

the winter. could be made were asked, apiary, sort in closing, y, swarming as possible by keeping combs con- keep bees at od of forced

THE SILO.

Co., Que.— my renewal ry much. I the proper make good be the best t in the silo ter? Would would a mix- put in silo? be any risk d growth of g? I think fact, a better feel greatly ection."

c., have been results have rouble seems o sufficiently oes not pack the result is ten mass. A tedly tried to College farm, ents with the heap. Later of green mil- ut in mouldy as been made eared to an- om any who

clover, better so than with In fact, the ome sections. oom, and not the silo. It attends the e built into the g each layer and round to- tramping is oughly. The e work of the silo is succeed in and fill con- oads of green h the clover d like to hear making good

—“Will you ions through VOVATE? I d would like uch per acre s will get all twelve cows. ws and Tam-

all probability ured for Mr. eights he pro- easons of the suitability of f, however, asons, so that e necessary; at the bacon ven or eight

on, and long, eenty of exer- e about 100 d be support- mmer this is es, together f grain daily, tion be main- ities of these what is called itely settled. A run e have always d mangels or clover hay cut d to be given millfeed. It is ovided at this he production , even though ng as they are hat plenty of eason of the otherwise the e to eight in a

hat Mr. John- mangels, red ats. To raise

eighty pigs a year to bacon weights would require, approximately, 200 bushels of barley, 200 each of peas and oats, five tons of shorts, and 1,000 bushels of mangels, besides green clover and vetches for pasture or soiling, and the skim milk. Reckoning the land to produce per acre, of barley, 25 bushels; of peas, 18 bushels; of oats, 35 bushels; and of mangels, 400 bushels, the following number of acres should be sown, at the following rates per acre: Barley, 8 acres, at 7 pecks of seed; peas, 11 acres, at 2 bushels of small or 3 of large seed; oats, 6 acres, at 2 bushels per acre [NOTE.—It may be well to sow 12 acres of oats, part of the crop to be exchanged for shorts]; and mangels, 3 acres, at 5 to 8 pounds of seed per acre. Vetches may be sown about one bushel per acre, and if seeded at the same time with clover a good pasture will be secured for considerable of the season if sufficient pigs are turned on when the crop is about ten inches high to keep it cropped off fairly close. Five acres handled in this way, together with a small clover field, will produce pasture for a considerable number of pigs. We have based our conclusions upon our own experience and that of other bacon-raisers with whose methods we are conversant, and would be pleased to hear from others who can suggest a more economical or profitable bill of fare.]

SOFT MAPLE PLANTATION.

GORDON L. LAMB, “River View Farm,” Prescott Co., Ont.:—“I am very well pleased with your paper and find it a great help to me. You will please find enclosed one dollar to renew my subscription. I shall be obliged also to get an answer from you as soon as is convenient for the following questions: I wish to thin out a young soft maple bush that grows in the flat of the Ottawa, and is overgrown nearly every spring. When is the best time of the year to save the trees that are left? I ask this because I have noticed that some standing on the edge of the clearing made in recent winters have had the bark dry up and peel, and I suspected that it was the spring frosts and sun coming too soon after the trees had lost their shelter. The trees are very tall and slender, some not more than three or four inches through. How much space should be allowed between them? Where two or more grow in a clump, separating only a short distance from the ground, should I cut all down but one, or allow more than one to grow?”

[Regarding the thinning of a soft maple plantation, I would suggest the following methods for him to adopt:

1. Thin during the summer months, as at that time when the trees are in full leaf one can tell better what to cut out, so that the leaves on those remaining will shade the ground more or less completely, which is necessary in order to produce the best results.

2. Leave a belt unthinned, or but little thinned, all around the woods, so that it will protect the other trees from either the hot, dry winds or wind storms. This belt should vary in thickness according to the density of the wood. In this belt undergrowth should be encouraged as much as possible.

3. Every man must use his own judgment as to a certain extent as to how many trees he should remove. Gradual thinning is the best, for when trees are grown very thickly and are tall and slender and have not much root growth, if they are thinned out too much those remaining are liable to be blown down or injured in other ways.

4. Your correspondent could probably thin his trees with safety to about three feet apart, cutting out the poorest; and where two or more are growing together, leaving only the best ones, if he can do so without endangering its life. In a few years, when the trees seem to be too thick, he should thin again.

5. If a permanent crop of wood is desired, it is very important that the seedling and smaller trees should be preserved; and in thinning, care should be taken not to injure them, and above all things keep the cattle out of the woods. W. T. MACOUN, Central Experimental Farm. Horticulturist.]

WELL WATER FOR ANALYSIS.

READER:—“What is the cost of having samples of well water analyzed at the Central Experimental Farm, and how large a quantity of water is required?”

