

HORSES AND CATTLE.

LIQUID MANURE-SAVING.

The value of liquid manure is generally admitted, but the extent to which it is wasted is realised by few. It is commonly supposed that, if horses and cattle are well bedded with straw, the greater part of the urine voided is absorbed by the litter. This, however, is a mistake. It will trickle down through the cracks in the floor far faster than straw will absorb it. Hence the greater portion sinks into the earth under the stables, and is practically lost.

A correspondent of the *N. Y. Tribune* tells how an observant Vermont farmer detected this leak in his method of management, and put a stop to it. In a stable where he kept fourteen cows, he used to strew horse manure behind the cows to absorb the urine, and flattered himself that he was saving all, or the most of it. But as he sat and milked, he saw the urine from his cows pass through the cracks and crevices of the floor to the earth below. So he determined to take up the floor, and make a pit to hold the liquid that drained down. He dug an excavation about thirty feet long, ten feet wide at top, four feet wide on the bottom, and five feet deep. One barrel of cement sufficed to make this receptacle water tight. The earth shovelled out of the pit, saturated with the drainage of the stable the previous thirty years, was applied as a top dressing for grass, and the increase in the hay crop sufficed to pay all the cost of the pit. After one winter's use of the pit, there was clear urine in it to the depth of two and a half feet. This was pumped out and hauled to the fields, about forty loads of one hundred gallons each, making 4,000 gallons, or about 40,000 pounds, or twenty tons. The floor had been replaced as usual, and the horse manure littered behind the cows as before. Here then were twenty tons of liquid manure obtained in addition to the solid manure previously got, and that in a single winter. This was in 1880. In 1881, he pumped out seventy-two loads, or thirty-six tons, the drainage of the horse stable containing three horses having been conducted into the pit, and the time having been somewhat longer.

The apparatus employed in handling this liquid manure was simple and cheap. A tub, set centrally upon two joists lying on the axles of a common farm waggon; a sprinkler suspended below; and a wooden plug, three feet and a half long, reaching above the top of the tub: these, with a pump, constitute the entire outfit. The teamster drives the waggon to the stable door, steps into the stable, lays a spout from the pump to the tub, pumps the tub full, and drives off with his load. The pump throws a large stream, yet does not work hard as the distance the stuff has to be lifted is but short. It is a clean operation, far more so than forking solid dung; and is less labourous, for it is only handled once. When the field is reached the stopper is drawn, and the load discharges itself. This Vermont farmer offers to dig and cement pits under the stables of his neighbours, if he can have the earth that comes out of the excavation.

This is certainly an easier and better way of saving liquid manure, than hauling muck,

sawdust or sand to absorb it. The pit once made; the pump, tub, and sprinkler bought; will last many years, with care. A tithe of money spent by many farmers in buying artificial fertilizers, will set them up with these things, and give them an additional source of profit. Many are deterred from endeavouring to utilize liquid manure by the idea that the necessary apparatus is complicated and costly. These objections do not lie against the plan above described. It can be carried into effect at but slight expense upon any and every farm. Reader! ponder well the above example, and resolve that, for the future, there shall be no more liquid manure wasted on your premises.

COLOUR OF SHORTHORNS.

Mr. Richard Gibson, Ilderton, Ont., writes as follows in the *Breeder's Gazette*:-

For the edification of beginners, and as food for reflection for older Shorthorn breeders, I beg to submit the following table, showing the colours of all the prize-winners in the respective classes at three national shows of Britain, viz.:—"The Royal of England," "The Highland and Agricultural Society of Scotland," "The Royal Agricultural Society of Ireland," and "The Great Yorkshire Show," for the years 1883 to 1881, inclusive, except that of the Irish show for 1868, and also for 1881; there being no show this year.

