

registered sires. Nearly all the stocks were local, often named after their county. The females were not sold off and replaced by other sorts, but by use of superior pedigree sires the flocks and herds were gradually improved. We now find grain-growing unprofitable, just as they did in Britain; then let us follow their example and devote more attention to improving our stock. We have the material at hand. We have the results of the skill and patient labor of that army of notable breeders whose names have been recorded above.

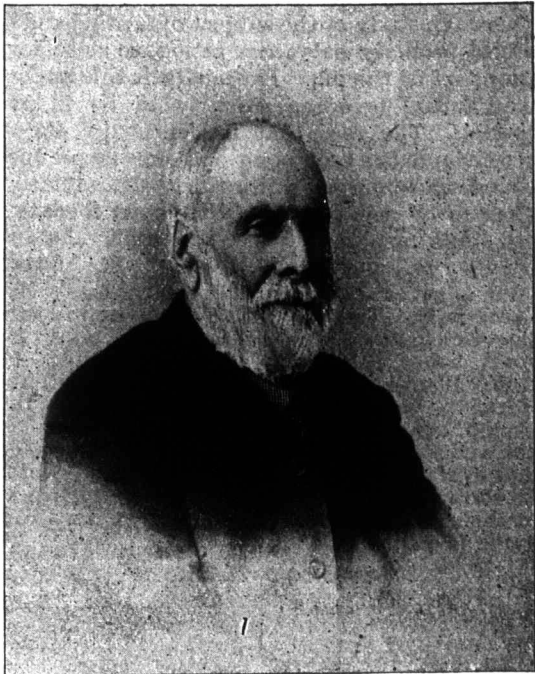
Another lesson: the improvements have been along the line of early maturity. The five-year-old ox weighing at maturity 1,700 to 2,000 lbs. is a back number, the profitable steer of the day is marketed ripe at 24 to 30 months. Size has also been much reduced. The five-year-old Lincoln sometimes dressing from 60 to 80 lbs. a quarter would not only be unprofitable to grow but be absolutely unsalable; this lesson must be more thoroughly learned by our breeders, and the only way to obtain satisfactory and paying results is to feed from start to finish. The first question asked in the showyard, as well as by letter, "How much does he weigh?" should be obsolete. The breeder aiming for size alone is making a great mistake.

But the greatest lesson that may be of value to us in Canada, and one which should be presented to our wealthy men, is the example of our Queen, the nobility and influential men in the interest taken by them in the improvement of our stock. Is it a disgrace to Her Majesty to be found in the competition with John Smith for the championship at Smithfield. Was the Prince Consort committing an "infra dig." when he entered the lists with a tenant farmer at the Royal with his Devons or Herefords? Is it pronounced vulgar for the Prince of Wales to breed bulls (by the way, he obtained the highest price of 1896, viz., \$5,000 for one) or Hackneys. If it is not beneath the dignity of our Queen and the Royal family to engage in the most fascinating of outdoor relaxations or occupations, it surely cannot be beneath that of our wealthy men. It will be a sorry day for British farming when her nobility and men of means lose all interest in the farm and its surroundings, and it will be a happy day for Canada when our prominent men follow in the footsteps of England's most noted. The deepest thinkers, the brightest intellects, have found the greatest enjoyment and rest when taking the relaxation from business cares which all require, in inspecting their herds and flocks; and a victory gained on the classic battle grounds of the Royal is often more highly prized than one in the halls of legislation.

The Kind of Cattle to Breed for Beef.

