

paunch with coarse boned legs to support it, always accompanies these miserable points, destroys the whole of the animal's symmetry, and "flabby handling" is sure to be the consequence of such a shape; it very seldom varies, for where you see one of them most of the others follow, and I should despise a beast with so low a character. Mr. Rotche says, "the crops are one of the most difficult points to breed right in a Short Horn." How can it be otherwise, when *he who pretends to be at the head of breeders*, instructs them to breed upright shoulders; can anything be more absurd?

Quality.—Mr. R. describes this exactly to correspond with the above shapeless points. The idea of "raising the skin with the thumb and finger to show that it should have a soft, flexible, and substantial feel." If any of your readers can make sense of this, and have tried the experiment, I hope they did it with their white kid gloves on, and then report their experience for publication. Again. "When beneath the outspread hand it should move easily with it, and under it, as though resting on a soft, elastic, cellular substance which however, becomes firmer as the animal ripens." I should like to know whether Mr. Rotch *studied this "soft" kind of quality* in his "soft" snug arm chair, by a "nice warm fire" with his foot resting on a soft Brussels carpet; or, whether he had the animals under his own eye and hand, in his own yard, then felt them, and had them butchered to prove it all. If so, I consider them very "soft," flabby handlers, and that such meat, while hanging on the shambles, never sets except when frozen; it is always "soft" until dried up on the spit, or in the oven, and then is very "hard feed."

My idea of quality is very different. The hide should be moderately thick and mellow in the hand, and the flesh under it should be "elastic." This word sums up the whole of quality, it is so in store condition, and until nearly ripe, when it should handle as firm as a mackerel. The best butchers know all this, and invariably select such kind of cattle in Smithfield or large markets. In such the meat is always interlarded or marbled, the fat and lean are put on together, and they keep together until they come upon the table which the breeder should always be proud to see. Such meat appears larger when cooked than raw. The "handling" that Mr. Rotche describes as "cellular substance," can be nothing less than crevices in the flesh, which he says fills up as the animal ripens. Now it is plain to any man of common sense that if these crevices are filled up at all, it is with "soft" oily fat, which runs from the lean when warm; in summer weather always appears greasy, and when brought in contact with the fire is drained of nearly all its nutriment. I will leave it to any family man of intelligence, whether he has not experienced the evil of having to carve numerous pieces of beef similar to the above, and many a good cook has been blamed when the breeder is the only cause. I consider the beef of the one worth one third more to the consumer than that of the other. Once more. The "Udder."—Mr. Rotch says this should be pliable and "thin in its texture, reach-

ing well forward, roomy behind, and teats standing wide apart, and of convenient size." Breeders of Short Horns, look at this, and then tell me if a "fleshy udder" could be better described, such an one can never be *thin in its texture*, and is a strong indication of a miserable milker. All the above points of Mr. R. accord with each other, but in my opinion constitute a *worthless specimen of breeding*, and if Agricultural Societies elect such men that can countenance such stuff and adopt it as a standard, the best breeders will cease to exhibit.

I am, dear Sir,

Yours sincerely,

WM. HENRY SOTHAM.

Piffard, Livingston Co.,

Dec. 6, 1853.

COAL, GYPSUM, &c. IN UPPER CANADA.

To the Editor of the Canadian Agriculturist:

Sheepwalk, Brantford, Dec. 10, 1853.

SIR,—In fulfilling a promise on returning from an examination of the Ohio Coalfields, I have to communicate some further remarks on the probability of finding bituminous coal in Western Canada. It will be unnecessary to say anything on the importance of the subject, as large sections in Western Canada are now entirely destitute of wood for domestic use. I have prepared a paper intended to be read at the Canadian Institute, but a poor state of health had prevented a personal examination of some of the localities desired, and on my arrival in Toronto last summer the session had terminated.

Before stating certain corresponding geological facts to be found in the European and American Coal fields, I am desirous of showing the fallacy of the theory so confidently advanced by some, "that Canada is geologically too low, by many hundred feet, to warrant the expectation of finding coal bearing strata." Now it happens that there is not much difference in the elevation of the Coal fields of Ohio and Michigan, and the section indicated in Western Canada is about the same altitude; but there exists another geological fact which seems to be forgotten or not practically understood. I allude to the prevailing feature, in most of the great mineral masses, of the recurrence of strata in the same or similar strike and dip. This fact is exemplified in the South Wales Coal field, which is again found twice recurring, in many of its chief features, in the Forest of Dean and other parts of Gloucestershire, the strike and dip here are generally about S.E., with some variations as found from my own inspection and recollection in 1837. I cannot now find my notes. The Coal Works near Boulogne, in France, are about S.E. from the preceding, and have many similar associate features, and here again the workings dip and extend under the overlaying new formations of Chalk and Oolite: again in the south-east will be found the great coal region near Valenciennes; a further illustration may be stated in the Bituminous Shales accompanying the Mindip, Somersetshire, Coal field, which again recur—and have produced spontaneous combustion—in the south-east on the coast of