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NOVA SCOTIA

JOURNAL OF AGRICULTURE

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Omnium rerum, ex quibus aliquid acquiritur, nihil est agriculturâ melius, nihil uberius, nihil homine libero dignius.—Cicero: de Officiis, lib. I, cap. 42.

VOL. IV.

HALIFAX, N. S., JULY, 1881.

No. 17.

WHAT IS A HEREFORD?

The chief points to be looked for in a good Hereford are, first, that the colour should be a distinct red, not too dark or too light; white face, mane, breast, and belly white, end to tail; and white legs as far as the knees and hock, sometimes running up the flank. The bull should have a good masculine head, not too long, broad between the eyes, which latter should be large and prominent, but with a mild look about them, denoting docility and equality of temper; the horn should be of moderate strength, springing straight from the head. The cow's head should be much the same, but finer, and her horns should have a mane and turn upwards slightly; they should be in both cases of a foxy white, although they are occasionally tipped with black; the nose should be a pure white or flesh colour. The bull should have a good rise of crest, deep sloping shoulders, well-developed brisket, straight back and belly line, wide loin, good springing ribs, moderately broad hips, tail well set on and falling in plumb line to the hocks; the hind-quarters should be long from the hip back; the thighs, which are a very important point, should be large and full, showing plenty of width across when you stand behind, and should be well meated to the hocks; the whole carcass should be set square on good short legs standing well apart, and be covered with firm flesh of good quality, and a mellow hide of soft but not too fine hair, giving the impression when you touch it that it will stretch to any extent; but the test of

"touch" is extremely difficult to explain in words, it can only be learnt by practice.

There can be no two opinions on the question of what Hereford cattle are—they are most undoubtedly a distinct and pure breed of great antiquity. Their early history is like that of many others, rather shrouded in mystery; but it is generally allowed that there has been a breed of cattle red and mostly with white face and markings for at least 200 years in the county of Hereford and the neighbouring counties. The late Mr. T. A. Knight, of Downton Castle, who lived in the last century, and who was a great authority on all matters of antiquity, besides being one of the most celebrated of early breeders of Hereford cattle, asserted that Lord Scudamore, who died in 1671 introduced cows of the red with white face breed from Flanders. There was also a breed of cattle known in Herefordshire that were "white with red ears," and so far back as the tenth century it is recorded that there was a law of fixed compensation to be paid for injury done by one prince to another at 100 white cows with red ears and a bull of the same colour; but if the cattle were of a dark or black colour the number was to be 150. Speed records, "Maud de Brebois, in order to please King John, who was highly incensed against her husband, made a present to the queen of 400 cows from Brecknockshire, all 'white with red ears.'" These facts were collected some years ago by Mr. Thomas Duckham, the late editor of the

Hereford *Herd Book*, and they are accepted as being correct both in this country and in America, where the breed is so fast increasing in popularity at the present time.

From these records I think it may be fairly considered to be proved that the Herefords of to-day have sprung directly from the old breeds of the district, the old grey Hereford coming from the white cattle with red ears, and an occasional white Hereford has cropped up as an additional proof of this. In 1857 there was a white Hereford shown at the Birmingham fat stock show. Some of the old light greys were almost white. I know at the present time several Herefords of the finest blood, that are nearer white than red, although it is a well known fact that they have never had a stain of any other breed in their pedigree.

Are not the present Herefords a mixture of these cattle that were known as far back as the tenth century (being "white with red ears") with the Flanders cattle, imported by Lord Scudamore previous to the year 1671, which were red with white faces? The first-mentioned were usually the largest, but with great quality and good touch; the grey were wonderful feeders, and of a medium size; while the red with white face usually were the smaller cattle, finer in the bone, and altogether more taking to the eye; so fashion by degrees excluded the others, and now the red with white face reigns triumphant.

However, breeders do not object to an occasional bit of tick or mottle appearing

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,

D. BLACKWOOD.

NOVA SCOTIA REGISTER OF THOROUGHBRED STOCK.

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SHORT-HORN DURHAM BULLS.

116.—HONESTY.

Red with little white. Calved 14th June, 1880. Bred and owned by Thomas B. Jacques, Church Street, Cornwallis. Sire Colchester King 29. Dam by Gwynne of the Forest 16, gr d by Bell Duke of Markham 7, g gr d by Yeoman 2.

117*—BLUCHER.

Dark red with a little white and roan. Calved April 4th, 1880. Bred by John W. Margeson, Cornwallis, N. S. Owned by Benjamin Eaton, Sheffield Mills, Kings Co., N. S. Sire Favorite 26. Dam by Roan Duke 78, gr d by Lobo Lad 1, g gr d by Sir William 3*.

118*—MORNING STAR.

Light roan. Calved October 10th, 1878. Bred by Isaac Chipman, Cornwallis, King's Co., N. S. Owned by W. H. Hogge, Lower Stewiacke, Co. Colchester. Sire Bretwalda 62. Dam by Sir Roger Tichborne 45, gr d by Lobo Lad 1, g gr d by Sir William 3*.

119*—BELMONT.

Red and white. Calved April 10th, 1881. Bred and owned by Robert Bacon, Windsor, N. S. Sire Duke of the Valley 79*. Dam Princess Josephine 4th 68 by Young Heir 31351 Eng., 3326 Ca., gr d. Princess Josephine 2nd by Duke of Cambridge 33586 Eng., g gr d. Princess Josephine by Grand Knight 26303 Eng.,—Josephine by Prince Alfred 22567 Eng.

120*—STRATHAVON.

Roan. Calved April 26th, 1881. Bred and owned by Robert Bacon, Windsor, N. S. Sire Duke of the Valley 49*. Dam Princess Royal 69 by Royal George 44, gr d Princess Josephine 4th by Young Heir 31351 Eng., 3326 Ca., g gr d Princess Josephine 2nd by Duke of Cambridge 33586 Eng.,—Princess Josephine by Grand Knight 26303 Eng.,—Josephine by Prince Alfred 22567 Eng.

