

smaller should be planted, and if the ground is not highly fertile and mellow, even larger than these should be planted. The substance of the potato seed is all the new plant has to draw from until the young roots are able to feed upon the fertility in the soil. 2. No. 3. In eighteen separate tests, with seed planted 1, 3, 5 and 7 inches deep on the Ontario Experimental Farm, the best results were obtained when the sets were planted five inches deep, while seed planted three inches did almost as well. Four inches is generally considered a good depth to plant potatoes. 4. So long as the ground is uniformly mellow, it makes little or no difference to the crop, except that by having plants straight in the rows the cultivation would be facilitated. 5. Four pounds of Paris green on two acres is much more than is necessary or wise to use, as such a quantity must burn the tops. The best proportion to water is 1 pound to 150 to 200 gallons. One pound of lime should also be used in the water to save the foliage from injury. 6. It makes little difference which implement is used, as the work can usually be accomplished well by either. It should be done when the ground is rather dry, so that the surface will not bake. Shallow molding-up is now generally preferred.]

To Bring Cows in Heat.

S. P., Riviere du Loup, Que.:—"I have great trouble in having fresh cows served so that they will calve early next fall. What is the best way to bring them in heat, and when in heat what is the best way to see it when cows are tied in the stable? Which is the earliest date after calving that a cow can be served? Some say nine days, are they right? About sows—Which is the earliest date after farrowing when they can be served again for a second litter?"

[We know of nothing better than liberal feeding to bring a cow in heat as soon as possible after calving. It is generally about a month when they come in season if well fed. Cows sometimes come in a week or ten days, but it is not natural, and probably in nine cases out of ten they will not conceive at that time; and we would not advise having them served, for the reason that it is liable to set up inflammation and cause the cow to be irregular in her periods for many months, and also renders her more liable to abortion in case conception does take place. The indications of oestrus in cows when tied in the stable are a slimy discharge from the vulva and unusual heat in those parts, restlessness, and in some cases bawling. When any of these signs are noticed she should be tried by turning her loose with other cows or with a bull, if one is kept. Sows in many cases will accept service in four or five days after farrowing, in occasional cases will prove pregnant to such service, but we do not advise this practice, as we believe that conception influences the milk supply, and that the nursing litter will suffer in consequence. A sow will generally come in heat in from five to seven days after her pigs are weaned.]

Should Calves Suck or be Fed?

H. G. H., Simcoe Co., Ont.:—"Can calves (pure-bred) be as well reared for breeding purpose by feeding them the milk as milked as to allow them to run with their dams?"

[We have no hesitation in answering this question in the affirmative, because when calves run with their dams they invariably depend almost entirely upon their dam's milk for several weeks whether she has enough milk for them or not. Most breeders of pure-bred beef cattle who allow the calves to suckle separate them, except three times a day at first and twice a day afterwards, and find that they soon begin to eat roots, chop and hay, and therefore grow more rapidly. Now, if the cows were hand milked and the calves fed there could be very little if any disadvantage to the calves. True, there might be a very little, provided the milk were allowed to lose the animal heat which is claimed contains some of the life principle, but the difference would be very little. H. G. H. does not state whether the calves are beef or dairy bred, but if dairy we would by all means advise feeding, especially the heifers, from the pail on milk from which the cream has been extracted, for the reason that butter-fat fed to calves serves to influence the tendency in heifers to lay on flesh rather than convert their food into milk when they have become cows. We have not touched the economical aspect of the question, as that did not seem to be involved in the inquiry. If H. G. H. or others would like to discuss this question our columns are open to them.]

Stone Hog Pen.

ENQUIRER, Lanark Co., Ont.:—"Would stone walls for a pig house be damp and unhealthy if boarded on the inside and packed with some dry material to the width of three inches, as we intend building it into a bank? This is the warmest and cheapest material we could use for building. If you think this plan would not do, what sort of material would you recommend?"

[We would have no hesitation in using the material referred to in constructing a hog-pen wall, as three inches of sawdust or chaff would effectively

prevent dampness. We would suggest that in building the wall as few as possible of the stones should reach through the wall, so that frost would not be conducted through wall. See the plan of ventilation in Mr. Tillson's piggery as given in this issue. Such a system should keep the walls dry at all times.]

Plan of Milk Wagon Wanted.

REUBEN SHIER, Huron Co., Ont.:—"Would any of the readers of the FARMER'S ADVOCATE please give particulars of a good method of making platform suitable for drawing milk, from eighteen to twenty-four cans?"

