

The Management of Sows.

EDITOR CANADA FARMER:—The March number of the FARMER contains directions for preventing sows from overlying their young ones. For young sows with their first litter, such directions are doubtless good, but, when a is turned into pork the better. Some sows are very careful, and show a disposition to overlie her young, the sooner she less, and lie down without manifesting the least regard for their pigs, while others are quite the reverse.

I once had a sow with a litter of eleven young pigs, and I have watched her lying down inch by inch, and, if a young pig got between her back and the wall, she would raise herself a little to allow the little pig to escape, and I have just such another careful sow at present. A few years ago one of my neighbors, one of the sort who let their sheep and pigs run about and get their living during the summer on the roadside, had an excellent store sow. She was allowed to make a place for herself in the straw stack, where in the fall she had a litter of eleven pigs, and early the following spring, thirteen pigs and reared them all.

Although sows especially of the improved breeds, should be rather underfed most of their time, yet they should be well fed for about a fortnight before they are expected to farrow, to get them in heart, and secure a good supply of milk for their pigs. Some sows are naturally inclined to put all they eat on their own backs instead of giving it in the shape of milk for their young. Such sows are only fit to make pork of. Occasionally a sow will devour her young as soon as they are produced, when she will soon be in heat again, and should have a meal of fresh animal food the evening before she is expected to farrow. A man must watch all night, to prevent her following such an unprofitable habit.

When a farmer has a sow which is a good breeder and nurse and careful mother, I see no reason why he should not keep her as long as she continues to breed well, as he never can be certain that her progeny will inherit her good qualities in these respects. I once had a sow that produced sixteen pigs for her first litter, twelve alive and four dead, and reared eleven. The next litter she produced eighteen, all of which were found lying about the floor, dead in the morning. As I left the township where I was residing about that time, I sold her to a neighbour and afterwards heard that she twice produced large litters—twenty-four on one occasion, but always dead, so that her owner was, though unwillingly, obliged to fatten her. Some of the first litter I sold to neighbors who wished to get that breed, but none of them had more than seven or eight at a time. I do not know what breed she was, but she was from a stock brought from Newcastle, England, a year or two before.

SARAWAK.

Economic Horse Management.

(Continued from last month.)

Scientific and practical observation are thoroughly in accord as to this fact (viz., that the exclusive use of oats for very hard-worked horses is injurious and expensive), the truth of which was forcibly demonstrated at a colliery in Durham to which I was called some time ago. The output at this place was decreased from 15 to 20 score per day through the horses being unable, from want of condition, or I may say from positive debility, to get the work out. These animals were miserably poor, though allowed 165lb. of oats and 154lb. of hay each per week. The oats were not crushed and the hay was not chopped. The horses were all large; none under 16 hands, many 16-2. They worked very long hours and took heavy loads, but I confess I was astonished at their appearance after many months of such apparently liberal feeding. On Sept. 1st their food was changed to the following:

Crushed Peas, 35 lbs., at 34s. per qr.	s. d.
Do. Barley, 20 lbs., at 23s. per qr.	2 4
Do. Oats, 40 lbs., at 23s. per qr.	1 3
Straw, 14 lbs., at 7d. per stone.	3 4
Hay, 7 stones, at 9d. per stone.	0 7
	5 3
	12 9

The old plan giving us

Oats, 165 lbs., at 23s. per qr.	£ s. d.
Hay, 11 stones, at 9d. per stone.	0 14 0
	0 8 3
	£1 2 3

a difference of 0s. 5½ per horse per week,

Notice, too, that besides this saving in money, the digestive organs had 28 lbs. less hay and 50 lbs. less corn to digest; or

Mixed grain 107 lbs.	Old oats 1-5 lbs.
Hay 94 "	Old hay 1-4 "
207 lbs.	122 lbs.

