stock-yards, and on July 23rd, 1910, four of them were injected with blood from hogs sick of hog cholera. These inoculated pigs were placed in a pen by themselves, and within five days they had become sick, at which time eighteen of the remaining pigs were each given one dose of the serum, while the other eight pigs were not treated in any way. The eighteen serum-treated pigs and the eight untreated pigs were then placed in the same pen with the four pigs which had been made sick by inoculation.

The four pigs which were first given hog cholera all died, and the eight untreated pigs all contracted the disease from them. The eighteen pigs which were given serum, and which were confined in the same pen with the four original sick pigs, and with the sick untreated pigs, remained perfectly well, and were finally turned over to the officials of the Stock-yards Company upon the completion of the experiment, September 17th, 1910. The Government authorities consider that this new serum treatment, if properly applied, will result in the saving of millions of dollars.

What Will the Average Hog Consume Per Day?

Editor "The Farmer's Advocate":

I have been making a careful comparison of the figures given as to cost of feeding hogs, recorded in your issue of Sept. 1st and Sept. 8th. There is little wonder that the farmer from Perth County is disgusted with hog-raising. If he had kept and fed these hogs much longer, he would have been totally bankrupt.

Laying aside for some future date his bold statement, that "not one farm product has yet reached the cost of production," I will take up the figures on the hog-feeding question, and examine them. Forty acres mixed grain, producing 30 bushels per acre, yields 1,200 bushels grain; 1,200 bushels, at 42 pounds per bushel, gives 50,400 pounds grain. Now, taking the time of seven months during which the hogs were fed, as commencing on August 1st, we find that we have 212 days during which the hogs were fed; 50,400 pounds grain consumed by 40 hogs in 212 days, shows that there was consumed 5.94 pounds of grain per hog per day.

Even with this feeding, as shown by these figures, the hogs only averaged 200 pounds at the end of seven months, or 212 days, an average gain per day of less than one pound. There is something very far wrong in this feeding proposition. To one who has experience in hog-feeding, many reasons for this condition of affairs suggest themselves, but, unless we know the conditions, how can we say where the leakage is?

It is interesting to compare these figures with those in the issue of Sept. 1st. Here, 17 hogs were fed 8,316 pounds of meal and other feeds for an average of 178 days. The other foodstuffs, milk, etc., should be equal in both cases; therefore, we only compare the grain ration: 8,316 pounds eaten by 17 pigs in 178 days, means 2.7 pounds meal fed per hog per day, which appeals more to one's sense of reason than 5.9 pounds per day, as in the other case. The prices obtained are almost identical—about $18 per hog—but the one feeder has produced a gain per hog of about 9 pounds per day, while the other produced a gain of a little over 1 pound per day, during the feeding period.

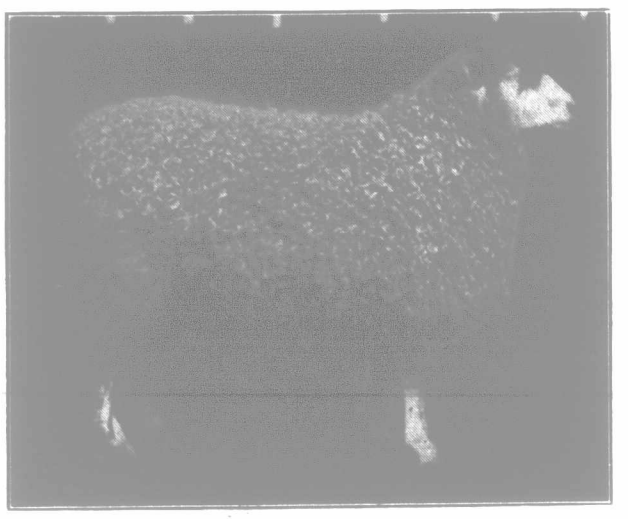
The actions of producer and packer to-day present an interesting study. A few years ago the market was glutted with hogs, and prices dropped to a very low mark. The farmer who had overstocked previous to this drop was hard hit, and was ready to give his hogs away. So hardly was he hit that he has not yet recovered his good nature, and the cries and moanings of the Perth County farmer tell their own story.

Just so soon as the market is glutted, prices drop, and the ever-watchful farmer at once concludes that the packers have conspired to fleece him. The real truth is that we have the workings of the simple law of supply and demand. Following this glut, there is a very noticeable falling off in the number of hogs produced. Soon the demand increases, and prices slowly begin to rise again. The farmer tries again, and, encouraged by the high prices, again produces to excess, and again there is a drop in prices. Thus we have a continual rise and fall, influenced by the rate of production.

For the everyday farmer, the safest and most profitable course is one which will lead to the happy medium. He should not rush into hog-production with his eyes shut, just so soon as prices soar. Yet, on the other hand, he will gain nothing by sulking and going out of the business entirely. By producing just the number of hogs which his farm can carry profitably, and feeding these intelligently with the cheap dairy by-products, accompanied by a light grain ration, it has been proved again and again that there is profit in the business of hog-raising. CECIL.

The Dairy Situation.

