

animals, is attended with decided advantage. Ashes will sometimes produce a similar effect. Guano, when mixed with mould and sown broadcast, is exceedingly useful; and so, too, are compost manures of all kinds. These help to destroy the mosses, by invigorating the grasses. Properly draining, and especially *thorough under draining* the lands, is one of the most efficient modes of removing mosses and worthless aquatic plants. By carrying off all surplus, and particularly stagnant waters, the atmosphere and heat penetrate the soil and induce a vigorous, healthy growth of the cultivated plants, and thereby withdraw so much of the space and food which otherwise would be monopolized by the intruders.

When these and some other, of the most obvious means of renovating meadows fail, there is no alternative, but to break up the sod and subject the field to another course of cultivation. It is not absolutely necessary that this undergo a series of rotations, although for many reasons this is better; yet a rotation may be secured exclusively with the forage plants, the clovers, and numerous varieties of the grasses. The meadow may, if it be preferred, be thoroughly manured with unfermented dung, then turned over flat, and after applying a top dressing of compost, may be harrowed lengthwise of the furrows, and sown with grass seed liberally; and if all has been properly managed, the mosses will not, for years again, infest your meadows.—*American Agriculturist.*

### LIQUID MANURE.

To the Editors of the Agriculturist.

GENTLEMEN,—Having frequently noticed in meadows that have been pastured in spring small tufts of grass growing higher, denser, and more luxuriant than the rest, I have been led to examine them, thinking they might be cased by the dung of cattle; however, upon examination, not finding any, I sagely concluded this might have been occasioned by the urine. Whereupon the following hint was suggested to my mind, viz.: that as most farmers have generally some hollow, in or near their barn yards, into which the urine of the cattle and other liquid manure runs, they would do well to form a tank in which to collect it. And by placing a strong tight box on the hinder part of a roller extending its whole length, and of sufficient breadth and depth as will make a good load, the box to be pierced with holes in the side near the bottom, and fitted with a sliding board so as to stop the holes while the box is filling; they may avail themselves of a valuable manure. The water may be taken from the tank to the field in a puncheon, placed in a cart, to have a stop cock near the bottom, with a little spout to convey the water into the box.

Wishing your paper the success it merits,

I am, Gentlemen,

Your humble Servant,

AN EARTH-WORM.

Vaughan, May, 1849.

P.S.—If you will give me a few hints concerning the best mode of rearing and managing colts, you will do me (and perhaps the rest of your readers,) a favour.

VIRTUES OF HEMP.—By its cordage, ships are guided, bells are rung, beds are corded, and rogues kept in awe.—*Cowles.*

HINTS ON THE MANAGEMENT OF HORSES.—The horse is the noblest of our domesticated quadrupeds. He is also one of the most useful in augmenting the power and diminishing the labour of mankind. He touches the extremes of beauty and deformity, and is associated with every degree of pride and degradation, of utility and injury to the human race. He may be refined by breeding, or debased by inhumanity and neglect. He is applied to the economical purposes of the farmer or citizen, or made the shuttlecock of gamblers and the fancy, by being thrown between the winning posts of the race course within the shortest possible time; or he becomes the terrible engine of destruction as he sweeps over the plain in a terrific charge of cavalry.

With us, however, in this portion of America, the horse is generally either the useful drudge and co-laborer of our citizens, or he is made to contribute to the ease, the pleasure, and the luxury of those who can afford it. Reasonable common-sense purposes among an intelligent common-sense people have produced such results as were to have been anticipated. The northeastern states can safely challenge the world to produce an equal proportion of horses every way adapted to the objects sought, as may now be found among them. This great excellence of our horses, has been mainly achieved within the last fifty years, by judiciously crossing the best made and stoutest bloods upon a substantial, but originally not over meritorious stock of brood mares. We have, besides, imported some of the best of other well-established breeds. Such are the Norman, the English cart horse, and Cleveland bay. We have occasionally brought choice animals from different quarters of the world; and where they have been found possessing superior merit, they have been made to contribute their quota in raising the character of American horses. We have within the last few days seen a Barb stallion, recently sent to this country, by our late consul at Morocco, standing nearly 16 hands high, with compact form, well-knit sinews, flat, clean, wiry, but strong legs, a shoulder approximating so closely to the hip as to be almost coupled by a double hand's breadth, yet with a steep Norman rump; and though probably incapable of ever getting a race of winners on the course, yet possessing qualities of intrinsic value for the horse of all work. But it is not our purpose to dwell upon the merits of our horses, but to suggest some of the most obvious hints for their management.

One great cause of injury to horses is, overworking at too early an age, before the frame is expanded and muscles and cords have become fully developed and perfected. A horse does not reach a full maturity till eight, nor a man till eighteen to twenty-four; and while the boy is generally exonerated from hard, constant labour till he reaches his majority, how often do we see the colt of three or four, delving daily at a load that would tax the powers of the thoroughly-developed horse. Whoever thus overtaxes the youth of the animal, may be sure that he is paying dearly for it in his maturer age. He may waste one end of life, but he cannot both; and for every year thus inhumanly filched from one extremity of horse existence, he is exhausting two if not three, and often times four of what should be his prime. But this folly is getting out of vogue, and is practised only by such as combine the double traits of idiocy and inhumanity.

Another cause of frequent injury to horses, is from improper breaking or training, by which the animal is left ignorant of the best and easiest method of doing his work. A horse should be well taught his paces; to walk fast, which is his easiest and least expensive gait; to trot square and light, yet firmly; to gallop easily, if destined for the saddle, and to back well, if used for the wheel. Most of the character and ability for a desirable gait is inbred, and is controlled by the form; yet a