[We will be pleased to give place in our columns to good descriptions of milk-wagon platforms.]

MARKETS.

Chatty Stock Letter from Chicago.

(BY OUR SPECIAL CORRESPONDENT.)

Following are the current and comparative prices for the various grades of live stock:—

CATTLE.	Extreme Prices.	Top prices			
		Two weeks ago.	1897.	1898.	
1500 lbs. up.....	\$4 10 to 5 45	\$5 40	\$5 40	\$4 75	
1350 @ 1500.....	3 90 to 5 35	5 50	5 35	4 70	
1200 @ 1350.....	3 80 to 5 25	5 25	5 35	4 55	
1050 @ 1200.....	3 75 to 5 00	5 15	5 35	4 35	
900 @ 1050.....	3 70 to 4 75	4 80	4 65	4 20	
Fed Westerns.....	3 80 to 4 85	5 00	4 90	4 35	
Stockers and feeders.....	3 25 to 4 40	4 40	4 15	3 75	
Fat cows and heifers.....	3 30 to 4 50	4 40	4 15	3 75	
Canners.....	2 20 to 2 90	2 75	2 40	2 40	
Bulls.....	2 40 to 4 00	4 25	4 10	3 50	
Calves.....	3 50 to 7 00	6 50	6 25	6 25	
Texans.....	3 65 to 4 40	4 65	4 30	3 70	
Texas C. & B.....	3 10 to 4 00	3 50	3 40	3 25	
Corn-fed Texas.....	4 10 to 4 60	4 65	4 50	
HOGS.					
Mixed.....	3 65 to 3 95	3 77	3 55	4 32	
Heavy.....	3 60 to 4 00	3 77	3 52	4 35	
Light.....	3 60 to 3 90	3 72	3 57	4 30	
Pigs.....	3 30 to 3 35	3 65	3 57	4 25	
SHEEP.					
Natives.....	3 00 to 4 75	4 60	4 10	3 70	
Western.....	3 75 to 4 65	4 60	3 90	3 70	
Lambs.....	4 25 to 5 90	5 90	5 10	4 80	

The cattle market has a strong undertone for all good grades. Hogs are likely to sell higher than at present. Sheep prospects are good.

There hasn't been so large a proportion of inferior to medium quality cattle in many years as at the present time. Buyers who have orders for choice shipping or export cattle have great difficulty in filling them. The country is full of corn, and considering the fair prospect for the future it seems strange that so many half fat and rough cattle are being marketed. Thousands of new feeders are in the business, however, and aside from the fact that they lack experience, many of them got into the business by borrowing money for definite periods to carry feeding operations. The obligations came due before they had gotten the cattle in proper condition, and this fact, coupled with the other fact that a large share of the cattle lately fed were of inferior breeding, accounts for the unusually poor quality of the beef cattle being put upon the market. An Indiana man who feeds 1,000 cattle every year is paying 25c. for corn delivered now, and 25c. to 30c. for corn to be delivered to his feed lots next fall. In Nebraska farmers have such a big corn crop that they cannot house it. Millions of bushels are piled up on the bare ground, and vast quantities are still on the stalk in the fields. A. J. Van Meter, Miami, Mo., in a load of 1433-lb. cattle of his own feeding which sold to the United Dressed Beef Co. at \$5.45. G. L. Millette, president of the Stock Growers' Bank at Fort Pierre, South Dakota, says the cattlemen on the range have an abiding faith in the future of cattle, and are holding them higher than they would bring on the markets. Live cattle exporters have been busy of late. Exporters bought 4753 cattle this week as follows: Hathaway, 878; Lehman, 615; Morris, 985; Myers & H., 30; Schwartz, 369; Swift, 659; Sherman, 365; Reeder, 337; Gordon & Ironside, 128; Sherlock, 100; Doud & Keefe, 105; Williams, 30; Epstein, 150.

The organization of the National Live Stock Association of America at the recent big meeting of stock owners at Denver was a significant thing. The interest shown by stockmen in organization was greater than it has been for the past fifteen years. It will take wise management to harmonize the interests of so large an organization. There were over 1,000 bona fide delegates at the Denver meeting. The cattle-men and sheep-men are continually having trouble in the range country, and the large cattle owners, the small ranchmen and farmers, are generally making life a burden for one another. An attempt was made by the largest cattle owners to have the Government sell the arid lands of the West to the different States and Territories. That would enable them to lease these lands from the States at nominal prices and put an end to the take up claims on the open ranges of the big cattle companies. There were too many small owners in the meeting to let the resolution go through, and so the fight will be continued. Richard Gibson, of Ontario, was an active participant in the convention. Hon. John W. Springer, of Colorado, was unanimously chosen president; John M. Holt, of Montana, vice-president; Charles F. Martin, of Colorado, recording secretary; and C. W. Baker, of Chicago, treasurer. The next meeting of the Association will also be held at Denver.