Within three months this stud of horses was in excellent health and condition, drawing out of the pit, with no application of engine power, from 20 to 50 scores more per day than when I first saw them. There were 149 horses on the colliery; so by this change a saving of £3,662 12s. 1½d per annum was effected. With this one might be stretched, but I claim that the increased work performed, and the increased value of the animals, must be considered, if not added in £ s. d. The marvellous change effected in this stud is to me conclusive evidence that oats can no longer usurp the position of being the best food for hard working horses. If our choice is limited to a single kind of grain, oats are certainly the best. Experience has settled this point, and science explains it by showing that the essential food constituents of oats are in better balanced proportions, and in a more digestible state, than in any other grain; but we find that there is a degree of work sometimes exacted from horses which oats are not able to meet, but which can be met by well selected mixtures of grain. Not only are these mixtures equal to the task of balancing the excessive waste of the system induced by hard work, but they do so at a less cost than that at which oats fail to preserve the balance.

But my plan does not rest upon this one case, nor is the question of feeding economically thus easily disposed of. I am not prepared to lay down a definite mixture as being in all cases and at all times the best and cheapest. We have just seen that not only must the chemical and physiological value of a food be known, but also its money value; and this changes constantly. So that we must thoroughly understand each article of food in its threefold aspect, and thus be enabled to take advantage not only of the best, but cheapest. Before, however, we consider each article of provender in detail, I will draw your attention to some rough analyses of various kinds of grain, which it is believed throw some light on the question of selection. At different times during the last six years we have engaged Messrs. Feiry's Steam Mills, at Easington, for the day, and have personally superintended the grinding, sifting, and weighing of the following grains, to ascertain the proportion of husk. The different results of each of the six years is so slight that I shall only offer the results obtained in 1865, as a fair average. I may just mention that in 1867 nearly all the grain experimented on gave a slightly less amount of husk than in any other year. It was all the produce of 1868, and I am disposed to think the difference is due rather to the husk leaving the kernel cleaner and easier than to a positive decrease in its quantity. This idea derives some force from the fact that 1868 was very fine and hot; corn was well ripened and well gathered. In carrying out these experiments we found it necessary to use three stones of each kind of grain, because the miller would not allow all the grain to run off the mill stones before adding more, which caused the grain to be more or less mixed with that which had preceded it in the mill. To prevent contamination we first allowed about 20 lbs. of each lot of grain to run through, then swept it away and collected 14 lbs. of the pure grain. This was carefully sifted through a fine sieve, and both husk and flour separately weighed, so as to make sure that we had correctly got 14 lbs. of the sample.

TABLE SHOWING THE WEIGHT OF HUSK IN VARIOUS GRAINS.

	Natural Weight per Imp. Bushel.	Weight of Husk in 14 lbs. of each.
1. 14 lbs. oats	41	lbs. 5 oz.
2. Swedish oats	39½	5 6
3. Danish oats	40½	5 6
4. St. Petersburg oats	40½	5 2
5. Short Scotch oats	41	3 14
6. English oats	41½	4 6
7. Irish potato oats	41½	4 1
8. Canadian oats	41	4 12
9. London barley	54	0 11
10. Danish barley	54	0 15
11. Taganrog barley	49	2 4
12. English beans	62	1 4
13. Egyptian small beans	61½	1 8
14. Egyptian large beans	59	1 10
15. Bica tares	68	0 10
16. Hamburg	57	0 11
17. English tares	65	0 19
18. Canadian white peas	66	0 7
19. Kensington white peas	64½	0 8
20. Kensington blue peas	64	0 8
21. Odessa maize	59½	0 5
22. Italian maize	60	0 5
23. American yellow maize	62	0 5

Now, remembering that the husk of grain is nearly, if not entirely indigestible, this table shows us at a glance which food contains the largest amount of indigestible material.

(To be continued.)

Lincoln Sheep.

EDITOR CANADA FARMER:—Would you or some of your subscribers give a description of the Lincoln sheep? In what do they differ from the Leicester and Cotswold? Are they smooth or woolly between the eyes? Woolly or smooth below the knee?