SHORT-HORN COWS AND HEIFERS.

93*—DAISY DEAN.

Red with white on forehead. Calved January 14th, 1887. Bred by C. C. Hamilton, M. D., Canard, King's Co., N. S. Owned by J. W. Margeson, Cornwallis. Sire Favorite 26. Dam by Gwynne of the Forest 16, gr d by Lord York 39, g gr d Sir William 3*.

94*—LADY MAY.

Roan. Calved May 7th, 1881. Bred and owned by Robie Moine, Cornwallis, King's Co., N. S. Sire Snowball 83. Dam by Sir Roger Tichborne 45, gr d by Lobo Lad 1, g gr d by Sir William 3*.

WE learn from Mr. Thornton's Short-Horn Circular that the Fourth Baron Oxford has died in England at the age of twelve years. This celebrated bull was bred by the Duke of Devonshire from Lady Oxford 5th, one of the grandest cows of her tribe. For years he was the pride of Holker, and begat most of the splendid animals that raised the He'ier herd to the highest rank in the British kingdom. He was in use in Lord Lathom's herd until August last, when, in well matured years and sound old age, he quietly sunk and died. Mr. Thornton's notice concludes with the remark: "He gave to his stock refinement and quality that will ever stamp him as one of the best sires in the golden age of Short-Horns." We have, fortunately, a strain of his blood in some of our Nova Scotian

Short-Horns. Baron Lightburne 2nd, owned by the Union Society of Cornwallis, was sired by Fourth Baron Oxford. Viscount Oxford, sire of the Laceyfield St. Nicholas and Queen Caroline, was sired by the Sixth Baron, and the Viscount's dam, Graceful Duchess, was by Fourth Baron Oxford himself. The dam of Wetherby Star, owned by the Farmers' Society of Cornwallis, was also sired by the Fourth Baron. The name of the Fourth Baron in a pedigree will be noted by our breeders.

THE "Season" in England is thus sketched in the *Agricultural Gazette* of 20th June:—

We have had a poor time with our turnips. That mischievous pest "the fly" has proved too strong for us, and sowing has been repeated in some cases three times without securing a plant. There is some consolation in the reflection that later sown turnips will stand the attacks of these creatures better than those planted in May or early in June; and also that the white and yellow turnips may be sown "all in good time" for many weeks to come. Early turnips to take forward lambs in the month of August, are likely to be very scarce, and, as early sown rape for July is also almost all prematurely "eaten off," the prospects of "keep" during the late summer and early autumn are certainly discouraging. In our own case we have been unfortunate in a high degree. We lost our cabbages through the frosts of January, and our rape, on the same ground, through the attacks of the fly in May. We are now ploughing up again with the intention of drilling in another lot of rape and swedes.

Reviewing the season up to the present time, we cannot report upon it with feelings of great satisfaction. Speaking from a central position (Salisbury) in the south-west of England, we cannot express great hopefulness as to the corn crops. Wheat, as a rule, is short in the straw, and thin on ground; but little is as yet shot out into ear, and still less, if any, is in bloom. Harvest, wherever it commences, is not so good as until August 8—not a particularly early date since wheat is here sometimes cut a week before this date. Red rust has appeared on the lower flags of the wheat, and this we think bodes no good to the prospects of yield. It is of course too early to speak with confidence, but at present we do not look for a good crop of wheat.

Next as to barley; the appearances are more favorable, especially in the cases of early sown and late sown pieces. The ground which was trodden with sheep during February and the first half of March, was much injured by the soaking rains of that period, and ploughed up rough. The drying north-east wind that immediately followed this fit of extremely wet weather rapidly dried the land, and rendered it unworkable. The barley, therefore, went in badly, and for many weeks remained stunted and weak. Recent rains have improved the barley, and it is quite possible that we may have a full crop. Oats look well. Clover hay is light with exceptions. We have a heavy cut of two-year old clover and sainfoin, and a light crop of seed hay. Water meadows will yield a heavy cut. Sheep are doing well on vetches, but the keep prospects are discouraging. Without cabbage, rape, or early turnips, it is not easy to see our way in the future. We however continue to hope on, as there is still time before us to secure a stock of winter fodder.

The season has been bright but unkind, brilliant but heartless. Taking it altogether, we feel we ought to be content with it, especially after the horrid experiences of past years. But keen frosts in May and frosty nights in June are not agreeable, and temperature sinking from 80° to 40° on two consecutive days is certainly trying. The yellow tips to the leaves of the wheat and the pinched look of the unfortunate bedded out plants, which do not seem at all at home even in the middle of

June, attest the severity of the trials to which vegetable life has been exposed. The question presents itself whether we are ever likely to get just the sort of season to suit us. We should not object to a regular old-fashioned winter and a full dyke February, provided we could in turn enjoy a dry March, a warm, weeping April, a showery, genial, frostless May and June, a hot but sloppy July, and a hot and dry August, with succeeding weather fitted for the ingathering of the crops and the prosecution of autumn work. This is what we should call a good season. Are we ever to see such a thing again? And yet the characteristic of each month to the popular mind is just what we have sketched.

Our readers will find in another column a letter from Mr. D. Blackwood, in which he calls attention to experiments made at Washington, D. C., on the extraction of syrup and sugar from mature corn stalks, after the ripe grain has been gathered. If our correspondent can teach our farmers to get their meal and syrup and sugar for their families, and fodder for their cattle, all from the same plant, he will deserve to rank above the man who makes two blades of grass to grow where only one grew before.

