 3c. to 3 1/2c. per lb. Heavy hogs are dull, selling at 3c. per lb.

Dressed Hogs were selling at \$5 for select weights in farmers' loads, and at \$4.50 for heavy fat hogs. Some small lots of nice quality were sold to butchers, and brought about \$5. Refusing any weighing over 140 lbs.

Hay.—Farmers met with a good market, from \$17 to \$19 per ton.

Straw.—A few loads bundled straw sold at \$12 and \$13. Small demand for rye straw.

Baled Hay.—Stocks are being gradually worked off. For car lots on track we quote No. 1 at \$14 to \$15 per ton. Baled straw. The market is a little firmer, but no change. Carloads on track, \$3 to \$3.50.

Wheat.—There is good demand for wheat from the millers, and the market is a little firmer. Manitoba No. 1 hard quoted at 84c. on spot; 82c. bid for No. 2 hard.

Oats are steady, 800 bushels selling at 29c. to 30c.

Barley.—Steady, 400 bushels selling at 34c.

Peas.—Steady, 100 bushels selling at 58c. to 59c. Scarce and wanted.

Butter.—The receipts continue very light, especially in choice butter, and the market is firm. Creamery is in fair demand, and stocks held here are light. Good butter of all kinds wanted at once, 20c. to 22c. per lb. Large rolls, 14c. to 16c. per lb.

Eggs.—The advance in new-laid is maintained, and prices are very firm. The offerings are very small, and packed stocks are about exhausted. Eggs stored and held fresh are practically cleaned up. We quote new laid eggs at 18c. to 20c. per dozen on the open market.

Poultry.—There is very little coming in. Good prices would be paid for choice stock. One dollar for three choice per lb. Geese, 7c. to 8c. Choice turkeys, 11c. to 12c. per lb.

Hides and Skins.—Dealers report trade unusually quiet. No. 1 hides are quoted at 5c.; calfskins, 22c.; sheepskins, 90c. Wool, 22c.

Live Stock Dealers.

The Canadian Live Stock Association held its first annual meeting in Toronto on March 6. President Robert Ironsides, being absent, the chair was occupied by Mr. T. O. Robson. The officers elected are: President, Robert Ironsides; First Vice-President, T. O. Robson; Second Vice-President, Robert Bickerdike; Executive Committee—John Scott, H. Gilchrist, A. J. Thompson, John Dunn, C. Coughlin, W. W. Craig, E. Coughlin, R. Winter; Treasurer, H. Bracken; Secretary, J. C. Gilchrist. An Advisory Board, composed of three members, with power to add to their numbers, was elected as follows: John Dunn, T. Crawford, M. P. P. C. Coughlin. A committee composed of R. Ironsides, C. Coughlin, Robert Bickerdike, and the Secretary was appointed to draft a set of by-laws for the government of the Association.

The following resolutions were adopted:—"That this Association enters its protest against the course adopted by the British Government in excluding from the British market Canadian cattle on the vain pretext that they are infected with pleuro-pneumonia, a disease which has never existed among the cattle of this country."

"That, whereas the committee of this Association which waited on the railway companies for the purpose of obtaining the redress they sought, the rates being refused to obtain, instead of reduced, be it resolved that a committee, consisting of Robert Ironsides, J. Dunn, R. Bickerdike, T. Crawford, and C. Coughlin, be appointed to wait on the Dominion Government for the purpose of asking their assistance in obtaining fair and equitable rates."

Chatty Stock Letter from Chicago.

(BY OUR SPECIAL CORRESPONDENT.)

Top prices at present, with comparisons:—

CATTLE.	Present prices.		Two weeks ago.		1898.	1899.
	1899.	1898.	1899.	1898.		
1500 lbs. up.....	\$3 75 @ \$4 75	\$4 40	\$5 90	\$4 80		
1350 @ 1500.....	3 40 @ 4 60	4 40	5 85	4 80		
1200 @ 1350.....	3 10 @ 4 55	4 40	5 85	4 80		
1050 @ 1200.....	3 00 @ 4 55	4 40	5 85	4 80		
900 @ 1050.....	2 90 @ 4 25	4 00	5 15	4 50		
Steers and F.....	2 60 @ 3 75	3 90	4 60	4 00		
Fat cows.....	1 25 @ 2 40	2 50	2 50	3 00		
Canners.....	2 00 @ 3 50	2 50	3 00	3 50		
Bulls.....	3 25 @ 6 25	6 50	6 00	6 25		
Calves.....	3 00 @ 4 10	3 90	4 85	5 70		
Texas C. & B.....	2 50 @ 3 00	3 10	3 65	3 70		

Hogs.
Mixed..... 3 70 @ 4 20 4 30 4 30 5 15
Heavy..... 3 60 @ 4 17 4 32 4 45 5 10
Light..... 3 70 @ 4 25 4 30 4 20 5 25
Pigs..... 2 50 @ 4 10 4 25 4 05 5 10

Sheep.
Natives..... 2 30 @ 3 65 4 00 4 60 4 00
Western..... 3 00 @ 3 65 3 75 4 75 4 00
Texas..... 3 30
Lambs..... 3 00 @ 4 70 4 75 5 50 4 25

Cattle feeders are feeling a little blue over prices, but most of them who are doing business on a business-like basis are leaving something on the right side of the ledger. Hog raisers are making a fair margin of profit. January and February receipts at four markets, with comparisons for years mentioned:—

	Cattle.	Hogs.	Sheep.
Chicago.....	430,280	1,269,519	553,335
Kansas City.....	223,047	445,888	126,333
Omaha.....	73,501	177,139	26,000
St. Louis.....	112,000	301,400	55,200

Two months, 1896.....	343,808	2,193,946	761,514
Same period, 1895.....	321,500	2,067,700	723,700
Same period, 1894.....	941,738	2,304,764	723,700
Same period, 1893.....	999,535	1,693,303	583,063
Same period, 1892.....	875,312	2,640,042	436,001
Same period, 1891.....	788,029	3,019,449	490,305

Prices for all kinds of live stock are low, but not in comparison with cost of production.

