

artificial manures, which has recently worked such wonders in agriculture, and which is touched upon as follows in "The new and admirable Arte of Setting Corne," by H. Platte, Esquire, published in 1601 by "Peter Shorte, dwelling at ye signe of ye Starne on Bred Street Hill :"—

"Shanvings of horne, upon mine own experience, I must of necessity commend, by means whereof I obtayned a more flourishing garden at Bishopshal, in a most barren and unfruitful plot of ground, which none of my predecessors could ever grace or beautifie either with knots or flowers. I have had good experience, with singular good success, by strewing the waste sope ashes upon a border of summer barley. Malte duste may here also challenge his place, for foure or five quarters thereof are sufficient for an acre of ground. And sal armoniakke, being a volatile salt first incorporated and rotted in common earth, is thought to bee a rich mould to plant or set in. Dogges and cattes and other beastes, and generally all carrion, buried under ye rootes of trees, in due time will make them flourish and bring forth in great abundance."

Thus we find that so long as two hundred and fifty-seven years ago an Englishman "had discovered the utility of ammonia in bones and flesh." Even in agricultural implements great inventions were suggested, and forgotten, because the farmers of England were not prepared to receive them. The reaping-machine carries us back to the agriculture of the Gauls. The horse hoe, the drill, and the water or wind driven threshing machines were employed in a few obscure localities, but it was not until necessity made farmers adventurous, and facilities of communication rendered one district conversant with the doings of another, that they grew into general use. Whatever, therefore, might have been effected on particular estates, the condition of English agriculture at the close of the eighteenth century nearly resembled that of the greater part of continental Europe at the present time. Wheat in many districts was rarely cultivated and rarely eaten by the labouring classes. Rye, oats, and barley were the prevailing crops : a naked fallow, that is to say, a year of barrenness, which was too often a year of exhausting weeds, was the ordinary expedient for restoring the fertility of soil. Farm-yard dung, exposed to the dissolving influence of rain, and carelessly applied, was almost the only manure. Artificial grasses, with beans, peas, and cabbages, were rarely grown, and turnips were confined to a few counties, where they were sown broadcast. Cultivation (except ploughing and harrowing) was performed almost entirely by manual labour; the rude implements were usually constructed on the farm, and often in a way to increase labour instead of to economize it. The cattle were chiefly valued for their dairy qualities or for their powers of draught, and were only fatted when they would milk or draw no longer. The greater number of breeds were large-boned and ill-shaped, greedy eaters, and slow in arriving at maturity : while, as very little winter food, except hay, was raised, the meat laid on by grass in the summer was lost, or barely maintained, in winter. Fresh meat for six months of the year was a luxury only enjoyed by the wealthiest personages. Within the recollection of many now living, first-class farmers in Herefordshire salted down an old cow in the autumn, which, with fitches of fat bacon, supplied their families with meat until the spring. Esquire Bedel Gunning, in his "Memorials of Cambridge," relates that, when Dr. Makepeace Thackeray settled in Chester about the beginning of the present century, he presented one of his tenants with a bull-calf of a superior breed. On his inquiring after it in the following spring, the farmer gratefully replied, "Sir, he was a noble animal; we killed him at Christmas, and have lived upon him ever since."

The reclaiming wild sheep walks, an improvement in the breeds of live stock, an increase in the quantity of food grown on arable land for their support, and a better rotation of crops, are the events which distinguish the progress of