

AGRICULTURE.

On the Feeding, Housing, and Treatment of Farm Horses and Live Stock.

Ask a farmer if he prefers for his own use a clean dry bed to a wet and rotten dung heap? Ask him if cleanliness in place and person, with proper ventilation, is not conducive to his health? Ask him if his food, nicely cooked and prepared, is not more agreeable to him than if raw and dirty? Ask him if he likes a cool residence in summer and a warm one in winter? He will say certainly, and laugh at you into the bargain, and yet he will not consider that what is good and profitable for himself, is quite as much so for his cattle. What would farmers say, if, after a hard day's work, they were obliged to walk ten miles for a supper, and the same next morning for breakfast—losing six hours' rest, and adding 40 per cent. to their labour; and yet this is how they treat their horses daily. It seems too ridiculous to be tolerated. I object entirely to turning horses out, or to have pasture at all; in our midland and southern districts the waste of food and manure is enormous.

If a horse is turned out twenty days on an acre, it is equal to twenty horses one day, or forty horses half a day. Then where the droppings fall the food is lost, supposing the droppings and urine to cover and taint four square yards per day, that is 130 per month, or 3 per cent. per month. It is, in fact, thirty-six pounds lost in every hundred per annum. The only excuse for depasturing is the imperfect state of the farm-yard, which allows the best part of the manure to be wasted.

Again, as to manure, there it lies, in hot sunshine and bleaching winds, till it almost becomes its original straw colour, losing its ammonia and other gases; and what, perhaps, is of more consequence than all, deprived of the benefits of fermentation which it would receive in a well-arranged tank. Supposing a horse's liquid and solid manure be one cwt. per day, or eighteen tons per annum, we lose one-third that quantity. In fact, it is not too much to say, that in the amount of labour the horse performs, his keep and manure, we can, by manger-feeding on my principle, save thirty or forty pounds out of every hundred.—This is enormous!!!

The idea of a man having forty horses, costing him £1500 per annum, and refusing to save £400 or £500 per annum in their keep, manure, and labour, is absurd; it is paying preposterously for the maintenance of prejudice or obstinacy; and yet, I am afraid there are some who will do so rather than act on my suggestions. There are other inconveniences and dangers attending depasturing horses—frequent kicks and accidents, loss of time in catching them, broken knees in driving home, and injury to constitution by sudden atmospheric changes. Besides, no horse fed entirely on green food can undergo the labour of those manger-fed on mixed food. Green food does not afford sufficient material for muscle and bone. It is too washy.

I object *in toto* to permanent pasture, as a positive individual and national loss. Clovers are useful—but you cannot thoroughly hoe and clean the land when they are sown with a corn crop. Lucerne (and Sainfoin) is my favourite, and you can grow it any where if you keep it clean, supply it amply with lime, and its constituent parts, drain very deep (not less than five or six feet,) and protect it from frost in the winter by a strong coating of manure, with a dust of guano in summer. Tares on heavy land and rye on light land are both profitable; and plenty of potatoes, Swedes, carrots, &c., which can be grown on any land, however heavy, boggy, sandy, or gravelly, if thoroughly drained, properly manured, and deeply cultivated. By these means, you may keep more than twice as much stock as by permanent grass.

Let us imagine ourselves standing or lying day and night for months in the moisture and effluvia of our own accumulated excrements, uncleaned and ill fed; it won't bear thinking of, and yet this is how most farmers treat their cattle: their food is presented to them in large unmanageable masses with abundance of dirt (a corrector of acid it is called) uncooked and unprepared. We need not wonder at having to stab our bullocks to let out the accumulation of windy flatulence, or forcing strange-looking machines down their throats to remove solid lumps of unmasticated roots; we need not wonder at foot-rot, fevered feet, or other complaints. The idea of a man swallowing a quantity of frozen turps on a frosty day—without a bit of bread, absorbent, or stimulant of any kind! It is too ridiculous to think of.

Let us keep our stock warm in winter and cool in summer—free from tormenting flies. In fact, I shall never consider we are perfect till we can keep up a given warmth in winter—whilst we have in summer cool and shaded paved yards.

My horses, cattle, and sheep are never turned out, nor do they receive any grass-hay or clover-hay—except a small portion during the interval between green crops and root-crops. In summer they are fed in mangers on wheat-straw chaff, cut one-eighth of an inch, and tares, lucerne, or green rye, cut also into chaff the same size, adding ground beans, oats, or meal with linseed. In winter, our carrots, Swedes, and mangold, will be well washed, passed through Gardner's Turnip-cutter, and again passed through a toothed cutting machine, so as to become what I call root-chaff; it will then be mixed with very fine wheat, bean, or oat-straw chaff, and a little ground beans, barley, or oatmeal, soaked linseed, steamed potatoes, and a little salt, varying the food as much as possible to stimulate their feeding.

In fact, to sum up, we shall present their food in the form occupying the smallest possible compass and requiring the least mastication. Every half-hour saved in feeding is so much added to their rest—a most important ingredient in fattening. The dry chaff will prevent laxity and flatulence, producing also a sufficient and healthy excitation of the stomach, whilst it will afford to the gastric juices a ready access to every part of the mass of food.

This mixture appears by its various constituents perfectly adapted to the formation of bone, muscle, fat, flesh, all which are essential to the perfect development of a well-fattened animal.

Our horses have a plump muscularity and vigorous rotundity, proving what I said before, that their food contains every necessary element; they thrive wonderfully and cost but little—they get their breakfast, dinner, and supper, in perfect quiet. This is better than sending them for a ten mile walk morning and evening, thus depriving them of six hours' rest; their skins are soft and their coats glossy—their general appearance exhibiting health, strength, and content. In this all visitors to my farm agree.—Were it not for their daily labour, I have no doubt they would be excessively fat—therefore I am justified in anticipating a similar result for my bullocks and sheep. The least they plough is one acre per day, seven inches deep for each pair, and occasionally one and a half acre, particularly during harvest. One pair also trench or subsoil ploughed one and a half acre per day during harvest, which is great work. I cannot now state exactly what number of horses we shall require permanently. I rent 45 acres adjoining my land, so that the total holding is 173 acres; we shall certainly require six at least on our principle of trench ploughing, and not resting the land. At present, owing to the great arrears of cultivation, and the various operations of subsoiling, stone-casting, &c., we have an additional four, and sharply they are worked too.

For very lean bullocks, the straw-chaff and green feed, or root-chaff, will be better than too rich a diet at first. As they freshen, we shall give them richer food and increase its quality by degree, adding soaked linseed, &c. Our horses and cattle will always have access to rock salt.

I apprehend in bullocks as in horses, a change from very poor to stimulating diet would be hazardous without a previous preparation by physic.

All stables and cattle-rooms should have their walls and ceilings lime-washed at least once a year. The mangers occasionally well scrubbed. A harness room in stables is indispensable.

My farm-yard will not look like one, for not much loose straw will be seen—a little straw-chaff may appear here and there, to absorb the moisture and excrement from the cattle; but the soiled part will be removed daily or frequently to the roofed tank, so as to go on the land as rich as possible, fermented, but not washed by rain, or evaporated by sunshine or wind.

The rest of my straw, both wheat, bean, and oat, will be converted as chaff into food for my stock, and so go to market in the shape of mutton, beef, or pork—or be forming bone and sinew for my horses.—*American Agricultural Gazette.*

NEWS.

The intelligence by the *Britannia* presents no features of great interest. The papers, especially the religious portion of them, are occupied with earnest discussions of the proposed endowment of the Catholic college at Maynooth. The bill for the endowment had passed to a second reading in Parliament, by the unexpected