[There is no charge, providing samples are sent according to the following directions prepared by Prof. Shutt, the chemist: “Procure from a druggist an empty ‘Winchester quart’ bottle, which, however, must not have held ammonia. If such be not obtainable, a clean, new, stoneware gallon jar may be used. In either case rinse the vessel several times with the water about to be sent, finally filling it up to the neck. Close tightly with a new cork, and tie over the cork and round the neck a piece of new cotton, which will prevent the cork from coming out and dirt from entering the bottle. Pack the bottle in sawdust or other suitable packing material, to prevent it from shifting in the box en route. Ship the sample as soon as possible after taking it, prepaying express charges. At the same time send particulars as to the nature of soil and subsoil or rock through which the well is sunk, the depth of well, the usual height of water in well, the distance of well from barn, stable or privy; state whether the well has been lately cleaned, the material and condition of crib-work, and add any other information regarding the water which may assist in drawing conclusions as to the nature of the source and the normal condition of the sample sent for analysis.”]

STABLE-CLEANING CAR.

W. J. WEIR, Middlesex Co., Ont.:—“In the issue of June 1st, 1887, there was a manure carrier highly spoken of. Would it be infringing on a patent to put it up?”

[The stable-cleaning car described and illustrated in the FARMER'S ADVOCATE of June 1st, 1887, was invented, constructed and used by Mr. Duck, in whose stable we saw it in operation, but it was not at that time covered by a patent. We understand a manure carrier similar in principle, but different in some of its minor points, has been covered by a patent. This gives the patentee the exclusive right to manufacture or sell the contrivance, the principle of which is covered by the patent. Unless the manure carrier referred to by Mr. Weir differs substantially from the one that is patented, his building it would infringe on the patent. A mere difference in material or in the manner of operating the carrier would not free one constructing it from obligation to the patentee.]

SCALDING HOGS.

H. C. R., Brandon, Man.:—“Can you kindly inform me what the exact temperature the water should be for scalding a pig? It is known that the water if too hot will cook the meat so that the hair will stick as badly as if the water is too cold. If you or some of your subscribers will answer this question, you will greatly oblige.”

[Water should be at a temperature of 185° or 195° for scalding hogs. While scalding, the hog should be moved up and down to get the air and prevent cooking the skin. As soon as the bristles will come off easily, the animal should be taken out, as if left too long the hair is apt to set. A shovelful of wood ashes thrown into the water helps to make a clean scald.]

FEEDING RACKS FOR SHEEP.

ARTHUR F. O'NEILL, Middlesex Co., Ont.:—“Please give through the FARMER'S ADVOCATE plan of best feeding rack for feeding sheep. I think the rack I saw at Ontario Agricultural College, Guelph, is the best, but I don't know the dimensions of it or plan. I think the Xmas number will worth year's subscription.”

[See Oct. 15th issue, 1888, for description and cut of useful rack on page 492, also Jan. 2nd issue, page 16.]

MARKETS.

Toronto Markets.

The last two market days have been fairly active; prices firmer; the quality of cattle not first-class, but all offered sold; prospects for a good market next week, with trade better in the near future; deals were effected early; market cleared by noon.

Export Cattle.—Only a few odd lots of shipping cattle selected from various loads; there was a fairly good demand. Prices quoted export cattle, choice, \$4.35 to \$4.62½ per cwt. Light exporters quoted at \$3.85 per cwt. to \$4.25. A load of mixed cattle, averaging 1,070 lbs., sold at \$3.80 per cwt.; five dollars over on the deal. Mr. Dean is asking for good shipping steers weighing 1,100 lbs. One load of mixed cattle, averaging 1,100 lbs., sold at \$3.80 per cwt. Mr. W. H. Reid, of Kingston, shipped one load of good exporters for Liverpool per G. T. R.

Butchers' Cattle.—Choice butchers' cattle in demand; handy weights, 1,000 lbs. to 1,150 lbs. each, equal in quality to export, quoted at \$3.45 to \$3.50; medium, \$3.30 to \$3.45; common, \$3.00 to \$3.25; inferior, \$2.35 to \$2.60 per cwt. Mr. T. Halligan bought one load of butchers' cattle, heifers and steers, average 980 lbs., at \$4.00 per cwt.

Bulls.—Heavy export bulls of choice quality, \$3.65 to \$4.12½ per cwt.; medium at \$3.25 to \$3.40 per cwt. The best export bull seen on this market lately, weighing 2,000 lbs., at 2 years old, the property of Mr. I. Vance, of Tavistock, Ont., was sold at \$4.25 per cwt. A lot of 4 stall-fed bulls, averaging 1,400 lbs., sold for \$3.65 per cwt.

Stocks.—Very few stockers on offer; prices ranged from \$3.00 to \$3.40 per cwt.; choice picked lots at \$3.50 per cwt.; all sold for Buffalo.