THE FERNERY AT ROSEVILLE, LISMORE, CO. WATERFORD,

The descriptive touches, reflective sentiments, and graceful cadence, of the following lines on "The Fernery at Roseville" are sufficient to justify the reproduction of them in this distant part of the world; but when we mention that Mr. Richard Power, the talented Superintendent of our Public Gardens, received his early inspiration from the author of the lines, (Mr. W. H. Baldwin, at Lismore Castle), they acquire a local colouring that will heighten their interest to our gardening readers:—

A few short years—it may be less—
And he who formed this curious grot
Must pass to other scenes away:
Say, stranger, shall he be forgot?

Will this cool cave, with ferns made green,
And rocks with softest moss o'ergrown,
Recall to mind the hand that planned,
The hand that claims this work its own?

How many an hour from early dawn,
Till eve with crimson flushed the sky,
With labour love these cells he formed,
Or rear'd the trembling arch on high.

Here when soft sleep its influence sheds
Alike on youth and tottering age—
Here still he lingered thinking o'er
What work the morrow should engage.

So, day by day, he snatched betimes
An hour from morn, an hour from night;
And, slow but sure, each stone he laid,
Nor left it till he fixed it tight.

And thus, while patience and while zeal
Together in one business run,
All difficulties disappear,
And now his work of love is done.

Perhaps some few, with artist eye,
Will kindly view and closely scan
Each tiny arch, each hall and nook,
And ask, Was all done by one man?

Yet many more—the young, the gay—
With lightsome hearts, won't stop to view,
Nor dwell on this, nor value that,
But, thoughtless, hurry quickly through.

And be it so. Let each esteem
Whate'er he sees, as best he may;
The work itself will still be here
When he and I have passed away.

But others will, on other days,
A visit pay to this quaint spot
And kindly say before they leave
"The builder should not be forgot."

Thus trifles over, such as these,
Our thoughts will fill and seize the mind,
And self conceit will whisper, too
That we should leave a name behind.

But oh! may all, whate'er the lot
To them on this frail earth is given,
Build up, while here, a lasting home—
An everlasting home in Heaven.

W. H. B.

We have frequent enquiries as to the peculiarities and merits of the respective breeds of Pigs. The following article from Professor Sheldon's *Dairy Farming* embraces almost everything that can be profitably said on the subject:

Most writers agree that the different varieties of domesticated swine in this and other countries have been derived from the common wild swine of the ancient forests. Ages ago, these animals roamed at large in Britain, where they formed common, and often dangerous, objects of the chase for the nobles of the land. Reminiscences of the wild boar still remain in the names of places in some parts of the country, as, for instance, in the moorlands of Staffordshire, "Boar's Grove" and "Wild-boar-clough" are to this day the names of farms or localities in which, so far even as present aspect goes, it is very probable the wild boar was common in the olden times. The wild boar, it is true, long ago became extinct in these islands, except in a few remote localities, yet to this day he is hunted in the forests and mountains of France and Germany, while in various other countries of Europe and Asia he is not at all uncommon. In these olden times a large portion of England was covered with forests, in which the oak was, it is said, more general than any kind of tree, and acorns formed, in the autumn and early winter, a sumptuous feast, on which the wild boar fattened; the beech-tree flourished, too, in those ancient forests on the limestone, as the oak did on the clays, and beechnuts served the boar for food; grasses and the roots of plants he fed on in other parts of the year. His keen scent told him where the latter were, and his long and powerful snout soon brought them up to light. The snout of the domestic pig, though still powerful for mischief, is much less vigorous than that of his wild progenitor; domestication, removing the need for so prominent an organ, has already reduced it much in length, if not in width, and, along with the need for work in search of food, it has lost its pristine

usefulness. The pig of to-day has no need to "root" for food; he is fed regularly in the yards and sheds, his rambles at large being confined to the stubbles in autumn and to a pleasant hunt for acorns near the hedgerows, so that in some of the more cultivated breeds the snout has an absurdly helpless look, nearly hidden as it is by a prominent forehead and well-developed chops, and it is next to impossible to root with it.

By many of the ancient nations the pig was held in abhorrence, and to this day the feeling prevails among the Brahmans and Buddhists of India, and the Mohammedans everywhere. The Mosaic Law declared the pig to be an unclean animal, and the Jews were forbidden to eat of it. The ancient Egyptians had a still stronger antipathy against it, according to Herodotus, who tells us that if a man touched one, even by accident, he presently hastened to the river, and, without undressing, plunged himself into the water to be purified. Unclean himself, the pig promotes cleanliness in others. The Egyptians were forbidden to sacrifice him to any deity than Bacchus, and to the moon when at the full, at which time they were permitted to eat of his flesh. But the ancient Greeks and Romans thought highly of the pig, and the Chinese of the present day use it largely as an article of food. Modern notions commonly agree with the ancient one that the pig is an unclean animal—in his habits of life, that is, but not unclean to eat. We hardly think he merits all the abuse and contempt that are thrown at him. It may be true that in habits he is scarcely decent at times, as in feeding he has no delicacy, yet he is a very useful member of the community, and he provides us with many a dainty dish. The truth is, the typical pig is the victim of conditions, and is regarded as a sort of hereditary scapegrace in the community of domesticated animals; consequently, self-respect with him is at a low ebb, and though thinner-skinned than he used to be, he still has a rebellious disposition, and goes in for a good deal of unseemly conduct. His propensity to root, we suspect, will remain in force so long as he has a snout that is fit for the duty, and he will wallow in the mire still longer when he gets the chance; yet, despite all his delinquencies, we could ill afford to do without him.

