

### Finish the Calves.

We cannot produce beef unless calves are raised, and one of the best places to raise the calves is on the farm upon which they are to be fattened. Farmers Bulletin 517 of the United States Department of Agriculture dealing with this subject states that the raising of cattle and the fitting of them for market have generally been considered two separate and independent operations, conducted, as a rule, by two different men, each operating independently of the other, and not interested in the outcome of the other's operations. The professional cattle feeder has always preferred to buy his feeder cattle in preference to raising them, and he has been interested in the cattle raiser only to the extent of having him supply a sufficient number of animals of proper quality, and at a low enough price to enable him to fit them for market with profit.

In recent years, however, as the value of land has advanced, the raising of feeder stock as a distinct industry has been less profitable, especially on the high-priced lands, and consequently there is, in some sections of the country at least, a tendency for the breeder also to fatten his product on his own farm. Of course, no fixed rules can be given as to the profitability of the one or of the other phase of the beef business. The question as to whether an individual farmer can raise feeder cattle with profit depends in a large measure, other factors being equal, upon the value of his land and the quantity and kind of feed he can produce. In sections where a great percentage of the land is stony, rough, or too steep to cultivate and is adapted to the production of grass, the growing of feeder cattle is profitable. On the other hand, there are many instances where the raising and feeding of the animals on the same farm would bring greater returns in money value, besides adding to the permanent fertility of the land.

Recent co-operative work by D. T. Gray, of the Alabama station, and W. F. Ward, of the Bureau of Animal Industry of the U. S. Department of Agriculture, in feeding yearling calves, has a direct bearing on the question of raising and finishing animals on the same farm. They state that—

Farmers who have as many as 30 breeding cows on their farms should make it a rule to fatten their offspring themselves; they can seldom afford to sell the calves to the professional feeder. The feeder usually makes money on the process of fattening, and the man who raises calves in sufficient numbers should keep this extra profit at home. Furthermore, the farmer who has from 8 to 12 calves or steers ready for the feed lot will usually find it profitable to buy a sufficient number of feeders to complete the load, and he can then finish all of them on his own farm.

There are many ways of disposing of beef calves or cattle, and farmers should be watchful to avoid methods by which money might be lost. It is possible to raise beef cattle properly and by selling them improperly to lose money on the business in just the same way that it is possible to raise good apples, potatoes, and peaches, and lose money on them when the marketing part of the business is not studied, and given proper attention. When beef cattle are bred, fed, and marketed in a scientific and businesslike manner satisfactory profits should be realized.

The first experiment undertaken was to determine the cost of finishing high-grade calves for market on different feeds when the animals were less than 1 year old. Three lots were kept for four months on a basal ration of cottonseed hulls and alfalfa hay. Lot 1, on a supplementary ration of cottonseed meal, made an average daily gain of 1.71 pounds at a cost of 6.22 cents per pound; lot 2, with cottonseed meal and corn-cob meal in the proportion of 2 to 1, made an average daily gain of 1.76 pounds, at a cost of 6.19 cents per pound; lot 3, with cottonseed meal and corn-cob meal in the proportion of 1 to 2, made a gain of 1.83 pounds, at a cost of 6.83 cents per pound. The third lot gave a larger percentage of dressed weight and sold for a better price, but not for enough more to pay for the extra cost of feed.

To determine whether calves can be fattened profitably for the spring market on a feed of cottonseed meal, cottonseed hulls, and mixed pea-vine hay, 52 calves were divided into two lots, one lot receiving the shelter of a good barn and the other fed in the open; but as it was found that the young calves would not thrive during the winter months without shelter, the entire lot was placed in sheds. During a period of 112 days the average daily gain for the entire lot was 1.24 pounds, at a cost of 6.97 cents per pound. Each calf netted a profit of \$3.50.

A test was made in wintering calves and fattening them the following summer on pasture. Thirty-four calves were wintered on cottonseed meal and hulls, corn chop, and alfalfa hay. The average daily gain was 1.13 pounds, at a cost of 8.63 cents per pound. On March 25th they were turned on good pasture and in 89 days made an average daily gain per head of 1.33 pounds, at a

cost of 4.84 cents per pound. The profit for each calf was \$1.86.

Among the conclusions drawn from the above experiments are the following:

A farmer may expect to obtain a reasonable profit on beef calves when he raises and fattens them on his farm and sells them when they are 12 to 14 months old. \* \* \* Young calves can be finished for the market at a profit on cottonseed meal, cottonseed hulls, and pea-vine hay, but it is more profitable to introduce corn-and-cob meal to take the place of part of the cottonseed meal. \* \* \* The tests seem to indicate that it is more profitable to feed a heavy ration and sell the calves at the end of the winter months, when the prices are normally high, than to hold them until the early summer months.

### Alberta Steers on Chicago Market.

It is not many years since scores of ranchers and hundreds of farmers in Western Canada gave up the stock-raising industry in disgust because of low prices prevailing for what they had to sell. Recent years have found better prices. In Winnipeg conditions have improved in four or five seasons. Occasionally, also, shipments have been made to Chicago. Few, of course, care to undertake shipments across the line in face of a 27½ per cent. duty.