Feeders.—Very few feeders are coming forward; they are wanted to fill vacancies at the byres; prices are firm; unchanged at \$3.60 to \$3.70 per cwt.

Sheep in good demand. Ewes are quoted at \$3.40; bucks at \$2.50 to \$2.75 per cwt. Mr. Morrow, of Tara, Ont., had on the market eleven wethers, the only specimens during last year; they brought \$3.50 per cwt., or about half a dollar more than common ewes. It is difficult to understand why the farmer does not learn this simple lesson of castrating and docking lambs.

Calves.—Only a few on offer; prices unchanged at \$3.00 to \$6.00 per head; for extra choice quality veals, \$5.00 per cwt.

Milk Cows.—Only about five milk cows on offer, which sold readily at \$25.00 to \$45.00 per head; a few choice milkers wanted.

Hogs.—Deliveries still very light; feeders are holding off; hogs are getting fat; packers are resolved to cull at any above 200 lbs.; top price paid for choice selections only \$4.25 to \$4.37½ per cwt. Light fat, \$4.00; heavy fat, \$3.75 per cwt. Sows, \$3.00; stags, \$2.00. The ruling price for car lots of hogs as they run was from \$4.30 to \$4.40 per cwt.

Eggs.—Firm, choice stock scarce; receipts light; choice boiling stock sells at 20c.; cold stored at 16c.; warranted new laid, 25c. to 30c. per dozen.

Butter.—Steady movement in best quality; receipts fair of both dairy and creamery; small dairy prints, 15c. to 16c. per lb.; creamery, 19c. to 20c.; in lbs., 20c. to 21c. per lb.

Cheese.—Market unchanged; choice stock sells at 10c. per lb. **Hay.**—Firm, at \$9.00 to \$10.50 for timothy, and \$6.00 to \$8.00 for clover.

Straw.—Steady; two loads sold at \$7.00 per ton; sheaf straw always in good demand.

Dressed Hogs.—Market steady; farmer holding stock over from \$5.25 to \$5.50 as to quality. Western hogs are quoted 10c. to 15c. lower than Northern, at \$5.15 to \$5.25 for selected weights.

Hides.—No. 1 green hides are quoted at 8½c. per lb.; green steers at 9c. per lb.; calfskins, 10c. per lb.; pelts, 80c. each; lamb-skins at 75c.; wool fleece at 15c. per lb.

Grain Market.—Deliveries of farm produce were fair. Wheat steady; 400 bus. sold at 47c. per bus.

Oats.—Easier; 900 bus. sold at the opening, 34c. down to 32½c. per bus.

Barley.—Easier; 400 bus. sold at 48c. per bus.

Clover Seed in good demand; sold at \$6.00 to \$9.00 for best, suitable for export.

Timothy Seed wanted; quoted at \$1.25 to \$1.35 per bus.

New Pork-Packing Enterprise at Toronto.

A new packing-house company has been organized, under the title of the Toronto Packing Company (Limited), share capital \$40,000. Thos. Crawford and Frank Hummsett, cattle dealers; John Dunn and Wm. Levack, cattle exporters; Mrs. Steine, of Toronto, are the charter members.

Chatty Stock Letter from Chicago.

FROM OUR OWN CORRESPONDENT.

Following were the prices lately current, with comparisons two weeks and one and two years ago:

	Extreme Prices.	Two weeks ago.	1888.	1887.
Beef cattle.				
1500 lbs. up.....	\$1 80 to \$5 85	\$6 25	\$5 50	\$5 40
1350 to 1500 lbs.....	4 40 " 5 95	5 85	5 40	5 45
1200 to 1350 lbs.....	4 20 " 5 70	5 90	5 40	5 20
1050 to 1200 lbs.....	4 00 " 5 65	5 75	5 00	5 30
900 to 1050 lbs.....	3 85 " 5 40	5 60	4 85	4 85
Fed Westerns.....	3 85 " 5 85	5 60	5 00	4 90

Hogs.				
Mixed.....	3 35 " 3 85	3 52½	3 72	3 55
Heavy.....	3 30 " 3 85	3 55	3 72	3 55
Light.....	3 30 " 3 77½	3 50	3 70	3 60
Pigs.....	2 75 " 3 50	3 40	3 60	3 55

Sheep.				
Natives.....	3 00 " 4 25	4 50	4 85	3 75
Western.....	3 25 " 4 15	4 30	4 50	3 75
Lambs.....	3 75 " 5 35	5 50	5 90	5 75

Actual receipts of cattle, hogs and sheep at Chicago, Kansas City, Omaha, and St. Louis, for 1888, with comparison of totals:

