

us the unquestionable West Highlander, whose headquarters are now fixed in Argyleshire and West Perth, and the somewhat more equivocal Galloway; perhaps even the rough east country stot, from Aberdeenshire and its associate counties, may claim some *locus standi* in this enumeration. In Ireland we trace no distinctive breed. The distinction of the Irish ox and heifer was, that they were the worst shaped and worst fleshed animals which ventured to appear in an English market. "Good things scarce; plenty of Irish," became an almost proverbial description of a cattle fair. The same system of haphazard breeding, which overran a large portion of England and Scotland, prevailed universally in Ireland. As with the human, so with the bovine race. Each endowed with a marvellous fecundity: maidens and heifers equally precocious. The same circumstances of penury, hardship and neglect which made the Irish (not "the finest," but) the most degraded peasantry who came into permanent contact with civilization, made the Irish ox the most degraded of oxen.

So stood the case a short century ago. But a great change was at hand. The early systematic improvers of our stock took the readiest, and perhaps, under the circumstances, the most scientific course. Having come to a definite end, in the main, an accurate perception of the objects which it was desirable to attain, they selected and commingled, without any regard to affinity of race, the animals which appeared likely to realise their vision. Immediate success attended their efforts. The merits of the first cross are proverbial, and even while we write, the newspapers offer us a confirmation of the proverb in the statement, that the prize ox, which this year furnished the baron of beef for the Christmas festivities at Windsor Castle, was bred by Prince Albert, was an animal of rare symmetry, quality and fatness, and was the produce of a buffalo cow by an Ayreshire bull. In sheep, Bakewell put together white-legged and black-legged, horned and polled, long-wooled and short-wooled. Nor was the case much different in cattle. The late Earl Spencer traced much of his standard short-horned blood to a Galloway cow, which is still, we believe, a luminary of the Herd-book, and which produced one or more animals of agricultural celebrity. Still the desire for something distinctive prevailed; and as every three or four years brought a fresh generation of these animals, their fleeting series enabled a successful experimentalist to establish something of uniformity within the limits of one human life. So, from most heterogeneous materials, breeds both of cattle and sheep, having respectively distinctive qualities, were called into existence. Of either sort one—of cattle, the improved short-horn, and of sheep, the new Leicester—obtained a decided pre-eminence. They gained a footing in almost every agricultural district of England and Scotland. The uncivilised herds and flocks of our predecessors shrank before them as rapidly as the red man before the white in the New World; and though fashion certainly pushed them into some districts for which they were unsuited, and in which they degenerated rapidly, yet in the main they have retained their conquests. No doubt they trench on the dominion of the old and pure races. They drove in their outposts, and even made inroads into their territory. Meanwhile the possessors of the old races were not insensible to the spirit of improvement which was abroad, nor to the fierce competition which was forced upon them. To them, as to men in higher station, three courses were open. They might discard their own stock as unequal to the occasion, and adopt that which the enterprise of other men placed within their reach; or, following the example before their eyes, they might aspire to success by crosses of which their own herds should be the foundation; or, thirdly, they might seek improvement by judicious selection and rejection within their own do-

main. Happily, they adopted the last course, and the purity of our old races of cattle was maintained. Who would not regret the disappearance of the beautiful Devon and the picturesque West Highlander? Either position or design had kept these races pure, and they retained all the distinctive marks of purity. Thus they were improved without being adulterated, and remain to this day as marked in their respective characteristics as they were before an improved Short-horn or a new Leicester had been called into existence. Their improvement has perhaps not been so rapid as that of the new breeds, but they did not start from so low a point of degradation. Nor should it be forgotten that they occupy districts below the average of the kingdom in fertility. On the whole, they have maintained the contest for superiority with various success—a success regulated perhaps at times by fashion and caprice, but resulting on the whole in good judgment and truth.\*

We should now, perhaps, be in a condition to estimate the results of a struggle which has continued for more than half a century. But before we can pronounce even a qualified opinion, we must have a very clear perception of the principles on which a decision ought to be founded. The real and only question for the farmer is, what breed of cattle will year by year yield me the largest money return per acre, or per given quantity of various sorts of food consumed by them? And this question is not settled by saying, Taken—ten tons of Short-horns and ten tons of Devons; 50 tons of food of equal quality were consumed by each lot; the short-horns give beef as 21 to 19, or *vice versa*. 1st, we must know the respective histories of each ten tons; we must have a debtor and creditor account of each up to the time of weighing in. The one may have credit for services in the dairy, the other for services in the team; or the creditor side may be blank in the case of either or both. We must *here* consider the breeder and the feeder as one man. Before we can answer the question so interesting to him, we must know the antenatal cost of each 10 tons, and their respective debits and credits up to the day when they leave the hands of the beef manufacturer for the shambles. 2ndly, We must know which fetched the most money—the beef represented by 21 or that by 19. It is easy to say, "I have bred a beast of rare symmetry, great size, early maturity, first-rate quality." Equally ready are the inquiries, "After how many failures?—At what cost?—How stands the balance?" These questions are answered by many brave and contradictory assertions, by many wild and contradictory guesses, but by no statistics on which we can found a safe conclusion. And yet on the answer depends, on average agricultural farms suited to any description of cattle, the whole question of successful breeding and feeding. The statistics are not forthcoming, first because few farmers keep any accounts but a cash-book; and secondly, because considerable intricacy arises from the circumstance that the breeder and feeder (in the case of cattle) are ordinarily not the same person. To those who give to the public accurate statistics of one farm, or of one animal, we are under great obligations; but the questions at issue can only be solved by a multitude of instances. Being therefore

\* A split has arisen in the Herefords, of which we cannot explain the origin, but which we regret, though we cannot say that it has produced any deterioration. The difference, though small, is decided, and the respective parties are of course very positive. The general Hereford is an animal with a white face, upward horns, and a tawny side. The animal of the offset has a speckled face, generally a broad white stripe down his back, and shorter legs and more horizontal horns than his relative. Of the speckled-faced Herefords, the late Mr. Price, Earl Talbot, and Sir F. Lawley have been the most distinguished breeders. The contest between speckled-face and white-face is not worth carrying on.

"Facies non omnibus una  
Nec diversa tamen, qualis decet esse sororum."