The hogs are running largely to lightweights, and the quality is not as good as it ought to be. The 164,044 hogs received here last week averaged only 227 lbs., the lightest average in about a year, and 32 lbs. lighter than the last week of last November. A average the previous week, 231 lbs.; a year ago, 237 lbs., and two years ago, 238 lbs. At the recent sale of Poland-China hogs in Johnson County, Nebraska, forty-nine head sold for \$1,917.50, the highest-priced animal bringing \$250 even.

A well-known Chicago horse salesman has recently been exhorting farmers to take up horse-breeding again on a more scientific basis than ever before, urging the necessity of using sires and dams that will give weight and action in drafters and speed and style in drivers and coaches. In the enthusiasm of his subject he declared that the country was upon the verge of a horse famine. Of course, he meant a famine of good horses. His speech was widely quoted and discussed, and the essential part of it that was passed from mouth to mouth was the prediction about the verge of a famine. As a result hundreds of horses have been held out from sales, and asking prices advanced \$5 to \$20 per head. The horse market the past week opened dull, with the tendency of values lower. In fact, many poor to good horses sold at \$10 to \$15 per head lower than a week ago, owing to excessive offerings. Last week 2,949 were received at the Chicago Stock Yards, being the largest week's receipts in about eight months. The previous week 2,805 arrived, and a year ago 2,011. The export and shipping demand seemed more indifferent than for weeks. Arrivals quotable at \$60 to \$300; good to fancy drafters, \$120 to \$225; poor drafters to choice chunks, \$50 to \$120; carriage teams, \$200 to \$800, and light horses, \$30 to \$50.

Toronto Markets.

Trade at the Western cattle markets continues good. Fat cattle are firm and fairly active. Export cattle and bulls are in fair demand. The prices do not show any material improvement, and while active for good, best class of animals, the poor and medium class of cattle tends to keep the prices down. Unless farmers are determined to finish their cattle before putting on the market, prices cannot and will not advance.

Export Cattle.—No particular trade going on. Export cattle are quoted at 40 to 45c per lb. Mr. H. Mulens has just arrived from Winnipeg. He reports that the cattle are wintering well, but that they have to be fed a good deal because of the deep snow. The first shipment of dressed beef to the Old Country from Messrs. Harris & Co.'s abattoir went forward to day—two car lots of hind quarters, carefully packed and turned out in good condition—sent in the new cars especially built by the Canadian Pacific Railway Company for the cold storage system. Three of our exporters sent a few carloads to the Old Country by way of St. John. Good steers are selling for about 40c per lb.; poor cattle hard to sell.

Butchers' Cattle.—This class of cattle were of better quality and prices a little firmer. Choice picked lots, 34; good to medium, 33.35 to 33.75; middling to common, 33 to 33.25; inferior and poor, 32.75. Butchers' cattle were hard to sell; one or two deals were reported at \$2.50 per cwt. The market of Friday, February 14th, was the smallest for some considerable time—only 25 loads and 500 hogs. Trade promises to be very good. The Montreal buyers report a great shortage in their districts. They were in full force to day and cleared the market.

Bulls.—Export bulls are quoted at \$3.25 to \$3.75. Messrs. Crawford & Hunslett sold 16 export bulls, 1,500 lbs. each, at \$3.67 per cwt. William Levaack bought several bulls at \$3.25 to \$3.75.

Feeders and Stockers.—Feeders and stockers in good demand for Buffalo. William Creslock bought 40 feeders, 950 lbs. average, at \$3.50. Two loads of stockers, average 850 lbs., at \$3.15; feeding steers sold for \$3.50. Half fat steers, farmers and to fill vacancies in the distillery byres, are selling at 34c; for very choice, 33c was paid to-day.

Calves.—There is a good demand for choice veals, but common calves are hard to sell; prices rule 32 to 33c per head.

Sheep.—Are a little more in demand and steadier in price. Butchers are paying 30 to 35c per lb.; bucks, 30c per lb.

Lambs.—Are much firmer and in good demand, at from \$4.75 to \$5 per cwt; 33c to 35c per head.