Early in October an editorial representative of the Farmer's Advocate of Winnipeg called on George Lane and visited his big Bar U Ranch at Pekisko. He talked enthusiastically about recent experiences connected with marketing his cattle. When last summer opened he felt that the Chicago market was going to be good and he determined to look into the situation. Consequently he went to Chicago, investigated market conditions and from the information obtained made up his mind that good cattle could be profitably marketed across the line. To date of the interview four shipments had been made to Chicago. The results are shown by the following statement of particulars.

On August 19, 464 head of steers brought \$9.00 a hundred for the tops, and \$8.65 for bottoms; October 14, 810 steers brought \$10.25 for tops, and \$7.40 for bottoms; October 21, 199 steers brought \$7.40 for tops, and \$7.25 for bottoms; October 28, 348 steers brought \$10.10 for tops, and \$8.10 for bottoms. On dates, October 14 and October 28, Mr. Lane's steers topped the Chicago market. The shipment of October 14 was composed mostly of four-year-old steers, weighing from 1,400 to 1,500 pounds, and were of such high calibre that they topped the market at \$10.25.

After calculating the main items of expense from certain Alberta points to Chicago, Mr. Lane figures that the freight cost about 80 cents per 100 pounds, commission and hay \$1.50 per steer, and duty 27½ per cent., the valuation on the four-year-olds being \$40, three-year-olds \$30, cows and heifers \$25. If a four-year-old steer weighing 1,450 pounds is taken as an example, he mentioned that the total cost of freight, duty, hay and commission, would be from \$1.00 to \$1.96 per 100 lbs.

He does not believe it would be profitable to ship all cattle to Chicago, and emphasized in no uncertain terms that only the very best animals, those fit for export, should be shipped to the Chicago market. With conditions other than those existing this year they would not pay.

To bring out the importance of this point it is necessary only to compare the prices obtained for the shipment on October 21 and the prices secured on the other three shipments. This one shipment of 199 head, Mr. Lane informed the Advocate representative, were light steers, averaging in weight only 1,177 pounds, whereas the steers in the other three shipments were the good quality, weighty ones, weighing about 1,400

pounds and better. This one shipment of light steers, it will be seen, were not profitably marketed in Chicago, whereas the three shipments of good ones netted a handsome margin to the owner.

Since the foregoing was written, we notice that Mr. Lane has marketed at least one more trainload of Alberta cattle in Chicago. They were sold on Nov. 20th, and though weighty, were not in as good condition as previous shipments. Still the top load, averaging 1,606 pounds, sold at \$9.75, the rest between that and \$8.75. One load of 1,363-pound heifers was cashed at \$8.00. The market reporter of the Breeders' Gazette describes these as "phenomenal prices for range stock," observing that they indicate "not only good cattle but the highest market on record."

### Open Sheds for Feeding Steers.

As a result of seven years' experimental work at the Pennsylvania Station, the conclusion has been reached that an open shed boarded up closely on three sides, and kept well bedded at all times, is more efficient for fattening steers than the basement of a barn.

During the winter of 1909-10 the cattle fed in an open shed, made more rapid gains, attained a higher finish, sold for fifteen cents per hundred more, and returned 11.6 cents more for each bushel of corn consumed than similar steers fed in the barn. They also required less labor in feeding, and more straw was used in bedding. Results of previous work show that cattle which are fed in groups of ten or twelve each with ample room at mangers and troughs, make more satisfactory gains than similar cattle tied in stanchions. This indicates that the methods which require the least amount of labor are the most satisfactory in the feed lots.

Drafts should not be permitted, so the roof and three sides of the shed should be tight.

## THE FARM

### Ontario Field Crops of 1912.

The following statements give the area and yields of the principal field crops of Ontario for 1912. The areas have been compiled from individual returns of farmers, and the yields by a special staff of official crop correspondents.

Fall Wheat—759,888 acres yielded 15,039,885 bush., or 19.8 per acre, as compared with 17,926,586 and 21.4 in 1911. The annual average per acre for 31 years was 21.0

Spring Wheat—123,080 acres yielded 2,301,339 bush., or 18.7 per acre, as compared with 2,295,534 and 17.2 in 1911. Annual average, 16.0.

Barley—647,382 acres yielded 19,232,275 bush., or 29.7 per acre, as compared with 16,248,129 and 26.3 in 1911. Annual average, 27.8.

Oats—2,601,735 acres yielded 98,444,807 bush., or 37.8 per acre, as compared with 84,829,232 and 31.4 in 1911. Annual average, 35.0.

Rye—105,949 acres yielded 1,839,675 bush., or 17.4 per acre, as compared with 1,562,971 and 15.8 in 1911. Annual average, 16.4.

Buckwheat—205,893 acres yielded 5,404,796 bush., or 26.3 per acre, as compared with 3,852,231 and 20.4 in 1911. Annual average, 20.7.

Peas—221,524 acres yielded 3,667,005 bush., or 16.6 per acre, as compared with 4,462,182 and 14.7 in 1911. Annual average, 19.2.

Beans—69,703 acres yielded 1,182,132 bush., or 17.0 per acre, as compared with 898,212 and 17.4 in 1911. Annual average, 17.2.

Mixed Grains—448,402 acres yielded 16,892,161 bush., or 36.6 per acre, as compared with 14,845,595 and 30.5 in 1911. Average, (6 years) 33.9.

Potatoes—158,883 acres yielded 21,340,394



Winter Wheat in Waterloo Co., Ont.

First-prize field in standing field-crops competition, 1912, on farm of Wm. Johnson.