	Cattle.	Hogs.	Sheep.
Chicago.....	2,450,897	9,357,114	3,580,459
Kansas City.....	1,757,964	3,672,909	980,303
Omaha.....	812,244	2,101,387	1,085,136
St. Louis.....	683,622	1,728,266	435,893
Total, 1888.....	5,704,727	16,859,676	6,090,771
Total, 1887.....	5,971,077	14,956,274	5,972,317
Total, 1886.....	5,693,888	15,059,607	6,332,319
Total, 1885.....	5,537,844	15,060,091	4,933,532
Total, 1884.....	6,148,725	12,069,907	4,225,348
Total, 1883.....	6,403,154	10,197,535	4,203,006

Largest receipts at Chicago of stock in one day:	
Cattle, April 25, 1882.....	32,677
Calves, June 25, 1885.....	3,089
Hogs, February 11, 1885.....	74,551
Sheep, October 1, 1884.....	31,331
Horses, June 13, 1888.....	1,098
Cars, July 30, 1884.....	2,394

Largest receipts of stock in one week:	
Cattle, week ending September 19, 1891.....	95,521
Calves, week ending July 16, 1892.....	8,479
Hogs, week ending November 20, 1880.....	300,483
Sheep, week ending September 25, 1890.....	69,863
Horses, week ending March 30, 1885.....	4,369
Cars, week ending January 16, 1892.....	8,457

Largest receipts of stock in one month:	
Cattle, September, 1882.....	385,406
Calves, September, 1891.....	31,398
Hogs, November, 1880.....	1,111,907
Sheep, September, 1887.....	397,106
Horses, March, 1897.....	17,782
Cars, December, 1891.....	31,910

Largest receipts of stock in one year:	
Cattle, 1892.....	3,571,796
Calves, 1893.....	210,567
Hogs, 1888.....	9,357,114
Sheep, 1888.....	3,095,610
Horses, 1888.....	118,764
Cars, 1890.....	311,557

Average weight of live stock at Chicago:	1888.	1887.	1886.
Cattle.....	1,084	1,091	1,118
Hogs.....	234	212	246
Sheep.....	86	85	85

Average prices at Chicago:	1888.	1887.	1886.
Beef cattle.....	\$4 65	\$4 50	\$4 05
Cows and heifers.....	3 40	3 05	2 65
Western rangers.....	4 20	3 75	3 30
Texas cattle.....	4 05	3 90	3 50
Hogs.....	3 85	3 70	3 60
Sheep.....	4 25	3 85	3 20
Lambs.....	5 35	4 95	4 50

Highest monthly prices in Chicago during 1888 were:

	Beef Steers.	Range Steers.	Hogs.	Sheep.
January.....	\$5 50	\$4 00	\$4 85	\$4 85
February.....	5 55	4 27½	5 00	4 75
March.....	5 80	4 17½	4 75	4 90
April.....	5 50	4 15	4 90	4 65
May.....	5 50	4 50	4 50	5 25
June.....	5 35	4 50	4 75	5 25
July.....	5 65	4 90	4 20	5 00
August.....	5 75	4 90	4 15	4 75
September.....	5 85	5 00	4 00	5 00
October.....	5 90	4 55	3 85	4 75
November.....	5 90	4 25	3 65	4 50
December.....	6 25	4 25	3 65	4 50

G. W. Simpson & Son have secured the Government contract for supplying meat to the United States troops at interior posts in Cuba for the next six months. Live cattle from Texas, Mexico, and Venezuela will be used in filling the contract.

The new year, 1889, opens with conditions generally promising, and stockmen are in cheerful frame of mind. In the cattle business there is one matter that is disturbing the trade, that is the high price of corn and other feed stuffs, and the question as to whether it will pay to make the cattle ripe. At present only the choice ripe cattle are paying a profit, and at the present cost of corn and value of ordinary cattle it looks to the feeder as if he might better save his corn. However, there is about \$1.00 margin between half fat and ripe cattle, and with so few good cattle in the country it looks as if this ought to be the year of all others when it would pay to “feed out.”

Hog growers are getting fair prices, notwithstanding the heavy supplies. The sheep trade is in moderately satisfactory shape.

Live Stock Association Meetings.

The annual meeting of the Dominion Cattle Breeders' Association, Toronto, on Feb. 7th.

Annual meeting of the Shorthorn Association, Toronto, Feb. 8th.

Annual meeting of the Clydesdale Association, Shire Horse Association, and Canadian Horse Breeders' Association, Feb. 9th.

The adjourned meeting of the Dominion Swine Breeders' Association, Feb. 10th.

The Directors of the Provincial Winter Show on the evening of the 7th.

Annual meeting Ayrshire Breeders' Association at Montreal on Feb. 15th.

Breeding Sows for Manitoba.

Mr. I. Young, Hartney, Man., was in the Toronto, Ont., market purchasing breeding sows recently, and was recommended to take 200 from the northern districts of the Province. He contracted for that number, to be delivered at Barrie Station on Saturday morning, Jan. 8th. He speaks of a great future for the hog business.