Milk Cows.—The trade was brisk on short supply; prices range from \$25 to \$40 per head. A pair of good dairy cows were booked to Myrtle at \$80 for the two.

Hogs.—Receipts were very moderate—about 1,000 only. Market opened with a fair demand from outside points.

Prospects are not very good for any advance at present. Prices fell off 10c per hundred, and a further decline is expected next week at \$4.75 for top price best selections. Thick fat and light are quoted at the same price, \$4.70; stores at \$1.50, stage at \$2.

Butter.—The market is unchanged. Prices are on the easy side, and plenty of stored butter on hand. Dairy tubs, poor to medium 10c to 13c per lb.; creamery, 10c to 15c per lb., in pounds; 20c for best make.

Cheese.—Market very quiet; prices remain as per last quotation—9c to 9 1/2c for choice.

Grain Market.—About 1,150 bushels of wheat delivered, at prices ranging from 80c to 85c per bushel for white, 90c to 91 1/2c for red, and 81c for goose.

Hay.—Twenty loads on offer, at \$7 to \$9.50 per ton.

Straw.—Selling at \$5 to \$6 per ton.

Barley.—There is a good deal of talk on the market amongst grain men as to the probabilities of the barley crop next year. Some contend that the duty will be lowered for shipment to the United States next year. If this proves to be correct, the demand from the Eastern markets would undoubtedly be very large.

Oats.—Easier, 2,500 bushels selling at 32c per bushel.

Peas.—Steady and firm, at 67c to 68c per bushel; wanted. Toronto, February 11, 1898.

Montreal Markets.

Cattle.—Our last report dealt with the overcrowded state of this market, but there has been a material change in the situation. The markets have been cleared of all surplus, and with a tight run on the last three markets—of 250 to 400—and to-day (Thursday, 10th) of 250 to 300 head at the outside, it was what can easily be called drovers' weather, and they are making the most of it. On this morning's market the run was the smallest that writer has seen on a regular market for some time and the quality of the poorest with hardly an animal of good quality to act as an offset. Consequently, though prices were materially changed, they will hardly be noticeable in the quotations. Common cattle, which up to the past two or three markets have been rather difficult to cash for anything more than 25c to 30c, readily sold for 40c per lb. higher, and with a regular market for the small lot of what could be called good, choice cattle, and they were turned over at 40c, an advance of 25c on last week's prices; medium to fair cattle, 34c to 40c per lb.

Sheep and Lambs.—There is practically no market for sheep or lambs, and very few are brought in alive, the bulk of the lambs used in the local trade being brought in already dressed. The few sheep in readily made 34c per lb.

Dressed Meats.—Everything of late has favored this market, the trading in all lines being brisk under a good demand from buyers, with perhaps a slightly easier feeling in dressed hogs. The higher prices asked on the live stock market turned many butchers away to the dressed beef, and it is expected that this week's sales will make a good hole in the stocks of beef and lambs on hand. There has been no change of note in prices, which were as follows:

Hogs, light and bright, in cars.....	\$6 00 to \$6 15 per cwt.
" light and bright, small lots.....	6 50 to 6 75 "
" bright, heavy, small lots.....	6 75 to 6 15 "
Lambs.....	60 to 70 per lb.
Mutton.....	50 to 54c "
Beef, hinds.....	54c to 74c "
" fronts.....	34c to 44c "

Hides and Skins.—There has been no change in the situation of this trade. The company which practically monopolizes the output are paying butchers top prices in order to break all opposition. This they have succeeded in doing to a certain extent, but there is not the slightest doubt but the moment they come down in their prices to butchers, buying will again be started by others. The range of prices are 9c to 9 1/2c, and in some cases 10c per pound for the green, salted hide, for No. 1, with a corresponding decline of 1c per lb. for Nos. 2 and 3; lamb skins, 85c to \$1.05 each.

The British Markets.

Monday's London market, with heavier arrivals of United States and Argentine cattle, eased off from the sharp advance of Monday week (January 31), and declined fully 1c to 1c per lb. on cattle from those two countries, but Canadian remained steady and unchanged in price, at 11c; States, 11 1/2c; Argentine, 10c; Liverpool steady, at 1c lower all round. Both ports were strong for sheep; Liverpool 11c for choice Canadians, 11 1/2c for Argentine sheep, and London 12c for choice. (All above quotations are per pound, dressed beef, sinking the offal.)

Attend to your "Farmer's Advocate" subscription early, and avoid regrets for oversight.