

Marketing the Wool Crop.

The question of a wool tariff is being well threshed out by the sheep and wool-growers these last few weeks. It is, perhaps, the easier of the sheep problems to settle, and so has been attacked first. When it is wiped off the slate, we trust that the problem of constructing an extensive, profitable, permanent sheep industry will be as effectively undertaken by the rank and file of producers.

J. P. Murray, Toronto, makes a number of valuable suggestions to aid in the encouragement of this business of wool production, which we submit for the thoughtful consideration of our readers here:

1. Decide what parts of Canada are most suitable for some breed of sheep. First, by Province, and again by section of a Province, for class.
 2. In sections of Province, let there be delivery sheds, to which a grower may bring his clip and pelts, where an expert will decide on proportion of dirt, and issue a non-negotiable receipt for wool and pelts.
 3. The wool and pelts will be cleaned, then sent to a provincial center, which will be a mart for all the wools of the Province.
 4. On receipt of wools at the Provincial assembling-shed, certificates will be issued to the growers for quantity and class delivered at the section shed, less dirt, burrs, etc. This certificate will be negotiable.
 5. A general Canadian wool mart should be established in the most adapted center, to which daily returns of wools on hand in each Provincial assembling-shed will be made.
 6. All wools should be standardized for (a) length and strength of fibre, and count; (b) average for waste and dirt, and loss in scouring.
 7. All wools imported should be classed and defined for manufacture, each wool to be valued in relation to any Canadian wool which may or could be used in its place.
 8. All imported fabrics should be dissected, and the class of wool defined and quantity approximated, such wools to be valued in relation to Canadian wool which may or could be used in its place.
 9. The quotations of the world's markets should be daily known at the Provincial assembling-sheds; also, available supply, freight and insurance from market to leading manufacturing points, and to any point in Canada. Also, freight rates from and to internal Canadian points.
 10. Each Provincial assembling-shed should have proper packing facilities, and establish a uniform standard weight for Canadian bales.
 11. Destructive dogs may be killed, without responsibility.
 12. Government contracts to call for Canadian wool (when possible) and Canadian labor.
 13. Official statistics be prepared to show kinds of sheep, number of returns for wool, mutton, tallow and hides, by Province and class.
 14. The cost must be borne by the products.
- Many of the above are excellent suggestions, and are along good lines. The desired improvements cannot be effected at once, and can only result from an educative campaign, the real interest of the public, and the co-operation of the manufacturers and farmers.

Crippled Pigs.

Speaking of the breaking down of the hind quarters in sows and young pigs, Doctor McIntosh, of the Illinois Agricultural College, writes:

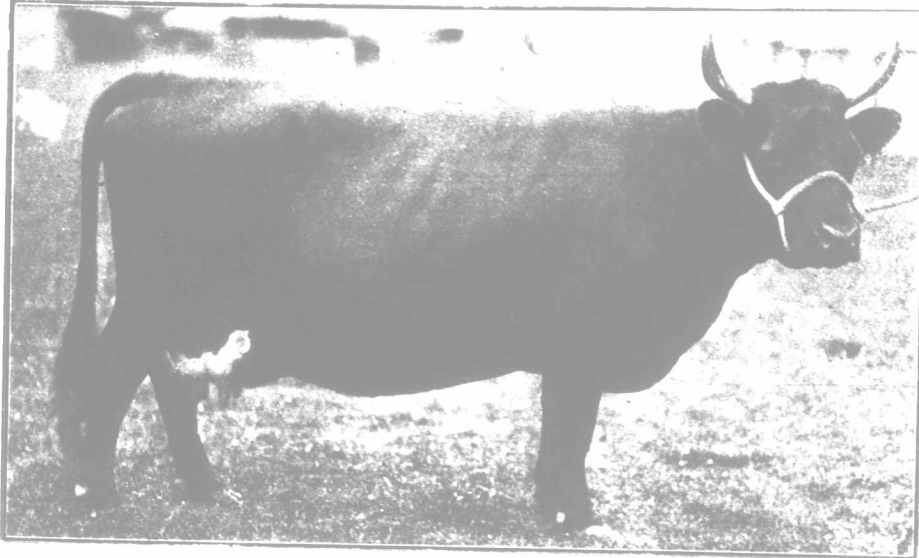
"This is a very common disease in sows and young, growing pigs, especially in fine-bred pigs. I have investigated this derangement, and find that it is caused by a want of sufficient phosphate of lime in the nerve system, especially the nerves supplying the hind legs. It is a known fact that the bones and nerves of pregnant animals are deficient in phosphate of lime, on account of the drain on the system for phosphate to build up the fetus, and also to nourish the young after they are born. There seems to be more of a drain for phosphate on the system of the sow than any other female animal. The sow is more frequently affected with partial paralysis a few weeks after farrowing, although the derangement may occur before farrowing.

