



Linksfield Champion (86401).

Shorthorn bull; calved May, 1903. Winner of first prize and male championship, Royal and Highland Shows, 1907.

a medal, it follows that sound parents have to be used to obtain the desired results.

Although twenty years of improvement may be claimed by all the leading British breeds of horses, none can equal the heaviest draft horse for making headway and finding supporters.

LIVE STOCK.

COMMENCING TO KEEP SHEEP.

Would you kindly give me what information you can regarding the raising of sheep. The writer has a hill farm property admirably situated for this purpose and contemplates purchasing a few hundred sheep, but has no knowledge whatever of the raising of these animals, and would like to hear from you with all information possible.

J. H. H.

In reply we would say first of all that in our opinion it would be unwise for one having no experience with sheep to buy the number mentioned until he had a year or two's experience in handling them. We would rather advise starting with 25 to 50 ewes and one or two rams, making the purchases in October and mating them in November, so that the ewes would produce lambs in April and May, five months being the period of gestation in the case of the ewe. If you have clover hay in stock the ewes would winter fairly well on that alone, providing they had free access to salt and to water, or even to snow, and were fed a quart of oats per day when within a couple of weeks of being due to have their lambs. If you have not clover hay or roots provided it would be almost necessary to feed them a little grain all winter to keep them in thriving condition and prepared to secrete milk sufficient to sustain their lambs. We would not advise buying pure-bred ewes to start with, as such probably could not be bought for less than \$15 to \$20 each, while fairly good grade ewes could perhaps be secured for one-third these prices. The ewes purchased should be from one to three years old, as ewes are seldom profitable to keep when over five years old, though some favorite breeding ewes have bred regularly up to ten or twelve years, or more. The age of a sheep is indicated by its teeth. At one year old the middle pair of front teeth are replaced by longer and broader ones, at two years old the four central teeth are broader and longer than the others, at three years there are six of those broad teeth up, and at four years eight, the full number of front or cutting teeth. After the fifth year the age of a sheep is known by the wearing of its teeth, though this is not altogether a sure guide, as a flock living on a poor pasture or on sandy soil will more quickly wear down its teeth so as to indicate a greater age than is real. The rams selected should be pure-bred, of the breed of your choice. A good strong ram lamb eight or nine months old would attend to 25 ewes, and for fifty ewes two ram lambs or one yearling or two-year ram should be obtained. If mutton be the principal product in view, or mutton and medium fine wool, rams of one of the Down breeds, Shropshire, Southdown, or Hampshire, would probably be most suitable, while if greater size and weight of flesh and wool be the object, then the Lincoln, Cotswold, Oxford or Leicester might more profitably fill the bill. It is wise to continue from year to year using rams of the same breed as you start with, as by this course the best of the ewe lambs being retained, for the purpose of increasing and renewing the stock, the flock will with each generation become moulded more and more into the character and appearance of the breed to which the sires be-

long, and will breed more true to type until the flock will, uniformly, have the appearance of being pure-bred. If, after a few years' experience in grading up a flock your success has proved satisfactory, and you are ambitious to establish a pure-bred flock, a few pure-bred ewes may be purchased, and a record of their produce be kept by means of numbered ear labels. It is wise, even with a flock of common or grade sheep, to have them marked uniformly, either by notches in the ear or by the use of metal ear labels, with the name or initials of the owner stamped upon them.

The lambs' tails should be all docked, and the ram lambs castrated at the age of two or three weeks. This is necessary to the cleanliness and comfort of the sheep, and the male lambs will fatten faster and give much less trouble if so treated at the early age mentioned. About the only other special care needed by the flock is dipping the lambs in a solution of one of the proprietary dips in spring, a few days after shearing the older sheep, to destroy ticks or lice, and either dipping in or pouring on the same solution in the late fall or early winter to ensure against the flock being troubled with the same vermin during the winter. It is a wise provision to have a small cow-bell or two in each flock or division of the flock, as a protection against roving dogs, as it is believed to have the effect generally of frightening the intruders, and, failing in this, might, by sounding an alarm, bring the owner or caretaker to the rescue.

MORE ABOUT MUSLIN-CURTAIN VENTILATION.