There is, without doubt, much dissatisfaction among the dairymen who are supplying the milk for cheesemaking. Although prices for cheese have not been as low as six or eight years ago, still, dairymen do not look at that, but consider that, as the price of all other produce has risen considerably, they should be getting more for their milk. Especially are the patrons dissatisfied where they are near those supplying milk to condensors or for town and city trade. With the condensors paying for winter milk an average of $1.50 per cwt., 80 to 85 cents per 100 pounds milk, which is about the price the cheese factory can pay, seems small. One reason why the milk for cheese does not bring more is on account of so much poor milk being delivered; that is, in regards to its sweetness and condition. It is now taking about one pound of milk more per pound of cheese than it did a few years ago. Whilst we hear a lot of the benefit the cheese business is deriving from Government effort, it is not evident in the results. In fact, the inspection does not begin at the right end. If more attention was paid to inspection of milk and dairies, instead of doctoring up overripe milk, there would be vastly better results. If, in fact, the milk supplied the cheese factories was as well taken care of as the milk supplied the condensors, there would be at least 5 cents per 100 pounds more for the milk, on account of taking less milk to make a pound of cheese, and very soon 5 cents more per cwt., on account of the increased price for the better cheese. The condensors are able to pay a good price because they get good milk, and have no losses to make up from poor milk. That they get good milk is due to their rigid inspection of the patrons' premises, as well as inspection at the factory.



Cotswold Shearling Ram.

First prize and champion, and winner of silver and bronze medals, at Toronto and London, 1910, and head of the flock that won at the Michigan State Fair, Detroit, 1910. Owned by T. Hardy Shore & Son, Glanworth, Ont.

"Wooler" (Imported).

First in class two shears and over, and champion Leicester ram, Canadian National Exhibition, Toronto, and Western Fair, London, 1910. Property of A. W. Smith, Maple Lodge, Ont.

One great complaint the cheese-factory patron has is that the price of the milk is so low, compared with the greatly-increased price of dairy cows, especially in certain dairy districts. It would seem, then, to be sound sense, if the price of cows were high, compared with the price of their milk, it would be the better business to produce the cows, instead of depending upon milk for all the revenue.

Cows are high because they are scarce, and because the milk, for certain purposes, at least, commands a good price, and this is likely to continue. Those that are near enough to the condensors or towns and cities, and supply milk to that trade, have no by-products to raise young stock upon, and to raise a calf on milk worth $1.50 per cwt. costs money. Those who are supplying milk to creameries can raise stock much more cheaply, and should make the raising of stock the big end of their business, while, by doing so, they can secure better milk cows. For instance, we have the results obtained in a pure-bred dairy herd. Although there is a good deal made from the returns from the milk, still the young stock has the first consideration. A good sire is used, and the calves are well looked after. A breeder of pure-breds who essayed to make milk production his first consideration, and neglected to raise his stock well, would not have much success. Much revenue is derived from milk products, still it is always considered as second in importance. With the price of grade dairy cows at from $50 to $100, and those ordinary cows with a probable capacity of 5,000 to 6,000 pounds of milk yearly; and $100 to $150 would quickly be paid for grade cows in this district, if they could be secured, with a capacity of from 8,000 to 12,000 pounds of milk yearly. There should be more money for all dairymen who cannot realize $1.00 per cwt. for their milk in making the raising of stock and producing good cows the big end of their business. Such cows can easily be produced, and such prices easily secured, if the same attention is paid to their care as breeders of pure-breds must pay if they are to have any large measure of success. Prices of good grade dairy cows are now as high as breeders of pure-breds received for cows of like capacity, say, five or six years ago. The price of grades is so high that many begin to think they might as well breed pure-breds. But, on looking around, they find they have about doubled in price, and are, in fact, hard to get at any price. There are not enough pure-breds to go round. There is, in fact, a great shortage of dairy stock; too many calves are made into "Deacons," "Canned Chicken" and veal. Whilst the grade males should go, the females, especially from pure-bred dairy sires and fair to good cows, should be raised. If the patrons of cheese factories would raise more heifers, and raise them properly, they would greatly increase their receipts. Whilst a calf should have good care and feed for the first six or eight months, after that they cost very little, especially where ensilage is available, until they come into production.

If patrons would raise more calves, and feed more milk in the early part of the season, they would get more for their cheese, and also have a good revenue from the young stock raised.

GEORGE RICE.

Breed-study Contest.

Out of the answers received for our latest picture in the Breed-study Contest, one correct answer was received, and perhaps it is not much to be wondered at that so few knew the breed of swine represented in the picture, since it is at least rare in Canada. The pig belonged to the Lincolnshire Curly-coated breed. This breed has a coat of rather long curly white hair; its ears are rather long and heavy, coming down over the eyes and cheeks. Pigs of this breed should be wide, long and deep-bodied, and, while having quite a fat-hog form, yet supply excellent bacon.

The winner of this number of the contest is S. H. Hopkins, of Guelph, Ont., part of whose reply here is given:

The picture of the pig in your issue of September 29th is that of a Lincolnshire Curly-coated pig. The photo exhibits a thick coat of curly hair. The ears have a characteristic droop, not unlike the Chester White, but totally different from the ears of all the other white breeds. However, this pig cannot be a Chester White, because that breed possesses a much shorter coat of hair, and is not so deep as is the Lincolnshire Curly-coated. Not that the Lincolnshire pig is not a bacon hog, because, although it is able to carry a huge amount of flesh, as the picture shows, having a wide and exceptionally deep carcass, with strong legs to support it, and although they may seem to be of the "chunky" sort, the official tests at the Smithfield Show, London, Eng., show that this breed makes the highest average daily gain of any breed, and yet kills out with a higher percentage of lean meat than even the Yorkshires.

Cottonseed meal is a rich nitrogenous feed, valuable to use with silage, timothy hay, straw, roots and such feeds. Its composition, as sold, is not always uniform, however, and, prior to the passage of the Feeding Stuffs Act, inferior brands were often sold, more especially in the Maritime Provinces. Since then, purchasers have a means of judging by the guaranteed analysis. When inspection of the article itself must be depended upon, it is well to know that the genuine meals are a bright-yellow color, while inferior grades are much darker, and usually show, on close inspection, fragments of hulls intermixed with the finer meal.