Scotland and France. An occasional infusion of blood from the source of the breeds may always be advantageous, but it is about time we began paying more attention to the breeding of our own horse stock.

## LIVE STOCK

"Cost of a Six-months Calf."

Editor "The Farmer's Advocate":

Replying to your letter on the cost of raising cattle, I have thought to attempt some contribution to the evidence you are seeking, by outlining part of the detail of an experiment we are at present conducting at Macdonald College. Our primary object was to compare the value and cost of different rations in rearing calves. This will not be of particular interest to you in the matter of your query, but as an outgrowth of this work we are able to give the ration, together with its cost, which, in our judgment, proved most success-The one to be given was rated to some extent as a "check" ration, as against others where substitutes were used for milk, and is one which we feed quite regularly in the stable. We have not yet continued our work far enough to give definite figures, except for the first six months of a calf's life. But for this period, while the data is given for a single animal, it represents the average for a number of calves which have received like care and treatment in the same herd.

The herdsman was guided by the following directions in feeding the milk, together with its supplement of a porridge of scalded linseed meal:

1.—Birth until four days old—8 to 10 lbs. of whole milk, in three feeds per day

2.-Fifth until seventh day-10 lbs. whole milk, in 3 feeds per day

3.—Seventh to tenth day-12 lbs. whole milk, in 3 feeds a day.

4.—Tenth to fifteenth day—11 lbs. whole milk and 1 lb. skim milk, in two feeds a day; also 1 teaspoonful linseed porridge each feed.

5.—Fifteenth to twentieth day—9 lbs. whole milk and 3 lbs. skim milk, in 2 feeds per day; also 1 teaspoonful porridge each feed.

6.—Twentieth to twenty-fifth day—7 lbs. whole milk and 5 lbs. skim milk, in 2 feeds per day; also 2 teaspoonfuls porridge each feed. 7.—Twenty-fifth to thirtieth day—3 lbs. whole milk and 9 lbs. skim milk, in 2 feeds per day; al-

so 1 tablespoonful porridge each feed. 8.—Thirtieth day—12 lbs. skim milk, in 2 feeds per day; two tablespoonfuls of porridge at each feed.

9.—Gradually increase skim milk to 24 lbs. in two feeds per day, and linseed porridge to half pint as the calf develops. Arrange to wean calf at six months old.

The following table gives complete data of weight of calf, gains, food consumed, cost of feed and cost per pound gain. Whole milk is valued at \$1.00 per cwt., skim milk at 15 cents per cwt., linseed meal at 3 cents per pound, meal mixture (bran and oats) at \$24.00 per ton, silage and

roots at \$2.00 per ton, and hay at \$8.00 per ton Cost of Cost of Feed consumed. feed. lb. gain. Weight. At birth, 85 lbs. End 1st month-120 lbs. 228 lbs. whole milk

136 lbs. skim milk

2 lbs. linseed meal \$2.54 74 cts. End 2nd month-148 lbs.

360 lbs. skim milk 9 lbs. linseed meal

11 lbs. oats & bran 85 3 04 "

(equal parts)

End 3rd month-

434 lbs. skim milk 192 lbs. 14% lbs. linseed meal

lbs. oats and bran

124 lbs. ensilage & roots

1.46 3.3 " 31 lbs. hay

End 4th month-469 lbs. skim milk

134 lbs. linseed meai

113 lbs. oats & bran 1.39 3.25 30 lbs. hav

End 5th month-600 lbs. skim milk 300 lbs.

20 lbs bran & oats 2.08 3.2 " 62 lbs. hav

End 6th month-

700 lbs. skim milk 372 lbs.

48 lbs. bran & oats 24 lbs linseed meal

65 lbs. hay 80 lbs. ensilage

was 287 lbs., and average gain for the six months, The average cost per pound gain 13 lbs. per day. was three and four-fifths cents. With a herd of forty calves in the stable, I have estimated that a single calf during the period of six months will cost \$2.60 for labor. Between feeding, grooming and keeping the boxes clean, practically half a

\$2.60 for the period. Against this we may note a credit of fully half the amount for the manure. Something over 21 tons accumulated throughout the interval. The manure was removed weekly, but we were able to take account fairly accurately of the weight. Manure is easily worth fifty cents a ton, and the amount to the credit of the calf

when born. In our neighborhood a drover has a contract to take all the calves from a big dairy herd at birth for \$2.00 each. Perhaps this is a lower value than farmers would care to dispose of their calves for even at that age. To be fair, we may estimate the value to be,, say, \$3.00. I am inclined to think that the dam should be required to take care of any further expense which might be charged against the calf at the commencement

The total amount of feed consumed may easily be computed from the above. The total cost of feed for the period was \$10.92. The total gain man's time is occupied with his charges. Allowing the man a wage of \$35.00 per month, the labor for a single calf amounts practically to becomes \$1.30, leaving a balance still to be charged against him of \$1.30. His total cost

of its life. A cow, unless it be a highly-fed dairy

for the period, therefore, becomes \$12.22. We have still to estimate the value of the calf decided increase

