

stock. The Canadian cow is no longer condemned, because, being better fed, she has improved in size, in shape, and in yield of milk.

To my mind, it is rather unsatisfactory to find how little stress Mr. Schmouth lays upon the main cause of success—selection. He only notices it *en passant*: "Cattle can be brought to perfection by two methods: by good food, and by a judicious choice of breeding animals:" by which he means of course, selection of parents. Farther on he says, "the English have, no doubt, made great use of the influence of choice breeding animals; but they have invariably insisted on good feeding as the main source of the size and build of their most distinguished races."

This is, as most of my readers know already, a singular error. The real means by which the Shorthorns, among cattle, and the Leicesters, among sheep, were brought to perfection, was the carefully selected sires and dams sought out wherever they could be found.

Good keep, of course, was not neglected, but selection of parents was the main point to which the successful efforts of Bakewell, Bates, Booth, and other eminent breeders, were directed. Good food alone would never have done it. It might have increased the size of the progeny, as I said before, but the form of the original Shorthorns would have remained as awkward and rough as the form of the Teeswaters whence they sprang, had not Bakewell and the others grasped the grand idea of "selection."

No one would be better pleased than I to see the Canadian cow elevated to a higher standard; but I am certain that unless a most careful consideration of the points of the parents is substituted for the present happy-go-lucky style of coupling them, no amount of food will have the desired effect. As a beginning, I would recommend people to be a little more careful about keeping their bulls at home. Here, one meets half-a-dozen brutes running all over the country every day, and as long as this freedom is granted to them, so long will all the efforts of earnest and intelligent breeders be thrown away.

Woodstacks.—Can any one tell me why the ground on which a stack of wood or of faggots has stood is richer than the ground alongside of it? It is so, but I really cannot see why.

Cato.—This great Roman writer on agriculture, in one of his *lacones*, addresses the following pregnant sentence to young farmers: "Do not rashly condemn the practice of others." Which, of course, means: when you move into a new district, do not imagine that all the practices which differ from that followed in your former district are wrong.

Tobacco stems.—I wonder, if tobacco stems are worth, as much as the Massachusetts Experiment station says they are, \$14.00 a ton; I wonder, I say, how much cabbage-stalks would sell for! According to the Country Gentleman, even this firstcost price is not all the outlay, as the land requires to be three times ploughed to mix the stalks well with the soil! Three or four tons to the acre are about the usual dose. Hum! pretty expensive manuring; four tons at \$14.00 = \$56 an acre! Is it possible for the force of nonsense to go further?

Bran vs. linseed.—Bran, at Sorel, sells for \$20 a ton; and linseed for 85 cents a bushel = 29.75 a ton. Now, theoretically, the average composition and value of the two foods is as follows, omitting water and ash:

	Albumi- noids.	Fibre.	Other Carb- hydrates.	Fat.	Value per 100 lbs.
Linseed.....	20.5	7.2	19.6	37.0	\$2.47
	12.9	8.1	59.1	3.5	1.01
					1.46

It appears therefore, that if linseed be worth \$29.75 a ton, bran should be worth only \$13.80, which discrepancy between the real value of the bran and the selling price would be worth looking into. Bran was selling this autumn for \$12.00 a ton in Montreal, and it seems to me that \$8.00 a ton for profit and carriage is rather too much of a good thing.

Hansen's Rennet.—Nothing can work better than this handy form of rennet. The tablets are about the size of a marrow-fat-pea, and one of them, dissolved in two table-spoonfuls of cold water, coagulates five gallons of milk, at 85° F. in about 25 minutes. I observe that, at the last dairy-show in London, the Messrs Hansen won the second prize for rennet, with hearty commendations from the judges for its perfect purity and keeping qualities. The Camembert cheese I am now making is as sound and well-flavoured as need be. My friend, M. Séraphin Guévremont, is making all his butter Devonshire fashion, and converting the skim-milk into cheese with the Hansen rennet. The butter fetches 25 cents a pound, and the cheese, 8 cents.

Maintaining the Fertility of the Soil.—It is a great mistake to suppose that, by feeding sheep or cattle on what is grown on the farm, anything can be added to the fertility of the soil. As M. Lippens very sensibly remarks, the animal originates nothing, it only changes the form of the food it consumes, appropriating a portion of the constituents of that food to supply its own wants, and rejecting the rest, which is returned, in part, to the land in the form of manure. Even with the very best care, in saving every particle of both the liquid and solid dejections, there is a constant and unavoidable loss to the farm from the abstraction of the nitrogen, phosphoric acid, sulphur and potash, requisite for the formation of flesh, milk, bones, hair, &c. Neither cows, sheep, nor pigs can add anything to the fertility of the farm.

"What shall be done with the surplus land," asks professor Roberts, of Cornell University. "Let it go to grass," he replies. "No longer fight your best friend. Make peace with him. Lay down the implements of warfare, climb on the fence, and see the grass grow, and the clover sweat with the labour of pumping up the nitrogen from the subsoil to the surface." Which pumping up of the nitrogen from the subsoil is, I humbly believe, the true solution of the question; why is the wheat-crop after clover almost invariably good?

Milk-selling.—Selling milk in our country towns and villages ought to be a pretty profitable business, judging from the price I find ruling at Sorel. A cow calving down in October ought to give at least 10 quarts of milk a day during the seven months ending May 1st = 210 days = 2100 quarts, which, at six cents a quart, = \$126! You cannot make a cow cost more than:

25 lbs. turnips &c	\$0.06
5 lbs. linseed, pease-meal, &c.06
20 lbs. straw02

14

a day = \$29.40 for the seven months, and leaving a balance of \$96.60 to represent labour, interest, or rent, &c. I say