

replied, "with shame I acknowledge, not one; but send me a list of such as you recommend, and I will immediately procure them." Now I apprehend this case might be multiplied by a thousand or more. Can we wonder then, that a youth who never heard the word agriculture at school, and who is seldom or never sent into different districts to be taught agriculture as a science, should go home to his parent, and follow his plan of farming, be it good, bad, or indifferent. In all other trades and professions an apprenticeship is considered essential to the acquirement of knowledge; but farming, the most necessary of all trades, is to be left to chance, or rather mischance. A system of uniformity is essential in making a hat, coat, or shoes; there are established educational rules for the church, the bar, and the senate; but agriculture, the greatest interest of all, on which our very existence depends, economically and politically, is to be like a ship without a compass, tossed about by the ever-varying gale of individual opinion, without the hope of reaching the port of Perfection. Were a youth ever so much inclined to furnish his mind with comparisons and observations of the various systems of culture in our own or different counties, as well as in foreign climes, there is under the present school system no opportunity for his doing so; and no doubt he would be surprised if told that we are a century at least behind the Chinese in agricultural practice. I hope we shall soon see every school, and in fact every farmer's parlour, possessing a few sound practical works on agriculture. I presume no man will consider he knows every thing in agriculture; if he does, it is unfortunate for him. Little as I am acquainted with the subject, I am fully convinced that it is full of interest, and of such extent that a life-time of study and practice would find us on the wrong side of perfection.—[London Agricultural Gazette,

MANAGEMENT OF MANURE.

It is always best made when under shelter: and perhaps no better can be made, other things being equal, than in Mr. Warner's system of box-feeding, where the litter accumulates under the animal, and is applied in quantity sufficient to absorb all the urine. It is surprising what a quantity of excellent manure may thus be made. An ox in a box 10 feet square, and well littered every morning, will rise in its shed only about three inches a week; but the manure below it is

hard, compressed, and will monthly, when turned out, form a heap of at least six cubic yards of first-rate material, containing, as it does, the whole of the urine. We clean out our boxes monthly, cart the materials to heaps in the fields, for our turnips and other root crops; and in turning it over, mix and cover it well with the earth on which it is laid. It is taken always to that part of the field where there is the thickest soil, that the land may not suffer from being thus robbed. The sheep dung, the sheep being fed under sheds, is allowed to accumulate for a month also, and is taken away to heaps in like manner. The stable dung, and that from the cattle stalls, cleaned out every day, is taken to a heap by the liquid manure tank, with the contents of which it is soaked, whenever the tank is full; and it is also well soaked when it is carted away in spring to the field. Dung, as we understand, does not contain, when perfectly fresh, much ammoniacal matter, but it contains that (mucous matter and urea) which forms (chiefly carbonate of) ammonia during the process of putrefaction which almost immediately ensues: and it has been contended, that if spread out in the field, when perfectly fresh, on the surface, or at most under a very slight covering of earth, its nitrogen compounds would form nitrates, and not compounds of ammonia, and thus as available as vegetable food, with less risk of waste. Nitrates are very rarely found in our soils, and that is against the theory, but the doctrine is nevertheless a fair subject for experiment, and to test it, when clearing out the cattle boxes, let, say 30 tons, be spread at once on an acre of ploughed stubble, for the Swede crop of the ensuing season, and another 30 tons put in a heap on the land, and turned, mixing with earth, &c., according to rule, and then in April or May plough it in on an adjoining acre: the resulting crop, if managed alike in every other respect, will tell the truth on this point. Farm manure may be considered, on the average, as containing about 10 lbs. of nitrogen in the ton; this, in the ordinary course of putrefaction, will form about 23 lbs. of carbonate of ammonia, to fix the ammonia of which requires 35 lbs. of the sulphuric acid of commerce; it will, however, be safer to use a smaller quantity, and it may be thrown among the liquid manure with which you soak the heap; 70 or 80 lbs. per ton of the common green vitriol will answer the same purpose, and as for sulphate of lime (gypsum), which is to a certain extent a fixer of ammonia, it may be well to apply an excess of that, as it has a value of its own as a manure: one cwt. of it may, therefore, be mixed per ton of the manure. Farm dung should be turned once,