In the British Islands there are many varieties of pigs, and these, again, are locally divided into sub-varieties, but with many of the latter the differences are so slight as to be scarcely worth notice. As a rule, the pigs of Scotland and the north of England are white in colour; those of the midland counties and in Wales black-and-white, red-and-black, or red-and-white, commonly enough white, or red, or black, though the two latter are not so numerous as the white; and in the southern counties they are most commonly black. Of the white ones in the north there are three tolerably distinct varieties: the large, the medium, and the small; in the south the black pigs may be similarly classed, though perhaps the varieties are somewhat less distinct as to size; while in the midlands they are of the mixed and indistinct character that might be expected in a neutral zone. We are not aware that the origin of these differences in colour has been, or can be, determined so as to exclude doubt on the matter, but the positive colours found in the southern and midland counties are supposed to be owing to foreign

blood, while the white colour of the northern ones is said to be that of the ancient breed of the island. There is no certainty, we think, in these conjectures, but they are probably correct. It is, however, in any case true that Neapolitan and Chinese pigs have been imported into this country, and they have greatly helped in improving the build and usefulness of our native breeds; selection in breeding and care in treatment have done the rest. In the days of the Ancient Britons the pig was a raw boned, thick-skinned, rakish-looking animal, weird and gaunt, with long legs, light quarters, a narrow back, and a figure-head that was surpassingly ugly; whereas his descendant of to-day is plump and symmetrical, short legged, fine boned, with well-developed hams and shoulders, a broad back, and deep thick sides, and a face which has lost its ferocity.

The white breeds are known under the generic name of "Yorkshires," though they are, and perhaps always have been, equally common in various other counties; the large white breed, from which the others have been obtained by crossing and by selection, are specially known under that name, while the sub-varieties, though also known as Yorkshires, are sometimes known by the name of other counties in which they are bred, as Cumberland, Leicester, or Lancaster.

The Large White Breed.—Up to the middle of the present century it was a common thing to find at our leading agricultural shows huge specimens of this variety some of them weighing as much as a fair-sized heifer, but in recent years they have been dropped out of sight as a rule, chiefly because they were slow to mature and large consumers of food, leaving consequently little or no profit for fattening, though at the same time they produced bacon of good quality and were prolific breeders, the litters often numbering sixteen or eighteen; and now the quality of early maturity is cultivated in connection with smaller size. The famous Robert Bakewell is said to have been the first to improve the white pigs of Leicestershire, and these in turn have improved the Yorkshires by crossing. Bakewell pursued with pigs the system he had with such marked success applied to Longhorn cattle and Leicester sheep, viz., selection; discarding the coarser ones, he bred only from such as were symmetrical and compact in form, and fine in skin and bone, cultivating at the same time the properties of early maturity and aptitude to fatten.

The Small White Breed.—This breed affords a striking contrast to the foregoing, not in size only, but in the period at which they mature, in quality, and—if the expression is applicable to pigs at all—in delicacy of character. It is supposed that this variety has been chiefly obtained from crosses with Chinese pigs, and it is commonly known as the small Yorkshire breed. Being small in size, indifferent breeders, and less hardy than most other kinds, these small Yorkshires are not as a rule profitable, and so are not adapted for practical dairy-farmers. There is, however, a good and constant demand throughout the country, and specially in London, for these small and dainty porkers, and the price they fetch is the highest in the market. But this small white breed has a special value for breeding purposes—for carrying on the improvement of the larger breeds, for reducing the coarseness and the coarseness of the largest sort,

and for providing a model which, differing more or less so far as size is concerned, breeders everywhere are striving to copy. Crosses with other breeds—Berkshire, for instance—have produced animals that were excellent for fattening. One of the most striking peculiarities of the small white pig is its puggy, dshy, snout, of which, when the animal is fully fattened, all that can be seen are the up-turned nostrils, which sometimes nearly meet the projecting forehead; the eyes are completely hidden, their position being indicated by creases in the fat, and the head is set on much below the level of shoulder.

The Medium White Breed.—This breed has hardly yet attained the dignity of a distinct variety. Having been produced by modern crosses between the large and small breeds, the type is not yet fixed, and individuals here and there are found to lean too much to the one or to the other branch of their diverse ancestry; by judicious selection of true specimens to breed from, the type will soon lose its nondescript character, and variations will in time cease altogether. This type promises to become one of the most valuable in the country for tenant-farmers' use; it has the early maturity and the facility to fatten of the small breed, while avoiding the coarseness and late maturity of the large one, and it is moderate in size, fattening nicely into twelve to eighteen stones, yet the longer it is kept as store, within limits, the larger weight it will fatten into. Its face resembles that of the small breed, but it is less concave on the snout and somewhat longer, while the frame is longer and larger, and less abnormally developed in the shoulders. It is one of the best of our bacon pigs.

The Berkshire Breed.—This, perhaps, is the most famous breed we have, and the most general of any distinct variety in the British Islands. Formerly these pigs were of various colours, generally "a tawny, white, or reddish colours, spotted with black;" but now there are two distinct varieties, the one wholly white, and the other black, with a little white as a rule on the nose, on the feet, and on the end of the tail, and a pinkish hue on the skin. The Berkshires are understood to owe their type to the influence of Chinese blood, of which breed there are both white and black-and-white varieties; hence the two varieties of Berkshires; yet they have been less changed than some breeds have by the infusion of foreign blood, and their improvement is mainly owing to the care and attention that have been bestowed upon them through a long period.

Mr. John Coleman, formerly Professor of Agriculture and farm manager at the Royal Agricultural College, Cirencester, describes the black Berkshires in the following terms:—"Head, moderately short; forehead wide, nose slightly dished, straight at the end—not *retroussé*, as in the small breeds; chops full; ears slightly projecting, occasionally pendant and covering the eyes. Prevailing colour black, with white blaze down the nose or white star on the forehead; sometimes uniformly dark, but this is the exception, and never the dead black of the Suffolk or Essex. The pink tinge should be always apparent. The eye is not sunk and closed as in the breeds remarkable for feeding properties, but large, intelligent, and denoting activity. General effect pleasing. The head is well set; the neck, of moderate length, is full and muscular; the shoulders well set, so that we have a perfectly regular outline.