"To prevent this trouble, the sow should be fed on ground oats, bran and oil meal, and as much milk as possible, during pregnancy, and while suckling the young pigs. Should the trouble occur at either of the above-mentioned periods, the following treatment should be begun as soon as the animal shows the first symptoms of weakness in the hind legs, or knuckling over at the fetlock joints; of course, cases can be cured even after the animal is down and cannot get up. Give one tablespoonful of cod-liver oil, fifteen grains of phosphate of lime, and three drops of the fluid extract of nuxvomica at a dose, twice a day, in a little food. In the young growing animals there is a great demand for phosphate of lime to build up all the tissues of the body, especially bone and nerve, so the young shoats should be fed on ground oats, bran or middlings, and about two tablespoonfuls of oil meal at a feed, or a dessertspoonful of bone meal at a time

mixed in the food. Shoats above three or four months old should be given half the above-mentioned quantity of medicine. This treatment should be continued several weeks if needed."

The Summer Silo.

Corn-belt farmers are having preached to them a lesson which they should learn this summer, viz., to prepare for summer feeding by the filling of a smaller silo for summer use. This is a dry year in a great deal of the West and Middle West. As a consequence, grass is short and dry; milk cattle and beef cattle are in need. Too many of us are like the man who, on being remonstrated with for not patching his leaky roof, replied that in wet weather he could not, and in dry weather he did not need to. Such seasons as the West is now having are not unknown in most parts of Canada; more than once have two or three such seasons succeeded each other; in truth, there is



What Breed is This Cow, and Why?

(See breed-study contest.)

scarcely a summer which does not have a considerable period of hot, dry weather, when grazing is too short to be economical. For that season of the year every dairyman should make provision for his cows. The summer silo has demonstrated its utility for that service. And even when grazing is good, judicious feeding will be more than paid for in the milk returns. When putting up a silo, do not overlook or forget to consider the use of silage in summer, and the storage of it.

Iowa Cattle Experiment.

Recently the Iowa Experiment Station marketed forty head of yearling steers which had been carried experimentally. The objects of the experiment were: First, to compare calves with older animals in economy of gain; second, to compare silage vs. dry feed; third, to compare cottonseed meal and oil meal as supplements to corn and cob meal in fattening young animals. The experiment began November 19, 1909, and ended about June 15, 1910. The calves were divided into three lots of equal size, type and quality. One lot was fed corn and cob meal, silage clover hay and cottonseed meal; a second lot was fed of the same feeds, omitting the silage; while the



A Prince Edward Island Flock of Leicesters.

third lot was fed similarly to the second, save that oil meal replaced the cottonseed meal. A conspicuous fact noticed in the result was the economy of gains on all lots. The first lot made gains at a cost of \$6.29 a cwt.; the second lot at a cost of \$5.67 a cwt., and lot three at a cost of \$6.39 a cwt. These prices are about 55 per cent. of what the gains on two-year-old steers cost in Iowa. The lot which received corn and cob meal, clover hay and oil meal made the most rapid gains, had a higher finish and sold for most; the lot receiving silage stood second in rate of gain, first in economy of gain, and sold second highest. The most important fact brought out by the experiment is the advantage arising from early finishing of beef cattle for market.

Costs of Beef-making in Colorado.