Proportion (imp.) [583]

Shire stallion. Foaled 1907. Winner of second prize in class, Canadian National Exhibition, Toronto, 1909. Owned and exhibited by Porter Bros., Appleby, Ont. Sire Nailstone Ragged Jacket. Dam Tuttlebrook Fuchsia (imp.), winner of grand-championship gold medal, Canadian National Exhibition, Teronto, 1908.

animal, will usually cost on an average of about \$40.00, or a little more, for feed and labor during the year. With milk at \$1.00 a cwt., she should yield, therefore, between 4,000 and 4,500 lbs. of milk to clear herself, particularly if we include risk, depreciation in value, etc. I take it that a cow isn't doing the square thing for her calf unless she makes good all such charges and give her offspring at least as good a start in the world as I have suggested. This three dollars will cover service fee of the bull, and partially the cost of nourishment before birth. Adding this \$3.00 to \$12.22, we have the calf costing at six months of age \$15.22, or if he weighs 372 lbs. he has cost \$4.09 cents per pound, live weight.

By way of remark, I would add that the calf in question is a grade Shorthorn, and its dam gave during the six months' period 4,955 lbs. milk, or the equivalent of 208 lbs. butter. She is still milking at the rate of about 24 lbs. a day. The cali has been a thrifty one from the start; he has not been forced, but we have tried to give him the same treatment he might receive under ordinary comfortable conditions on the farm. I will attempt to draw no deductions from the experiment, but allow the reader, as his own best judge to figure these out for himself.

Macdonald College, Que. H. S. ARKELL Professor of Animal Husbandry Our English Correspondence.

EMBARGO TO STAND.

The embargo on Canadian cattle is to stand. In spite of representations by farmers and others interested, Mr. Asquith, on the ground of public health, has declined to remove restrictions. Nor will he institute any inquiry, as no new facts to the public advantage would be gained.

While quite prepared to admit that one might go through Canada and find no trace of foot-and mouth disease, it could not be disputed that disease had from time to time made its appearance in the United States, and one could not put the United States and Canada into two water - tight compartments. The long boundary was not an adequate security. He said this with regret, because as a very strong free trader he was averse to any form of restriction of importation.

HORSE SHOW AT DUBLIN.

The Dublin Horse Show, the 42nd of the series, was favored with fine, though dull weather, and a capital attendance. Entries do not vary much from year to year, and they totalled 1,245 at this show. Harness horses showed a decided increase, and young horses suitable for hunters an equally

In the Thoroughbred classes an English stallion, Curis, a fine brown, owned by Stephen Mumford, of Warwick, took the honors in the agedstallion class, and also the Croker challenge cup. A County Down horse, Captivation, shown by Thos. Lindsay, was first amongst the younger

The yearling colts were only an average lot; the fillies were better. best colt was a nice bay, owned by Mrs. Delaney, County Dublin. Amongst fillies, first place to Forest went Belle, shown by Hogan, of Loughrea.

The Coote challenge cup, for the best hunter brood mare, owned in Ireland, was won by Patrick Clarke's Partridge, and she also took the breed gold medal. The hunters made a grand display in the ring, but were of widely varying quality. A fine bay gelding, John Read's The Baron, was first amongst the heavier weight carrying class, and a handsome chestnut, Red Rover, owned by John Draye, was best in the mediumweight class.

The judging of the double - harness classes was keenly followed. In the first class, in close competition, Kerr, of Rickmansworth, took first place with his wellknown winners, Loudwater Rob Roy and Loudwater Friar

Tuck, beating Miss Ella Ross' pair. This was the not under 15.3 hands class. Miss Ross got first place in the 15 to 15.3 hands class, with her fine blacks, Grand Vulcan and Grand Volcans. The Milward Jones challenge cup, and the society's silver medal for best pair of carriage horses driven in double barness, again went to John Kerr, the holder for Rob Roy and Friar Tuck.

SHEEP FAIR A SUCCESS

The Britford Sheep Fair is one of the most important in the country, and in this year, in tine weather, about 29,000 sheep were penned -2,000 more than last year. The demand was not good, and prices fell below expectations, except for lambs, which were fairly well called for. The sale and letting of lambs was attended by a large crowd around the sale rings, and some fine Hampshire Down lambs were offered from well-known flocks. Top price was 72 gs. for two lambs, let by J. Flower, Chilmont, to Capt. Morrison and H. Lambert. Store sheep on offer numbered 15, 000, and demand was fairly brisk.

SALE OF SOUTHDOWNS

Another widely-known animal event is the sale of Southdowns at Chichester. The demand for ewes was much better than expected, and practically every lot was disposed of. The rams sold rather unevenly, though demand was excellent for