

albumen, or saline matter, of which three substances potatoes which contained the largest quantity of starch were those which were most likely to fail; while those containing greater quantities of albumen and saline matter were more likely to succeed. They would further observe, that if they top-dressed a portion of a field of potatoes with a saline substance, and left the other portion of the field undressed, the latter might prove a failure, while the former would prove an enormous crop. It had been still further ascertained that if they planted seeds next year taken from the top-dressed potatoes, they would find their produce much greater than those raised from the undressed portion of the potatoes. It was in this manner they were proceeding; and when they had worked out their operations, he had no fear but they would be able to find a remedy to the failure of the potatoe crop. But it opened up a field which applied to various crops, and would lead them to obtain such a control over it that they could not only increase the quantity, but improve the quality of the produce. He then referred to the ashes of the plants, which remained when their substance was burnt. After giving a history of various chemical opinions which had been held at various times regarding the origin of the matter which composed these ashes, and of their use in the plant, he stated that it had now been ascertained that these ashes contained no fewer than eleven distinct substances—potash, soda, lime, magnesia, &c.—that they existed in different plants, and that all the substances thus present in the plant must also be present in the soil, as it was from the soil that the plant derived its supply of this earthly matter. This threw a beautiful light upon the causes why plants would not grow in certain situations; for if a plant required a large proportion of lime, for instance, and there was little or none in the soil, it was clear that the plant would either refuse to grow, or that it would be stunted in appearance, and would soon exhaust the land. To remedy this it was necessary to supply the deficiencies of the land, so to speak, and to supply lime if lime was wanted. On the other hand, if lime was not wanted, as he believed it was not in this district and in the neighbourhood of Edinburgh, then it was unnecessary, and injurious to the land, to apply lime. He concluded by urging upon farmers to economise their manures, and compensate to the land as much as possible for what was annually carried away by the produce.

LINCOLNSHIRE FARMING.—In the Wolds, as they were called, meaning the wealds or wilds of Lincolnshire—a term expressive of their natural sterility—in those Wolds, not yet forty years ago, in the beginning of the present century, Young, in his "Agricultural Tour," described them as passing through a country covered with furze bushes. Lord Yarborough, said Young, was an excellent landlord, and he wished him no more harm than that he should be thrown from his hunter into the middle of one of those furze bushes; for a little prickling would do him a deal of good, and would tend much to the benefit of that part of the country. That same Lord Yarborough lived to plant four thousand acres of trees, which had now attained a height of from fifty to sixty feet, and, what was more important, he lived to bring into existence a race of tenantry now the glory of the land; tenants who occupied from 500 to 2,000 acres of land each. Land, which thirty years ago was covered with furze-bushes, and was not worth 5s. an acre, now produced 25s. an acre. The rent of the land had increased five-fold, whilst the wealth of the tenantry had also augmented in the same proportion. Every farmer whom he visited possessed the finest hunters. Many have carriages. Some whom he did not visit had hot-houses and pineries; and yet, whilst this was the situation of the tenantry, the landlord had benefited five-fold. But what was better than all, was the condition of the labourers. He had never heard of such labourers—£38 a year for wages—all of them kept a pig, a cow was kept for each, and they were compelled to eat meat three times a day. Those who had visited Lincolnshire must have witnessed the beautiful architecture with which every village of that county was adorned. Such churches and such steeples! displaying more exquisite taste and skill than

was to be found in any other part of the country. But, lofty and beautiful as were those churches, they were, for the most part, outvalued in height by the ricks which presented themselves everywhere. Such ricks! streets of ricks—acres of ricks, disposed in rows. Near Lord Yarborough's house there were streets of ricks as long as the longest street in Tamworth; streets longer than the length of the Parthenon at Birmingham, and all from land which, 35 years ago, was not worth 5s. an acre. And what became of all this abundant produce? It went to the manufacturing districts to be disposed of. But there was another district in the vicinity of the metropolis of a county, not five miles from the town of Lincoln, in the midst of which stood a column, bearing this inscription:—

Columnam hanc
Utilitate Publicæ
D. D. D.
E. DASHWOOD.
MDCCLI.

In 1751 that column was erected in the centre of a desert, to guide the traveller in the midst of a howling wilderness. On that plain might now be seen hay-ricks standing together in rows, almost like the squares in London. It was, in fact, a city of hay-ricks. There was there, also, the remains of an asylum of the Knights Templars. There lived there now a farmer of seventy years of age, who, in thirty years, had realised a fortune of £60,000. They might ask him (Dr. Buckland) how had those results been produced? They had been produced by a judicious application of capital, and of the good sense which was the characteristic of the farmers of England. The present proprietor of the Templars' Asylum imported ship-loads of bones and oilcake to be ground for his farm. The cattle ate the straw, and produced that manure which was the foundation of all success of the crops upon his farm. In that and other farms in that district, the produce was never less than 30 bushels per acre, and that was only one example out of many, of what could be done by judicious application of capital.—*Dr. Buckland at the Tamworth Dinner.*

TO THE RIGHT HONOURABLE EARL SPENCER, PRESIDENT OF THE SMITHFIELD CLUB.

MY LORD,—About four years ago I had the honour of submitting to your lordship a statement of the advantages which it occurred to me would accrue from an ascertainment of the gross and net weight of the animals exhibited at the annual meetings of the Smithfield Club; and subsequent observations having tended to confirm that opinion, I trust I shall be excused for again bringing the subject under your lordship's notice.

The recent regulation of the club, requiring a statement of the weight of the carcass of each of the prize animals to be transmitted to the secretary, is a step towards the attainment of the object I have in view; but the information thus obtained will be incomplete so long as the returns are unaccompanied by means for comparing the net with the gross weight.

Animals, similar in respect to age, maturity, and gross weight, differ essentially in value, from the circumstances of the quarters of some bearing a larger proportion than of others to the weight alive; and it is only by a comparison of the gross with the net weight—coupled with the circumstance of the weight being equally distributed over the carcass, or predominating on the prime or coarse parts—that the respective degree of excellence is to be intelligibly communicated or recorded.

The proportion which the carcasses of animals in a ripe state bear to the gross weight is, moreover, an indication of quality, and ought to be adverted to in estimating the relative value of the competing animals; not merely of the same variety, but what is more difficult of attainment, in determining the merits