There is not the extraordinary wealth of China seen in Suffolk, but the forequarters are well proportioned. Occasionally we find a slight deficiency in the girth, caused by the flatness of the fore-ribs. The back is fairly level, and the ribs, as a rule tolerably sprung; a less perfect barrel, however, than is to be found in the Essex and Suffolk blacks. Loms wide and well covered; quarters often rather short and drooping—this is probably the weakest point in the breed. The tail is usually set lower than the hips, which give a somewhat common character. The gammon full and deep; under lines somewhat irregular; the flank often light. The carcass stands on short legs, and the bone, whilst stronger than that of the small sorts, is well-proportioned, and by no means stronger than is necessary. The strength and character of the coat varies according to sex and management. The effect of confinement and close breeding is to reduce the hair. We have a great objection to bristles, which indicate a thick skin, coarse ossal, and slow feeding; but we do equally dislike the thin, weak, soft hair, which is a sure evidence of delicacy, especially in the boar; the offspring will be sadly deficient. In the sow fine long hair is desirable; too much and too strong hair is indicative of coarseness. But if the pig is required to work for its living, and to officiate as scavenger of the farm, there must be constitution; and we cannot have this without hair. The great merit of the Berkshire over most other breeds consists in the larger proportion of lean meat, and the distribution of fat and lean when properly fed; consequently a given live weight realises a larger proportion of available meat than any other breed."

As Mr. Coleman has said, the hind quarters are weak and drooping, and the top line is not level, as it ought to be, from the neck backwards; this fault, though much more marked than in other breeds, is not by any means a feature which cannot be removed, or at all events greatly reduced, by careful breeding against it. [There is an engraving of a Berkshire prize-winner, in which the fault we speak of does not exist, but the quarters, instead of sloping, are nicely rounded off, while the top line is as level as anyone can desire in a pig.] As their name implies, the Berkshire pigs first became celebrated in one of the southern counties, but they are now, as the Shorthorn cattle are, known in all the civilized countries of the earth; yet, so far as England is concerned, they are chiefly found in the southern and western counties, and are not at all common in the northern ones. Besides the Berkshires, there are several varieties of black pigs, most of which bear the name of the county in which they are a speciality, as the Essex, the Suffolk, the Dorset, &c.; but so far none of them have attained anything like so widespread a popularity.

The Essex Breed.—The old Essex pig had a "roach back, long legs, sharp head, and restless disposition"—four very undesirable qualities; it is now a shapely and valuable breed. While travelling in Italy some forty years ago, the late Lord Western saw and admired the breed of swine called Neapolitan, which "found its greatest purity in the beautiful peninsula, or rather tongue of land, between the Bay of Naples and the Bay of Salerno—a breed of very peculiar and valuable qualities, the flavour of the meat

being excellent, and the disposition to fatten on the smallest quantity of food unrivalled." He brought over a male and female of this breed, and he engrafted the stock on the Essex, and, it is said, on the Suffolk and Berkshire too, in so successful a manner that, as he said himself, "my herd can scarcely be distinguished from the pure blood." The improved Essex, which had great success at the agricultural shows, were produced by a further cross of Lord Western's Essex-Neapolitans on Essex sows, under the care of Mr. Fisher Hobbes who became an even more famous breeder of pigs than Lord Western himself; for, though all the improvements sprang from the Western herd, his lordship bred in and in to such a degree that his breed "gradually lost size, muscle, constitution, and consequently fecundity." After his lordship's death, Mr. Hobbes bought the best of the breeding sows at Western, and by their aid he continued to improve his own and the pigs of the country. Another branch of the breed is said to have been improved by a pair of black sows which Mr. Coates procured from Turkey about the year 1846; these were bred to a Chinese boar, and the progeny in turn had the fusion of Neapolitan blood; lastly, they were engrafted on good specimens of the old breed of the country, and so the breed has been built up.

Early maturity and excellent quality of flesh are the leading merits of the improved Essex, and, while they retain the symmetry of the Essex-Neapolitans, they have more size and vigour, a stronger constitution, and an increased fecundity. Their only defects are: a lack of hardness, that is probably owing to the climate in which they are bred; and a too great proneness to fatten, on account of which the fertility of the sows is judicious diet and plenty of exercise. For crossing with and improving inferior breeds, the Essex swine of to-day are very valuable, and in the United States, as well as in various countries of Europe, they have made their mark; while in our own country the Berkshires, the Devonshires, the Oxfords, and the Dorsets have derived many of their merits from Lord Western's Neapolitan importations, whose influence, commencing in Essex, is now seen in every parish in the midland and western counties where black pigs are found. The old Essex pigs had more or less white on them, but now they are invariably black; their heads are perhaps come as near being handsome as a pig's head possibly can; they are moderately fine in bone and short on the leg; the quarters are well-proportioned, and they are symmetrical withal. They attain great weights at an early age, and have a small percentage of offal. The engraving gives a good representation of an improved Essex sow.

The Devon and Dorset Breeds.—These two counties are now proud of their pigs, and with reason, for they have really excellent varieties of the porcine family. Whatever differences there may be between the pigs of the two counties are to be attributed to merely local influences, for both have derived their chief improvements from one and the same source—the improved Essex. Though the pigs of one county may be somewhat inferior to those of another, in the eye of an impartial judge, yet there is reason enough for each one thinking its own the best—the best, that is, for its own use. This, however, is merely a question of climate, and it is

reasonable to infer that the pigs that have been bred for generations in a given climate are the best for that climate, providing they have been improved equally with other pigs. The Devons and the Dorsets may not be so shapely as the Essex and Berkshires, yet have they much in common, so far as quality is concerned, and they are all of the same colour—black. As a rule, it may be taken for granted that we can take the old stock of a county, and so improve it by careful selection and judicious infusion of distant blood, that it will become as valuable for practical purposes as any wholly alien breeds could possibly be; yet this is a rule to which, as in the case of horned stock, there are possibly one or two exceptions. The Berkshires and Yorkshires among pigs, like the Shorthorns and Herefords among cattle and the Leicesters and Shropshires among sheep, are probably better stock than most others which they could possibly supplant; yet, at the same time, it would be better in the case of such pigs as the Devons and the Dorsets to seek to improve them by crossing rather than supplant them altogether, and especially so when we remember that cross-breeds are usually more vigorous than pure-breeds, and generally more profitable to feed for the butcher.

