

on the face; or what was formerly called a "cheery eyed 'un," having a little red under the eye; and if a little white does come along the back, or a splash along the belly and thighs, they well know "whence it comes," and put the heifer carefully aside for home breeding, as the foreigner is not yet educated up to the ins and outs of the old breed. In the United States and far west of America the large breeders there cannot be yet induced to buy an animal with anything but the orthodox red with white face and white mane, thinking that any deviation must be a "grade;" but in Canada they do not mind a little white, as the farmers there know more of England and the Hereford breed in general. Many of the best cattle have slightly dark tips to their horns and a few specks of black on their nose. These things should be guarded against, but I am not of opinion that it is a fatal objection. I have seen the black specks crop up on the noses of some of the cattle descended from the best and oldest herds, and think a good animal should hardly be rejected on this account. There is rather a prejudice at present against cattle of the light red colour; but any experienced man will bear me out when I say that the light red, as a rule, are of a better quality and feed quicker than the dark red ones. The late Lord Berwick's cattle were usually of this light red colour, and they were celebrated as their descendants now are celebrated for their quality and aptitude to lay on flesh. The early records of the breed show that they were carefully bred in 1776 by Mr. Tompkins and others. At the first meeting of the Smithfield Club, in 1799, the 1st prize was won with a Hereford ox by Mr. Westcar, and this gentleman took the 1st prize with an ox of this breed for twenty years in succession at the London cattle show, which was open to all breeds. The Herefords of this period were of gigantic size, and usually kept for working on the land and fed off afterwards. No two year old or baby beef in those days!

The sales of Mr. Westcar's oxen are worthy of note. An extract from his books gives the following details:—

1799. December 16, two oxen.....	£ 200 0 0
1800. December 4, one ox.....	147 0 0
1800. December 13, one ox.....	100 0 0
1801. November 26, six oxen.....	630 0 0
1802. November 26, one ox.....	100 0 0
1802. November 31, one ox.....	126 0 0
1803. December 4, two oxen.....	200 0 0
1803. December 4, one ox.....	100 0 0
1803. December 19, one ox.....	105 0 0
1803. December 10, one ox.....	105 0 0
1804. December 3, one ox.....	165 0 0
1805. December 4, one ox.....	100 0 0
1811. November 23, one ox.....	105 0 0

Total for twenty oxen.....£2123 0 0

Thus the twenty oxen averaged £106 6s. each. Again, the Smithfield record shows that from the year 1799 to 1834, Hereford bullocks had taken eighty-eight

premiums at the London fat stock show, more than double the number any other breed of cattle took in the same period. I have quoted the above particulars to show the great merits the Hereford breed of cattle possessed in the last century and the early days of this; and it is hardly worth while stating that since that time they have gone on steadily progressing and keeping pace with other improved breeds, and whenever brought into competition with them they hold their own.

The early sales which we have recorded show that they were most highly esteemed in 1819. Fifty two head of Mr. Tomkins' cattle made £4673 14s.; there were among these twenty-three steers, so taking the breeding stock the average price is £145. Again, in 1816, a herd of 116 head of Mr. Price's cattle made £6724 4s. 6d., which brought an average of £57 19s. 4d. This includes 27 yearling heifers and 21 two-year olds.

One of the first who set to work to alter somewhat the Hereford type, and in some way reduce the scale and get them to mature earlier was the late Mr. Knight, of Downton Castle. From memoranda supplied by the late Mr. Salwey, of the Cliff, Ludlow, to the well-known authority on cattle, Mr. William Housman (to whom I am indebted for some of the facts of the early breeding of Mr. Knight's stock), Mr. Knight was less particular about size (not neglecting ~~to~~ ~~than~~ ~~about~~ symmetry and quality. The old Herefords had size for anything; the difficulty was to control the tendency of their vast and vigorous growth to produce coarse and ungainly animals, with what Mr. Knight used to call "lambs' knees and sickle hocks." Anyone who has seen Downton Castle can easily imagine that cattle which were heavy and lumbering could not easily get up and down the hilly ground situated round the castle. Mr. Knight drafted all those which had not well set-on legs and "bull calves that could not trot properly."

The Downton herd sprung from three of the best herds of that day—Mr. Tully's, Mr. Tomkin's and Skryme's,—the light red color mentioned before as being usually the color of Lord Berwick's tribe of cattle, which is descended in a distinct line from the Knight herd. The darker color and signs of the old tick face come from the Tomkins blood, as his cattle were usually mottle-faced; and the Tully cross gave the greys for which Downton was so celebrated, and were called the Knight-greys. These latter have almost died out, but, as I stated before, the white occasionally asserts itself, and when it does there is no disgrace attending it, since its illustrious origin is so well known.

Such is an outline of Hereford history from the latter half of the last century

up to about 1814. When Lord Berwick's name began to become well known among Hereford breeders, as I have shown, he perpetuated the Knight tribe, and his Bulls have been most extensively used, with the greatest benefit, in very many herds in England and abroad. Most of the Hereford breeders of the present day follow the type set by him and Mr. Knight, and endeavor to get their cattle deep bodied, heavy fleshed, on short legs, and small bone; but some have gone too far and got them too small and compact, and not enough lean meat. This was contrary to Mr. Knight's intention, as he kept up the size as far as he considered it compatible with symmetry and quality.—*The Agricultural Gazette.*

#### SYRUP FROM FIELD CORN.

*Sir,*—It may be interesting to farmers to know the result of experiments made by the Department of Agriculture in the United States. The result is stated as follows: The kinds tried were three coarse growing white field corns. The stalks grew in drills three feet apart and about nine or ten inches apart in the row. The ears were plucked after they had thoroughly ripened and the husks were dead and dry. The corn was plump and sound and yielded at the rate of 69 bushels (of 56 pounds) to the acre. The stalks were then topped, stripped and crushed, and the juice proved to be the best obtained from corn stalks at any period of growth or any variety. The machinery at the command of the department being imperfect, little more than half the amount of juice present in the stalks was obtained. Perfect machinery would recover 70 per cent. An acre of corn stalks yielded 27,240 lbs. and the yield of syrup from this was 1166 lbs. Had the full quantity of 70 per cent. of sugar recoverable with good machinery been obtained, the yield would have been 1807 lbs. From the field corn syrup 39.3 per cent. of sugar was yielded. This is equal to 458 lbs. sugar to the acre. Early Amber sugar cane yielded 32,415 lbs. stalks per acre. From this 2,100 lbs. syrup was obtained. The syrup yielded 47.5 per cent. of sugar, or nearly half a ton of sugar per acre.

The nutritive value of the pressed stalks is nearly, if not quite equal to that of the unpressed stalks, weight for weight. The yield above shown was on the grounds of the Department. The stalks were grown in drills three feet apart, and although a good crop, there is no reason, it is stated, but that upon good land the estimated yield to the acre could be obtained. These particulars are gleaned from the Department of Agriculture Report for 1879.

Yours respectfully,

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