DR. VOELCKER ON THE COMPARATIVE VALUE OF ABTIFICIAL AND FABM-YARD MANURES.

Professor Voclcker recently delivered a locture on the above subject, in the Lion Rooms, Shrewsbury.

 T^{h} . CHAIRMAN said the subject upon which they were about to hear a very interesting lecture was a very important one to the farmer.

Dr. VOEL KER said there had been a good deal of talk about the relative merits of farm yard manure and artificials. Some would have nothing but the former, while others evidently thought the perfection of good farming was to use an unlimited quantity of artificial manure. Many of the latter gentlemen troubled themselves very little about what they really bought ; it sufficed for them to expend a certain amount of money on some description of artificial manure, which might be entirely valueless for their particular purpose. Such, for instance, as the London Economic, the essence of Guano, and others. Now, farm-yard manure was an excellent thing in its proper place, and so was any other description of manure. Some artificial manures, which were exceedingly valuable, lost their efficacy from being improperly applied, and a great quantity of valuable manure at the present day was wasted on farms for the want of knowledge necessary for its application. Those who had not sufficient intelligence or general knowledge on the subject of plants would be less likely to go wrong if they followed the old-fashioned routine and used farm yard manure, than by using artificial manure, which at least would be of no use to them. Some knowledge ought to be had of the wants of the different crops that grow in rotation. Those wants could not well be laid before his hearers without a reference to the character or properties of the soil to which they were applied. On the whole, the proper system of manuring required a great deal of rudimentary knowledge, which could not be ireated of in a single lecture. He would, therefore, rather offer a few remarks on the comparative advantages of natural and artificial manure; and each of these possessed peculiarities of their own, which rendered them perfectly well adapted to special purposes. As would be seen on reference to the diagrams, one peculiarity of farmyard manufe was its extreme complexity of character. [The diagram referred to, contained the analysis of the component parts of fresh and rotten manure.] It contained both organic and inorganic food, and was applicable to a variety of crops, such as corn, root crops, and grass land ; and this, no doubt, was the reason why farm-yard manure was entitled to the name of universal manure. It contained everything required by our cultivated crops. But he did not say that it should always be used indiscriminately. Another peculiarity of farmyard manure was that it exercised beneficial effect on plants, not only supplying direct food to them, but producing a highly beneficial mechanical effect on the soil, especially on stiff clay land. He was a strong advocate for long dung being applied as soon as possible. In the yard manure one great peculiarity was the large amount of water—in fact, this amounted ge erally to 66 per cent, and in rotten it amounted to three fourths of the whole bulk; so that for every ton of active manuring matter, the farmer has to cart three tone of useless materials, even supposing that the remaining ton is composed of nothing else but valuable fertili-zing constituents. This would explain why it was that artificial manures were especially adapted for hilly districts, and for fields removed a considerable distance from the farm-yard. He did not think that farmers always took a sufficient account of the wear and tear of horses and men in the transit and application of that manure. If the subject were carefully considered, the farmer would think twice before he carted a heavy load of farm-yard manure some eight or nive miles from a town, and afterwards applied it to a remote field on the farm; and he would also hesitate before producing farm-yard manure at any expense. Under some circumstances, which every farmer ought to know best for himself, feeding cattle did not pay at all; farmers sometimes made up their minds to feed at a loss, calculating on something f r the manure. But it was a very delicate question whether this was the best way of producing manure, or whether it was not better to use the ordinarily-made manure, and app y it in connection with artificial or special manure, the latter term showing that it was adapted for special purposes. If a farm was not in good order it ought to be brought round by general manure, such as farm-yard manure ; but when it was in better condition, to make it go as far as possible, special manures must be resorted to. A peculiarity in artificial manures was that they supplied special fertilizing ingredients, to the exclusion of some others which were abundant in farm-yard manure. For instance : In the best Peruvian guaso, there was a high per centage of annuovia, with about 20 or 25 per cent of phosphate of lime; and that guano was applied for getting an additional crop of corn. Some other artificial manure-bone dust, for instance-were valuable on account of their containing phosphate of lime, which w s