The Shropshire Breed.—This breed is not famous for symmetry or beauty of any kind; but it is a good practical sort, with no pretensions to fancy. The colour is various, but generally a dark red-and-black. These pigs are extensively sold in the markets of the adjoining counties; bred in Shropshire, they go in large numbers to be fattened in other counties. The Welsh pigs have much in common with the Shropshires, and are sent about the country for the same purpose.

The remaining sub-varieties of pigs in the British islands are mostly of a nondescript character, in each case more or less resembling the distinct breeds which have helped to improve them; and they are known less for any distinct merits or characteristics than by the name of the county to which they happen to belong. As in cattle and sheep, so in pigs, a great improvement in breeding has been brought about during the past half century, so that all our varieties are now much better than they formerly were, while between the best of them there is so little to choose on the score of usefulness that it becomes a mere matter of fancy which of them a farmer had better own. The Yorkshires, Berkshires, and Essex are held in high estimation in America, and in that country there is also a very good breed, called the Poland-China Hog. This breed is the result of a cross in which the Chinese blood figures prominently; we are not aware, however, that it possesses merits equal to those of the best English breeds.

NEW JERSEY CROPS.—The crop prospects of this State were seldom better and more promising at this season of the year. The weather has been singularly favorable during the most important growing season through which we have so far passed. From the opening of Spring until the first of July is the critical period to several crops. It is during this season that the small fruits, wheat and rye and oats, grass and hay,

and many other crops, are either made or marred. It too often happens that persistent drouths occur at this time, dwarfing, drying out, cutting short, or entirely ruining many of these crops. They have no opportunity, like corn and potatoes, to make up, in a more propitious later season, damage suffered from a spring or early summer drouth. This year the rains have been copious and the weather in every respect favorable. If a spring drouth had occurred this year similar to that of 1880, a hay famine would most likely have been the result. As it is the hay crop cannot be large, because the severe winter and last year's drouth killed so much of the plant. But the frequent rains will insure a fair crop. All other crops are looking remarkably well, and the outlook for the farmers of this State is very promising. Corn needs warmer weather, but it will most likely get enough of this later in the season. The country never presented a fresher, more beautiful and luxuriant appearance than at present. Vegetation of all kinds is growing with almost tropical richness, and it is a feast to the eye to behold the vigor and loveliness of nature's handiwork.

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1 Bruce, <i>Jour. Ag.</i> (June 1880), Vol. IV, p. 44	2 Boulevardier, do. do. do.	3 Sir George, do. do. do.	4 Johnny, do. do. do.	5 Prince of Wales, do. do. do.	6 Young Pr. of Wales, do. do. do.	7 Reform, do. do. do.	8 Charlie, do. do. do.	9 The Shah, do. do. do.	10 Lord Clyde, do. do. do.	11 Avon Water, do. do. do.	12 Bismarck, do. do. do.	13 Prince Albert, do. do. do. (Aug. 1880), Vol. IV, p. 61	14 Yakob Khan, do. do. do.	15 Sir George, do. do. do.	16 Young Royalty, do. do. do.	17 King Humbert, do. do. do.	18 Thrift, do. do. do.	19 Mars, do. do. do.	20 Leopold, do. do. do.	21 Hero, do. do. do. Vol. IV, p. 62	22 Lord Canning, do. do. do.	23 Prince Bismarck, do. do. do.	24 Lord Clyde, do. do. do.	25 Lord Raglan, do. do. do.	26 Mimosa, do. do. do. (Oct. 1880), Vol. IV, p. 73	27 Kenelm, do. do. do.	28 Nicholas, do. do. do.	29 Wallace 3rd, do. do. do.	30 St. George, do. do. do.	31 Oscar, do. do. do. Vol. IV, p. 74	32 Albert, do. do. do.	33 Young Bismarck, do. do. do.	34 Romeo, do. do. do.	35 Sir Hugh, do. do. do.	36 Bellahill, do. do. do.	37 Royal Charlie, do. do. do. Oct. 1880, Vol. IV, p. 74	38 Marquis of Lorne, do. do. do.	39 Marston, do. do. do.	40 Hero, do. do. do.	41 Mark Anthony, do. do. do.	42 Robin Hood, do. do. do.
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43 Julius Caesar, <i>Jour. Ag.</i> (Oct. 1880), Vol. IV, p. 74	44 Frank, do. do. do.	45 Champion, do. do. do. (Oct. 1880), Vol. IV, p. 74	46 Prince Imperial, do. do. do.	47 Francis, do. do. do.	48 Mark Wain, do. do. do.	49 Prince William, do. do. do.	50 Persian Prince, do. do. do.	51 Possey, do. do. do. Vol. IV, p. 75	52 Woodside, do. do. do.	53 Duke of Canning, do. do. do.	54 Talbot 3rd, do. do. do.	55 Sir Albert, do. do. do.	56 Peter, do. do. do.	57 Joseph, do. do. do.	58 Lord Cornwallis, do. do. do.	59 Sir John, do. do. do.	60 Sir Wallace, do. do. do.	61 Colchester, do. do. do.	62 Bob Roy, do. do. do.	63 Wagonbrook, do. do. do.	64 Scott, do. do. do.	65 Charley, do. do. do.	66 Von Moltke, do. do. do.	67 Invictus, do. do. do.	68 Zulu, do. do. do.	69 Bruce, do. do. do.	70 Dominion Champion, do. do. do. (Vol. IV, p. 83)	71 Independence, do. do. do.	72 Chief Wauban-off, do. do. do. (June, 1881), Vol. IV, p. 145	73 Col. Fieldmore of Fieldmore Farm, do. do. do.	74 Zulu Chief, do. do. do.	75 Lord Nelson, do. do. do.	76 Ladyman, do. do. do.	77 Duke of Sussex, do. do. do.	78 Hermit, do. do. do.	79 Beaconsfield, do. do. do.	80 Aberdeen, do. do. do.	81 Wallace, do. do. do.	82 William, do. do. do.	83 Lord Dufferin, do. do. do.	84 Prince Charlie, do. do. do.	85 Prince Leopold, do. do. do.	86 Prince Napoleon, do. do. do.	87 Captain Jinks, do. do. do.	88 Lord Dufferin 2nd, do. do. do.
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AYRSHIRE COWS AND HEIFERS.