The distribution of the largest proportion of the best quality of flesh on the parts of the carcass which command the highest price is a point which should be constantly kept in view in the breeding and feeding of animals intended mainly for the purpose of beef production. A great change in the last few years has taken place in the requirements of the trade in this line. The big, heavy, full-grown bullock of four or five years of age, weighing 1,800 pounds, is no longer wanted, and the demand is now for a well-bred, early-maturing animal, which at say two and a half years old is fully finished, ready for the market and the block, and weighing from 1,200 to 1,500 pounds. In looking over the reports of the principal cattle markets it is not unusual to observe a difference of from one and a half to two and a half cents a pound in the range of prices, and the difference in almost every case is determined by quality rather than by size. The shrewd and capable buyer and dealer must be able at a glance to determine the dressing qualities of a beast and the percentage of high-priced meat he will produce. The animal may be fat enough and heavy enough, but the weight may be in the wrong place to bring the highest price, and so he has to be classed with a lower grade. The tallow candle has been superseded by such productions as coal oil, gas, and electric light. Cottolene and other substances are now used for the purposes for which tallow was formerly used, and the loose products of fat cattle now sell at a very much lower price than formerly. With tallow quoted at 3 cents a pound, the buyer naturally hesitates to pay five cents a pound for cattle when he knows from their form there must be in the animals he is buying an unduly large amount of pure tallow, which is only worth three cents a pound in the market. Cattle which have been carelessly bred and fattened, being uneven and lumpy, with bare backs and big bellies, will certainly be discriminated against, for the simple reason that there will be an undue proportion of the weight in the parts that will bring a low price. When cattle show evidences of good breeding, and are smooth in form, and have broad backs, thickly-fleshed loins, long, level quarters, well-sprung ribs thickly covered with natural flesh, mellow to the touch, yet firm and not flabby, the buyer will confidently pay the highest price the markets will justify, because there is the assurance that in dressing they will produce a larger percentage of beef to the live weight than will coarse, ill-bred, paunchy animals which are narrow on top and wide below, carrying their weight in the belly rather than on the back, where the ideal steer is best furnished. The scrub or low grade steer may suit the local butcher at a low price, as he has customers for all the parts at different prices, but in the large cities the retail butcher is largely a specialist, and caters to first-class hotels and restaurants, and to wealthy families who are able and willing to pay a good

price for a choice article, and who will have the best cuts. The range of prices for the different cuts in a beef animal at wholesale rates in the city markets is generally in the proportion of three cents to four and a half cents per pound for the less desirable parts to twelve or fourteen cents for the loin and rib cuts. The principal difference in the conformation of the ideal beef animal, as exemplified in the best specimens of the leading beef breeds as compared with the scrub or even the dairy breeds, is the broad, straight, thickly-fleshed back, level quarters, and well-sprung and well-covered ribs of the



AMOS CRUICKSHANK, OF SITTYTTON, SCOTLAND, FOUNDER OF THE "SCOTCH SHORTHORN."

former; while the latter, being designed for a different purpose, that of milk production specially, is narrow on top and wide below, giving room for a large udder and the capacity to work up large quantities of bulky food. This same form for the most part also goes with the scrub, and no matter how well he may be fed or how fully fattened he may be, his weight, instead of being on his back, loin, and ribs, will be in his lower parts and in the loose tallow inside of him. This being the case, we need not wonder that the prices for beef cattle range from three to five cents a pound live weight on the market when so large a proportion of the dressed beef of ordinary cattle will only bring from four to five cents a pound wholesale. Is it not surprising, in the light of facts so plain and patent as these, that so many farmers seem to be content to raise and feed cattle which are only calculated to bring second or third class



HUGH WATSON, OF KEILLAR, SCOTLAND, PRE-EMINENT AS A BREEDER OF ANGUS CATTLE AND SHEEP.

prices, and which in order to make them salable at all will consume more good feed than better bred animals will, and which make such a very unsatisfactory return for what they eat as compared with what the better class will realize?

The prices at which pure-bred bulls can now be obtained leave no excuse for the use of low-grade sires, and a bull with a little extra feed will sell for beef after two or three years' service in the herd for nearly if not quite his first cost.

The Sheep Fold.

FROM OUR SPECIAL ENGLISH CORRESPONDENT.