The list is of winners in classes only, herds and extra prizes not counted; were we to have included them, the ratio of roans to other colours would have been still more marked:-

	Roans.	Red and white.	Red.	White.	Roans.	Red and white.	Red.	White.
Royal of England								
-Bulls.....	147	25	28	37				
Cows & heifers	158	84	22	15				
Total.....					305	59	50	52
Highland Society of Scotland—								
Bulls.....	85	12	17	16				
Cows & heifers	87	20	20	7				
Total.....					172	32	37	23
Royal Irish —								
Bulls.....	55	12	11	13				
Cows & heifers	55	11	18	9				
Total.....					110	23	29	22
Yorkshire—Bulls	103	12	21	30				
Cows & heifers	128	17	20	10				
Total.....					231	29	41	40
Grand Total.....					818	143	157	137

I have no doubt but that the reds make a better show than they are entitled to; probably more than half should go into the red or white list, as it is customary with many to call cattle red unless they show a preponderance of white. The above list suggests the thought that in their native country the roans are infinitively the best show cattle, and that there is but little difference between the other colours, white being just about as good as red.

Let a red "crank" take one trip across the Atlantic, and spend a few weeks among the old herds in Lancashire, Yorkshire, Gloucestershire, etc., and I will engage he will change his opinion in a short time. Let him reflect awhile at Holker, over the Oxfords and Winsomes; at Latham, over the Wild Eyes, Lassies, Gwynes, etc.; then, by the way of variety, cross over to Warlaby, and see those massive spotted roan matrons, with a good proportion of whites and a very exceptional red; thence to Carperbay and Catterick, and Sheriff Hutton, and Burghley, the house of Telemachus, if he wishes to see cattle that win prizes. Nor must he forget to call at Berkeley, and spend a day with the roan Kirklevingtons, the Darlington, the Wild Eyes, and the last but not least, the noted Duke of Connaught, who in his ninth year looks as young as most four-year-olds, and whom I believe can, with five daughters, beat any bull and offspring in Britain.

We can admire good red animals as well as roans, but cannot believe, because they are red, that they are better or worth more money.

EARLY MATURITY IN STOCK.

There was a time not long ago when choice, well-ripened beef was only furnished by steers

at least five years old. This time was thought necessary to bring the animals to full maturity. Sheep four or five years old were then preferred for mutton, and comparatively few hogs were slaughtered for the market till they were two years old. But times have changed. The sheep at the recent Smithfield show averaged only 21 months old, and the live weight of some lots averaged 294 pounds per head. Some of the sheep 20 months old furnished dressed quarters weighing 40 pounds each. At present most farmers prefer to market hogs when they are within a few days of a year old. At the Farmers' Institute at Sugar Grove, Ill., the question: At what age shall we market our steers? received but one answer, and that answer was 2½ years. English feeders arrived at a similar conclusion some time ago. The old idea of spending several years and a large amount of fodder in building up a huge carcass to be subsequently fattened is abandoned by all intelligent feeders. The reports of the growth of animals exhibited at the fat stock show in Chicago showed the largest gains in the early portion of the life of the animals and the smallest during the later portion. This was so, notwithstanding the amount of food consumed was largest during the later period. The breeds of cattle, sheep and hogs that mature earliest will hereafter be the favourites with feeders. They will desire to make the most meat for the smallest amount of food consumed, and in the shortest time possible.

CARROTS FOR HORSES.

The average farmer is slow to learn the value of carrots for horses, and still slower to provide them for his horses. They are so nutritious that livery men and some others feed considerable quantities regularly to their horses instead of grain. Many consider that four quarts of oats and the same of carrots are as good a feed for a horse as eight quarts of oats, and horses that are worked little more than for mere exercise will keep in good condition and look slick and smooth on hay and carrots alone. An occasional feed of raw potatoes is also good for the horse, especially to give a smooth, glossy coat, and if troubled with worms it tends to clear them away.

CARE OF CORNCOBS.

Dr. Nichols, of Boston, analyzed a corncob, and declared there is over 60 per cent. of fat-producing and flesh-forming substance in the cob, after the corn is removed; or a per cent. of nutriment fully equal to the best oat straw. A report from the experiment station at Middletown, Conn., shows the nutritive ratio of the corncob to be 71 per cent.; and that when compared with hay it stands 0.64 per cent, while the stalks are 0.61, and the best oat straw 0.69. A paper read before the Massachusetts State Board of Agriculture, by Prof. Goersmann, gives the maizecob as high nutritive value as the stalk itself. Richard Goodman, jr., of Berkshire county, Mass., says:—"I believe that well-ground cob has great mechanical value in the process of digestion," and recommends cobs to be ground by all means.

ROBERT CHRISTIE has sold his farm in Elma to Adam Dunn, of Listowel, for \$5,000.