An interesting experiment in beef production has recently been completed in Colorado. Colorado is a hay, oats, barley, wheat and root-growing State, and consequently their methods and results are interesting to Canadians. There were thirty steers, divided into three groups. The corn-fed lot sold at \$7.85 per cwt., the barley-fed lot at \$7.60 per cwt., and the combination lot at \$8.00 per cwt.

The cattle were put in the lots on December 1st. The thirty head were fed together on alfalfa hay until December 11th, when they were divided, reweighed, and the experiment really begun. Ten head were put on a ration of alfalfa hay and ground California feed barley, ten head on alfalfa hay and corn chop, and ten head were started on alfalfa hay, sugar beets and cotton cake. This third lot was fed on this ration until about the middle of March, when corn chop and molasses were added, replacing the sugar beets, this change

in feed on this third lot being made at this particular time for the reason that, as a rule, the pulp at the sugar factories is usually exhausted about that date. When the steers were reweighed, on December 11th, the barley lot averaged 663, the corn lot 668, and the combination lot 673 pounds, and they gained right along in the same relation up until about April 1st, when the barley cattle began to fall behind. The combination lot continued the heaviest until within two weeks of the finish, when the corn lot made their heaviest gain, nearly 4 lbs. per day, while the combination cattle gained a

little less than 3 lbs., and the barley cattle only about 1 lb., during the last two weeks of the experiment. This was probably due to the hot weather, and, the syrup being very heating, the cattle ate less of it. In feeding the two bunches on barley and corn, they were given the same number of pounds of each ration per day, and all three lots consumed practically the same amount of hay per day. The difference in the cost of the feed makes the combination cattle the most profitable from the feeder's standpoint, and they also showed the most finish, not only as live steers, but also in the beef, although, as a lot, the chucks on the corn steers were a little better covered than on either of the other two bunches. The average net profit on the three bunches of cattle is \$1.00 per head on the barley cattle, \$7.50 per head on the corn cattle, and \$10 per head on the combination cattle. In this experiment, alfalfa hay was figured at \$8 per ton, corn chop at \$1.20 per cwt., barley at \$1.20 per cwt., cotton cake at \$32 per ton, and syrup at \$9 per ton.

Honor Roll of Shorthorns.—VIII.

By J. C. Snell.

While the exhibit of Shorthorns at Toronto in 1893 was not so strong numerically as usual, owing to several herds being at the Columbian Exhibition at Chicago, and not having returned in time for the home show, the best of those brought out were up to a good standard. The winner in the aged-bull class of eight entire males was War Eagle, a very smooth and symmetrical red four-year-old son of Imp. Warriar, bred by Arthur Johnston, and shown by John Currie, of Everton. He was the champion Shorthorn bull of the show. J. & W. Watt's Clan Stewart, by Barmpton Hero, was first in the three-year-old section. John Miller & Sons' Duthie-bred red-and-white Sittytton Stamp was the first prize two-year-old, and Thos. Russell, of Exeter, had the first prize yearling in the stylish roan. Riverside Hero 2nd. Strathallan of Kent, by Sir Christopher, a remarkably level roan two-year-old heifer, shown by Simmons & Quirie, was first in her class and champion female.

At the Toronto Exhibition, in 1894, the winning aged bull was C. M. Simmons' massive six-year-old roan Royal Saxon =10537=, bred by W. J. Biggins, Clinton, and sired by Excelsior, a bull of Booth extraction, bred by Edward Cruickshank, and imported in 1884 by John Dryden. A prominent figure was the red Duthie-bred bull, Prime Minister 15280, first in the three-year-old class, imported by D. D. Wilson, of Seaford, a brother-in-law of Mr. Duthie, and shown by John & Wm. B. Watt, of Salem, a massive bull, of good quality, a grandson of the famous Field Marshal. The champion of the year was found in the two-year-old class, in the Bow Park-bred bull, Lord Outwaite, a strong roan son of the great show cow, Lady Isabel (imp.). Second to him in his class was the wealthy fleshed Royal Member, bred