Here is an orthodox twenty-four lines giving a splendid description of what a ram should be. Those with bad memories and "baggy" minds might do worse than keep them near at hand for future reference:

A ram must be strong in the face, and broad.
Thick and deep in the jaw to be good.
The horn to be sweet and well set on;
The color distinct and good to look on.
Wide in the muzzle and bright in the eyes,
Flat in the bones and strong in the thighs;
Broad, thick and short in the neck;
Level, wide and neat in the back.
Back to be short and ribs well arched round,
And not much daylight between and the ground.
The wool to be long and thick with a sail,
Behind him must flow a good bushy tail.
Strong in the shoulders and tight on the roof,
With a broad knee-lid and a good sized hoof.
A feature that's reckoned as one of the best—
To be broad, wide and deep in the chest;
When handled to have a kindly, good feel,
Well formed down the gigot with flesh as well.
And a fact that everyone here well knows,
When turned up to show broad and rough below.
From tail-head to the horn to have a slight rise,
Wide set on his legs, and good mover likewise.
Firm, substantial, and up to a size
That will qualify him to win a first prize.

One of the very first breeders in Scotland of the famous Scotch Blackface sheep, prized for the excellence and sweetness of its mutton, gives the following as the result of his experience in breeding between a ram and ewe. Says he: "A ram must show more strength before than he does behind, although the hind quarters show somewhat light. I do not mean by that that a ram should be deficient in hind quarters, but that he should have a preponderance of strength in the fore quarters. That is the kind of ram which has bred best with me. A ewe is the opposite. She must show a predominance of strength in the hind quarters. This is the ewe that has bred best with me. I know this is debatable ground, and I look for criticism, and adverse criticism here, nevertheless I observe that the ram and ewe specified are the sort that breed best with other people. And I go further. A ram with strength before breeds a ewe with strength behind, and a ewe with strength behind breeds a ram with strength in front. These things have been evident to me for fifteen years, and after some speaking I am beginning to get some few to agree with me about it."

EFFECT OF FEEDING ON WOOL.

As the feeding of sheep has a marked influence on the quality and quantity of wool, the following rules may well be observed: To obtain wool of good quality and proper quantity the sheep should be well fed. The increase of the wool in length and resistance comes to a stop if the animal be deprived of the amount of food necessary for it. Well-fed sheep pay for the increased expense by the weight of the fleeces and the better quality of the wool.

When the sheep receives little food, or when that food given in sufficient quantities is not sufficiently nutritive, the wool usually preserves its fineness and acquires a certain length, but its power of resistance falls—it is deprived of that essential element called yolk or grease, which renders the fibers and the staple weak, harsh to the touch, and dry as flax.

Regularity in distribution of the food is of the highest importance, the wool soon showing the effects of this. This is seen when in winter our English farmers feed well with hay, grains, turnips, and sometimes a little oil cake, and when these supplementary foods are too quickly taken away in spring.

The wool undergoes a time of stoppage, later continuing to grow under more favorable circumstances, the woolly hair is less resistant, and, in a part of its extent, covers a dead spot, a real scar, indicating the irregularity of its growth. Opinions differ as to the action of different foods on wool. All, however, agree in attributing a marked effect to fertile pastures. The fleece is more abundant, the fibers are longer, and noticeable by its softness, whiteness, brightness, and strength; in other words, good sheep and good pasture produce good salable wool.

Black Teeth in Pigs.

Seeing in the ADVOCATE of May 1st the enquiry of a reader on the above subject, I will give my experience covering over twenty years. In 1875 we had a splendid Chester White sow farrow, but the pigs were dying one after another. An old neighbor said, "Look in their mouths and you will find black teeth." We had never heard of such a thing before, but got a small pair of nippers and took out these black teeth, when forthwith the dying ceased. Not convinced, however, that the teeth were the cause, we let them go the next season with similar fatal results; took out the black teeth, after which there were no more dead pigs. Since then we have generally taken them out on the fourth day after farrowing, and if we have overlooked it at any time we soon got a reminder by the pigs showing the following symptoms: The tongue cut to shreds at the side (more than the mere serrations at the sides), nose scabby, and if the body got scratched with fighting, ulcerated sores, the eyes become glassy, and then death soon follows. Your reader asks if it is indigestion. I cannot say. I have no theory to advance. I have never had a litter that did not show the symptoms in four or five days, and I have fed the sows all kinds of feed from nothing but roots and swill to wheat and water, with no apparent difference to pigs and black teeth. The