One day native steers sold at \$3.30 to \$4.75, bulk \$3.90 to \$4.00; Texas steers, \$2.75 to \$4.10; native cows and heifers, \$1.60 to \$3.80, bulk \$2.35 to \$3.00; bulls and oxen, \$2.00 to \$3.00; veal calves, \$3.50 to \$6.25; and stockers and feeders, \$2.00 to \$3.50. Some 1,600-lb. to 1,630-lb. steers sold at \$4.70 to \$4.75; steers averaging only 1,107 lbs. at \$4.55; some averaging 1,190 lbs. at \$4.55; and 1,390-lb. steers and heifers at \$4.55, with some 1,363-lb. Herefords at \$4.60. Twelve head of 1,940-lb. Short-horns sold at \$4.55. They do not pay as well as baby beefs.

Among the sales of stock cattle and sheep in Montana recently were 2,000 cattle at \$24, 5,000 yearling ewes at \$1.50; a bunch of native stock cattle at \$25 for cows and calves, \$30 for three and four-year-olds, \$21 for two cows, and \$16 for one cow.

Some extra good 1,423-lb. meal-fed Texas cattle sold at \$4.10. The arrivals at market of cattle from Texas have been comparatively light since the first of the year, and it looks as if they would continue light for some time. Very few cattle have been put on second feed, and most of the first feedings have been marketed. Stockmen say there are plenty of feeders for sale at \$20 to \$25; but not much trading is being done. Cotton-seed meal is \$14 per ton, which feeders think is too high to suit the present condition of the market, and so many cattle will be prepared for market during the next few months.

A Chicago man has word from his ranch in Lubbock County, Texas, that grass is green and would make fine cattle feed by the middle of March.

The current week's hog receipts at Chicago fell about 50,000 short of the previous week and 100,000 short of the corresponding week last year, when 205,131 arrived.

The maturing of February contracts of \$4 hogs, and the forced shipment of hogs by "renters" who move to other farms March 1, made the last week of February the largest week's receipts we will see this side of May 1.

At Kansas City last month, Armour packed 64,169 hogs; Swift, 33,356; Fowler, 31,437; and Dold, 22,836.

Average weight of hogs at Kansas City last month, 231 lbs., against 238 lbs. for January and 213 lbs. for February, 1899.

The quality of the hogs now being marketed tends to greatly enlarge the production of lard.

Some 95-lb. Mexican sheep sold at \$3.50. Exporters have bought a good many Western sheep at \$3.40 to \$3.65.

A lot of 362 Texas lambs, averaging 62 lbs., sold at \$3.85. Some 33-lb. Western-fed lambs sold at \$4.70. A bunch of 106 Michigan shorn lambs, averaging 78 lbs., sold at \$4.40. They would have brought only about \$4.65 with the wool on. A lot of thin 66-lb. yearling sheep, newly shorn, sold at \$3.50.

Montreal Markets.

Receipts of cattle have been small lately, but even under the smaller runs the markets have not been cleared, and the close a number having to be carried over. The class of stock has run a little better for some time back, the want of demand apparently keeping the inferior lot of cattle out. There have only been a couple of loads of export cattle offered: one lot making 3 1/2c. per lb., and another, 3 1/2c. per lb.

Butcher's Cattle.—This class has eased off a trifle during the past week, and it was only the very tops that would make as high as 3 1/2c.; in fact, we only heard of one lot changing hands at this price. Good, fair cattle ranged from 3c. per lb. to 3 1/2c. per lb.; medium from 2 1/2c. to 2 3/4c.; a few inferior selling for 2c. per lb.

Sheep and Lambs.—The offerings are almost nil, only an occasional small bunch being run into the market, and a couple of spring lambs. In the absence of sales, it is almost impossible to give any quotations.

Culves.—This branch of the trade is coming up a little, though what have been offered were of very poor quality, and consequently realized very small prices, ranging from \$1.50 to \$5.00 each.

Live Hogs.—A number of hogs have been received weekly, but no very heavy runs have been in, and fair prices have been realized for picked lots, choice hogs making from \$4.10 to \$4.20 per cwt.; mixed and heavy lots selling a trifle under \$4.

Dressed Hogs.—This trade is over; and with the exception of an occasional small lot, receipts are almost nil. Packers have all stopped curing for some time, and any trade done is of a jobbing nature; the range being from \$1.15 to \$1.40, as to grade and quantity.

Dressed Lambs.—There is no market for dressed lambs, at least as far as the demand is concerned. The market is packed with lambs, and every effort has been put forth to relieve the pressure. The wholesale firm of R. & N. Bickerdike have shipped 500 carcasses to the New York market, and another car to Kingston (a couple of cars were handled here successfully there they were re-shipped to Toronto, but have not, as yet, changed hands. This same firm endeavored to secure market, but were unable to get storage room from either Portland or St. John, N.B. The selling price is quoted at nearer 1c. will have to be taken before the season closes and they are worked off.

Beef continues steady at the recent advance noted, though the heavy supplies of mutton have a restraining effect on this market. Fronts, 3c. to 4 1/2c. per lb.; hinds, 4 1/2c. to 7c. per lb.