

fifth the price, are confined to the action on the health and digestion of the animals of the small amount of stimulating and carminative seeds which they contain. In fact, so far, they are sauce or medicine, rather than food. As usual they are likely rather to increase than to diminish the appetite for further nutriment. Still, it is possible that, if judiciously compounded, they may be of service in keeping horses in a more healthy state of body, or in aiding the digestive powers of weakly animals. Still it should always be borne in mind that such preparations can never supply, in the ordinary way, the proper amount of the necessary ingredient contained in ordinary food. "I feel bound to say [observes Mr. Lawes,] that I should require much clearer evidence than any that has hitherto been adduced, to satisfy me that the balance-sheet of my farm would present a more satisfactory result at the end of the year were I to give to each horse, ox, sheep, and pig, a daily allowance of one of these costly foods."

THE PROGRESS OF ENGLISH AGRICULTURE.

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The farmers were too often worthy of their ploughs. In Leicestershire, where rich pastures made tenants indifferent to careful cultivation, the present president of the Royal Agricultural Society, Lord Berners, found the farmers, as late as 1825, intentionally ploughing crooked with a long string of horses; and the Duke of Rutland, when in the chair at an agricultural meeting, was alarmed lest a storm of disapprobation should disturb the harmony of the day, because Lord Berners' brother ventured to suggest ploughing straight as a first step toward improvement, and exchanging the strings of slow hairy-legged horses for currie pairs of lively steppers. Young calculated that at least one-half of the draught cattle might have been saved in Essex. The long file of men and beasts which were wasted upon the work provoked his indignation. He exhorted the farmers to raise less oats and more wheat, and to expend their summer provender in fattening bullocks, which were food for man, instead of maintaining superfluous horses, whose ultimate destiny was to furnish food for the kennel. Truths which to us seem truisms were heresies then, and such a simple suggestion as that of Young was distasteful to many a farmer of the olden time. There is no ground to triumph over them, for they were what their circumstances made them, but we may at least rejoice that the present system gives us an ox to eat where our ancestors had a horse to feed.

The pecuniary gains of agricultural progress are not to be estimated by the mere saving in wages, horse-labor, seed, or manure. Thorough draining not only diminishes the cost of ploughing, but it renders it possible to grow great crops of roots—of mangold-wurzel from thirty to thirty-five tons an acre, and of turnips from twenty to twenty-five tons. Ten times more live stock is thus fed on the land than it maintained before. The corn crop follows the roots in due course without further manuring, and is made certain, in addition, even in wet seasons. The well-shaped modern plough saves in horse-labor, as compared with the clumsy old-fashioned swing-plough, a sum which can only be calculated in reference to the tenacity of each kind of soil, but which on an average exceeds the power of one horse, besides enabling youths, skilful but not strong, to act as ploughmen, encouraging deep ploughing, the foundation on the best