Believing, as we do, in the presentation of all sides of every question discussed through our columns, we quoted, on page 1327 of our issue, August 22nd, a condensed extract from an article contributed to Hoard's Dairyman, by Prof. F. H. King, of Wisconsin, who had been investigating the muslin-curtain system of ventilation in the stable of F. B. Lord, Cedarhurst, N.Y. Prof. King being the father of what is known as the King system of ventilation, which is probably the best and most scientific of any heretofore in use, it is not surprising that he should be a trifle prejudiced in his conclusions regarding the simple muslin-curtain system, and we fear that such is the case, for some of the arguments advanced by him against the curtain plan appear to be characterized by an obtuseness altogether surprising. However, it is not for us to undertake at this stage to champion the muslin-curtain system. It is fitting that the criticisms should be met by those who are in a position to answer them from experience and first-hand observation. Meantime we continue to attach a good deal of weight to the testimony of poultrymen and stockmen who have had experience. The fact stands out that in poultry-houses muslin-curtain ventilation has proven such a practical success that, as Prof. Jas. Rice, of Cornell University, said to us recently in an interview, authorities have come to regard it as an established feature of poultry-house construction. If practicable for poultry-houses, why not for other stables? We have already published a number of contributions of experience from dairymen and stockmen, but more are in order, and we give one below. In a paper prepared by the noted poultry writer, A. F. Hun-

ter, of Massachusetts, the following letter is quoted. It was sent to Dr. Santee, U. S. Department of Agriculture, Washington, D. C., by a stockman who had tried the new system at Dr. Santee's suggestion:

"The condition of my stock, plant and equipments was such as to merit good report, score ninety, when you first visited me on December 22, 1906, and the suggestions which you then and since have so willingly given me were taken advantage of to the end that when you again inspected my establishment here on February 9, 1907, you felt that conditions were so much improved as to merit excellent report as to general sanitary conditions, the score being ninety-five. This betterment was chiefly brought about by increasing the light and ventilation in the barn, by putting 90 square ft. of muslin curtain, such as you suggested, which has been somewhat in the nature of a revelation here, and my experience is below given for your particular information, and through you for the benefit of all who may yet be in doubt. After satisfying myself from your statement of experience that the curtain was all right, I desired to try it, and taking my manager, Colonel A. B. Marshall, a practical and experienced architect and builder, along, I indicated to him where I wanted the side walls cut, and frames, with muslin only on, put in. Well, he looked at me, and after assuring himself that I really meant it, sat down to advise against such a really inhuman course, explaining his belief that it meant subjecting the cattle to unnecessary exposure to the cold winds, which must blow through the mesh of the muslin during the winter, and indeed freeze them. However, I persisted that they must be tried, and they were finally put in.

"The first two or three nights thereafter, being mild weather, caused no alarm for condition of cattle, but the morning of the fourth day saw the thermometer down to 7° F., and the wind blowing a gale, when, at 5 a.m., Colonel Marshall, with his corps of men, approached the barn with feelings akin to fear and trembling, but on entering he was agreeably surprised to find the conditions much more ideal than ever before; the cattle comfortable in a suitable temperature of dry, healthy atmosphere, free from drafts and dampness. The manager, still doubtful, approached the most exposed curtain, that facing the north-north-west wind, which was forcing it inward by a strong outward attack, but he could hardly perceive the cold, and had to resort to a method he learned on the plains, of wetting the finger and holding it up to detect the direction of the wind, when at two inches from the curtain he thus discovered the admission of air; but that being there assimilated at once with the temperature of that within, was constantly driving out the dampness and foul air, and furnishing the barn with pure atmosphere without noticeable cold, and in the most admirable and economical manner. That morning when the Colonel met me he was, and is, an ardent advocate of the muslin curtain, and will say so to anyone, for both barn or chicken-houses, but his conviction is not without chagrin, that he, a practical builder of wide experience in the use of muslin windows in new buildings in extracting dampness, so that mechanics may continue their work on the inside in the most approved manner, should have been unwilling to admit its utility on the farm until after a practical demonstration."

Every farmer in Canada needs "The Farmer's Advocate."



Sweetheart.

Shorthorn cow, first and champion, Royal Show, 1907. Exhibited by Lord Calthorpe.