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The old Lincoln, which is probably now extinct, was an ungainly animal, with long, thin body, coarse bone, pot-belly, and razor-back; slow to mature, producing coarse-grained flesh. In those days they were prized only for the beautiful lustre of their wool, which lustre, it was found, was partly owing to the climate, as Lincolns brought from Lincolnshire partly lost their lustre, while other breeds taken into the country acquired it to some degree. It is doubtful if there be a pure Lincoln now in existence, the breed having been immensely improved fifty years ago by crossing with the Bakewell Leicester. By this means, a breed was obtained of better proportions, quicker to mature, and producing mutton of better quality. About the same time, the Bakewell Leicesters were used to cross the Cotswolds. They are woolly between the eyes and smooth below the knee.

Comparing the three breeds together, the Lincoln will average the most wool, and of the best quality; a fair average for a flock being eight and a-half pounds, against the Cotswold's eight pounds, and the Leicester's seven pounds. At fourteen months old, the Leicester will weigh 126 to 140 pounds; the Cotswold 168 to 182 pounds; and the Lincolns, 120 to 140 pounds. The Lincolns are not usually fit for the butcher at that age they being generally kept until they are 22 to 28 months old, when they will weigh 32 to 40 pounds per quarter, and will have given another fleece of from 10 to 15 pounds of washed wool.

PHOTOGRAPHICAL SHORTCOMINGS. There appears to be a great discrepancy between the drawings and photographs of Shorthorns, caused partly by exaggerations of good points and a smoothing down of bad ones by the artist in the former case, but still more, I think, by reason of the different points of view from which they are respectively taken. In drawings a considerable portion of the back is given in fact, very much as the animal appears to a man when standing at a short distance from it, we thus have partly an elevation and partly a ground plan, whereas your photographs are altogether elevations, consequently the body always shows a deficiency in depth, and the legs are more conspicuously displayed than is at all natural; and although they may really be in a measure truthful, still they are not satisfactory, being a representation of the animal from a lower point of view than is taken by an observer. *Mech. in Agricultural Gazette.*

LUCCERNE AS PHYSIC. Any clover, or succulent plant of like nature, will act at first as a physic when horses and cattle, or for that matter even sheep and hogs, are turned upon it. The great value of alfalfa, or lucerne as it is called in English, is that it may be repeatedly cut the same season, after the first year. Cattle should not be turned upon it, but it ought to be cut one day and fed the next, or cut in the morning for the evening feed. Thus it is fed wilted and is more digestible, less bulky and better relished. It should be fed green to horses in small quantities, to cattle freely. Cut for hay, it should be treated like red clover, and allowed to grow to its full height and begin to blossom. You need have no fears of its hurting any animal that will eat it, provided it be fed dry or wilted, and moderately. No doubt horses allowed to feed off it would be thoroughly weakened and physicked; cattle unaccustomed to it turned upon a field would no doubt be bloated, and die of hoave, as they would on red clover; but fed judiciously there is no better fodder crop when it succeeds well.—*N. Y. Tribune.*

TRANSFERRING CATTLE TO HOT CLIMATES.—Imported cattle, or cattle taken into an entirely different climate from that in which they were bred, seldom show the same degree of excellence as they possess at home, unless given special care. Old cattle frequently die before getting acclimated. This is strikingly illustrated by shipping them South, especially in the spring of the year, if the animal is fat. The arterial system first takes cognizance of the change; the pulsation increases to twice its normal rate, fever is engendered, and death ensues. Cattle to be taken from the far South to the North, should be shipped in May or June; from the far North to the South, in September or October; for the reason that the change of temperature is not so radical as it would be to reverse this order. The younger the animal, if old enough to wean, the less danger from these causes, and that danger is soonest past. To avoid this necessity of transportation and consequent risk, some enterprising farmer in every neighborhood could with profit and at reasonable rates raise bulls from pure stock of the different types or breeds, for the accommodation of the wants of the farmers of his vicinity. —*D. W. Duke.*