1 Miss Cuthbert, <i>Jour. Ag.</i> (June 1880), Vol. IV, p. 44	2 Josephine, do. do. do.	3 Nora C. F., do. do. do.	4 Belle of Aysdale, do. do. do.	5 Miss Strang, do. do. do. Vol. IV, p. 45	6 Daisy, do. do. do.	7 Lily 4th, do. do. do.	8 Lady Avon, do. do. do.	9 Merry Duchess, do. do. do.	10 Merry, do. do. do.	11 Hlyth, do. do. do.	12 Pearl Drop, do. do. do.	13 Cherry, do. do. do.	14 Park 4th, do. do. do. (Aug. 1880), Vol. IV, p. 62	15 Merry Gipsy, do. do. do.	16 Dewdrop 2nd, do. do. do.	17 Sadie, do. do. do.	18 Crocus 2nd, do. do. do.	19 Daisy, do. do. do.	20 Crocus 3rd, do. do. do.	21 Blossom, do. do. do.	22 Spot, do. do. do.	23 Rose, do. do. do.	24 Buttercup, do. do. do.	25 Fawn, do. do. do.	26 Grace, do. do. do.	27 Cowslip, do. do. do.	28 Lily, do. do. do.	29 Boxcas, do. do. do.	30 Belle of Paradise, do. do. do.	31 Cuthbert Lassie, do. do. do. (Oct. 1880), Vol. IV, p. 83	32 Lady Beatrice, do. do. do. (Aug. 1880), Vol. IV, p. 62	33 Rowena, do. do. do. Vol. IV, p. 63	34 Lady Cuthbert, do. do. do.	35 Primrose, do. do. do. (Oct. 1880), Vol. IV, p. 75	36 Lady Mary, do. do. do.	37 Braw Lass, do. do. do. Vol. IV, p. 76	38 Gypsy, do. do. do.	39 Juliet, do. do. do.	40 Ruth, do. do. do.	41 Nora, do. do. do.	42 Mimic, do. do. do.	43 Zulu, do. do. do.	44 Heiress, do. do. do.	45 Island Lass, do. do. do.	46 Buttercup, do. do. do.	47 Lady Clemencia, do. do. do.	48 May Queen, do. do. do.	49 Flora, do. do. do.	50 Hebe, do. do. do.	51 Lady Halifax, do. do. do.	52 Evangeline, do. do. do.	53 Blossom, do. do. do.	54 Marie Bismarck, do. do. do.	55 Alice Gray, do. do. do.	56 Clarissa, do. do. do.	57 Princess Alice, do. do. do. Vol. IV, p. 77	58 Ophelia, do. do. do.	59 Octavia, do. do. do.	60 Juliet, do. do. do.
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61 Cleopatra,	<i>Jour. Ag.</i> (Oct. 1859), Vol. IV, p. 77
62 Princess,	do do do do
63 Belle,	(Oct. 1870), Vol. IV, p. 77
64 Little Dorrit,	do do do do
65 Queen of Ayr,	do do do do
66 Stella,	do do do do
67 Dolly Varden,	do do do do
68 Polly Peckins,	do do do do
69 Rose,	do do do do
70 Lady Franklin,	do do do do
71 Besse,	do do do do
72 Torta,	do do do do
73 Falcid Beauty,	do do do do
74 Miscellaneous,	(Oct. 1880), Vol. IV, p. 77
75 Mrs Ida,	do do do do
76 Pinford,	do do do do
77 Daisy,	do do do do
78 Myra,	do do do do
79 Daisy the Second,	do do do do
80 Cherry,	do do do do
81 Flora,	Vol. IV, p. 77
82 Maid of Fern Hill,	do do do do
83 Hortense,	do do do do
84 Flora,	do do do do
85 Mary Gray,	do do do do
86 Alice Gray,	do do do do
87 Hortense,	do do do do
88 Lady Fairie,	do do do do
89 Beauty,	do do do do
90 Lady Ballindalloch,	do do do do
91 Belle of Bellahill,	do do do do
92 Rose of Bellahill,	do do do do
93 The Nun,	do do do do
94 Olive,	do do do do
95 Spotted Lady,	do do do do
96 Rosebud,	do do do do
97 Dairy Duchess,	do do do do
98 Daisy Duchess,	do do do do
99 Gipsy 9th,	do do do do
100 Shifty of Staustead,	do do do do
101 Belle of Brookside,	do do do do
102 Mayflower,	Vol. IV, p. 70
103 Lady Windsor,	do do do do
104 Lilydale,	do do do do
105 Minerva,	(June, 1881), Vol. IV, p. 145
106 Galony,	do do do do
107 Molly,	do do do do
108 The Abbess,	do do do do
109 Louise,	Vol. IV, p. 140
110 Maple Leaf,	do do do do
111 Belle 2nd,	do do do do
112 Effie 3rd,	do do do do
113 Flora Baker,	do do do do
114 Nellie,	do do do do
115 Lady Blanche,	do do do do
116 Lily 2nd,	do do do do
117 Lily 5th,	do do do do

JERSEY BULLS.

1 Pioneer,	<i>Jour. Ag.</i> (July 1880), Vol. IV, p. 64
2 Dick Swiveller 3rd,	do do do do
3 Bruno,	do do do do
4 Past Tyler,	do do do do
5 Tyler,	do do do do
6 Yarmouth,	do do do do
7 Darling,	do do do do
8 Plantagenet,	do do do do
9 Prince of Lee Farm,	do do do do
10 Knight of Lee Farm,	Vol. IV, p. 55
11 Azinbur,	do do do do
12 Burtlan,	do do do do
13 Bon Hampton of Hillcrest,	do do do do
14 Bilapaur,	do do do do
15 The Sultan,	(Aug. 1880), Vol. IV, p. 61
16 Prince Imperial,	do do do do
17 Ajax of Lornedale,	do do do do
18 Lord Seafeld,	(Oct. 1880), Vol. IV, p. 31
19 Round Robin,	do do do do
20 Gambetta French,	do do do do
21 Elopey,	do do do do
22 Comet 2nd,	do do do do
23 Comet 3rd,	do do do do
24 Bellerophon,	do do do do
25 Elopey 2nd,	do do do do
26 Lorie,	do do do do
27 L'Etranger,	do do do do
28 Prince of Springfield,	do do do do
29 Springfield Boy,	do do do do

JERSEY COWS AND HEIFERS.

1 Braintza,	<i>Jour. Ag.</i> (July 1880), Vol. IV, p. 55
2 Nabritza,	do do do do
3 Golden Doublet of Hillcrest,	do do do do
4 Zabritza,	(Aug. 1880), Vol. IV, p. 61
5 Oriole of Hillcrest,	do do do do
6 Maid of Orleans,	do do do do
7 Mermaid of St. Lambert,	do do do do
8 Cow-slip of St. Lambert,	do do do do
9 Sultana,	do do do do
10 Little Buttercup,	do do do do
11 Seafeld Belle,	(Oct. 1880), Vol. IV, p. 81
12 Heather Belle,	do do do do
13 Bellatrix,	do do do do
14 Doucel,	do do do do
15 Florrie,	Vol. IV, p. 82
16 Lady Bonar,	do do do do
17 Bel Aer	do do do do

18 Ladies of Lornedale Jr.	<i>Jour. Ag.</i> (Oct. 1880), Vol. IV, p. 82
19 Lady Seafeld,	do do do do
20 Gussie of Brooklyn,	do do do do
21 Jersey Queen,	do do do do
22 Nathalie,	do do do do
23 Gypsy Queen,	do do do do

DEVON COWS AND HEIFERS.

1 Primrose,	<i>Jour. Ag.</i> (Sept. 1880), Vol. IV, p. 65
2 Lady Pink,	do do do do
3 Maid of Miller Hill,	do do do do
4 Margaret,	do do do do
5 Blossom,	do do do do
6 Violet,	do do do do
7 Buttercup,	Vol. IV, p. 68
8 Mayflower,	do do do do
9 Lily,	do do do do
10 Verbena,	do do do do
11 Is Grant,	do do do do
12 Orange,	do do do do
13 Kalula,	do do do do
14 Snowdrop,	do do do do
15 Pansy,	do do do do
16 Myrtle,	do do do do
17 Marigold,	(Sept. 1880), Vol. IV, p. 66
18 Poppy,	do do do do
19 Moss Rose,	do do do do
20 Larkspur,	do do do do
21 Carnation,	do do do do
22 Heartsease,	do do do do
23 Duchess of Linnb'h,	Vol. IV, p. 67
24 Princess Victoria	do do do do
Adelaide,	do do do do
25 Princess Alice,	do do do do
26 Hawthorn,	do do do do
27 May,	do do do do
28 Peony,	do do do do
29 Azalea,	do do do do
30 Princess Beatrice,	do do do do
31 Dahlia,	do do do do
32 Princess Helena,	do do do do
33 Cowslip,	do do do do
34 Balsam,	do do do do
35 Trillium,	do do do do
36 Princess Louise,	do do do do
37 Acacia,	do do do do
38 Camella,	do do do do
39 Princess Victoria 3rd,	do do do do
40 Lady Barbara,	do do do do
41 Princess Alexandra,	Vol. IV, p. 68
42 Foxglove 2nd,	do do do do

DEVON BULLS.

1 Prince Alex'r,	<i>Jour. Ag.</i> (Sept. 1880), Vol. IV, p. 68
2 Sir Charles Napier,	do do do do
3 Sir P. Williams,	do do do do
4 General Wolfe,	do do do do
5 Lord Chelmsford 2nd,	do do do do
6 Carly Prince 2nd,	do do do do
7 Lord Keane,	do do do do
8 Lord Olive,	do do do do
10 Hartland 2nd,	(Oct. 1880) Vol. IV, p. 82
11 The President	do do do do
12 Havelock,	do do do do

GUERNSEY BULLS.

1 Aul Jones,	<i>Jour. Ag.</i> , (Oct. 1880), Vol. IV, p. 82
2 Bonanza,	do do do do
3 Gold Dust,	do do do do
4 Prince Edward	do do do do
5 Duke or Kent,	do do do do
6 Prince Arthur,	do do do do

GUERNSEY COWS AND HEIFERS.

1 Bertina,	<i>Jour. Ag.</i> (Oct. 1880), Vol. IV, p. 82
2 Bertha 2nd,	do do do do
3 Lady Bird,	do do do do
4 Daisy,	do do do do

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