the price would have been low, and the result would have been that last summer's grazing would have been lost. The farmer fitted up the apparatus, boiler and engine, with his own hands, without the help of an engineer. In this case a large barn is utilized, one end for machinery, the other for storing the chaff pulls or cavings, which are carried there on threshing days, and as a mixing floor. The coal slack consumed in the boiler for steaming purposes was one ton per month, costing eleven shillings. As the boiler and engine are necessary for the work of grinding, &c., it would appear that the steaming apparatus should only be charged to feeding. A man and lad can prepare the mixture and feed the stock. As an economical method of using home produce, combined with a cheap and valuable purchased food, the above experiment might with advantage be adopted by many farmers.

## THE SMOKY-FACED MONTGOMERYSHIRE CATTLE.

The following letter was addressed to the *London Live Stock Journal* by Lieut.-Col. Platt, of Gorddinog, Bangor:—"A letter appears, signed M., referring to a protest lodged at the late Royal Agricultural Show, held at Shrewsbury, by Lord Cawdor and Captain Best—who, by-the-bye, is not the secretary of the Black Cattle Society—and repeated since by the last-named society, against the old Smoky-faced Montgomeryshire cattle being exhibited as Welsh. Perhaps I may be allowed briefly to give my reasons for objecting to them as being considered not Welsh, but of the old Welsh breed—which latter breed our society was formed to perpetuate and improve. Professor Nilsson, in a paper on 'The Extinct and Existing Bovine Animals of Scandinavia,' remarks that the old Celtic ox is descended from the *Bos longifrons*, otherwise *Brachyceros*. Cæsar himself alludes to the ancient inhabitants of Wales and their cattle. Of the latter he says: 'They were small, and everywhere present in a domestic state, and of a black color.' Further, in a Latin translation of the Welsh laws, subsequent to the Dimetian code of the tenth century, 100 white cows with red ears were considered equal to 150 black cattle. Mr. Storer, again, an eminent authority, enumerates, in his book 'The Wild White Cattle of Great Britain,' the parts of Wales where the white cattle were found, and says:—'They did not occupy the intermediate and far larger and more mountainous parts of Wales; on the contrary, the smaller black breed—the native cattle of Wales—possessed the country as a whole, and has finally exterminated the others.' I now wish to point out that Montgomeryshire was a county thoroughly over-run with different tribes of conquerors, and, therefore, its ancient inhabitants—the 'Celts'—and their cattle were driven westward and northward into the fastnesses of the mountains of Merionethshire and Carnarvonshire. Wherever the conquerors could penetrate, whether Romans, or, after them, the fierce tribes from Jutland and Holstein, &c., they brought their families, household goods, and cattle, which last, in the natural course of events, were cossed with the remaining native breed; and this was particularly the case as regards Montgomeryshire. Mr. Davies, in his 'Book of the Agricultural and Domestic Economy of North Wales,' written in 1810, describes the Welsh runt as of a 'coal-black color;' of Montgomeryshire he says 'the real breed of the county are brindled, finch-backed, and a short leg kind. Another, which has of late become very numerous in the Severn Valley, are the long-legged, light brown color, without any mixture, and smoky or dun faces, and said to have been originally from Devonshire.' To conclude, I am willing to admit that the old smoky-faced Montgomeryshire cattle are an old breed peculiar to the county, having for their ancestors the *Bos urus*, whereas the old and original breed of Wales are the black cattle, claiming the *Bos longifrons* as their progenitors. It, therefore, follows the former are inadmissible in a herd-book registering the pedigrees of an ancient and pure black race."

## IMPORTS OF AGRICULTURAL PRODUCTS INTO GREAT BRITAIN.

From the Farm and Home.

The following, showing the variation in our imports of farm produce for 1884, as compared with 1883, will be read with interest. In the year 1884 we effected a saving of £23,191,892 in our expenditure under this head, and the following table, compiled from the Board of Trade Returns, shows how the amount is obtained:—

| | Increase. | Decrease. |
|---|---|---|
| Animals for food | — | £ 1,454,121 |
| Meat | — | 1,212,580 |
| Corn, flour, and pulse | — | 19,477,479 |
| Butter and butterine | £ 770,874 | — |
| Cheese | 115,392 | — |
| Lard | — | 711,667 |
| Eggs | 180,531 | — |
| Poultry and game | 78,234 | — |
| Fruit | — | 37,007 |
| Hops | 554,279 | — |
| Onions | 93,149 | — |
| Potatoes | — | 761,193 |
| Other vegetables | 27,253 | — |
| Horses | 54,928 | — |
| Oilseed cakes | 94,858 | — |
| Clover and grass seeds | — | 94,226 |
| Cotton seed | — | 263,636 |
| Linseed | — | 983,488 |
| Rapeseed | — | 165,993 |
| Totals | £1,969,498 | £25,161,390 |
| | | 1,969,498 |
| Net decrease | | £23,191,892 |

It is not a little remarkable that our increased expenditure was chiefly on articles which, it is generally admitted, are profitable to produce at home—such as butter, cheese, eggs, onions, various market-garden vegetables, and horses. Hops need not be included in this category, because the increased expenditure was due to the failure of an uncertain crop. The greatest saving effected was on wheat and flour, amounting to no less than £13,762,001. Two good crops of potatoes in succession enabled us also to effect a considerable saving in our expenditure upon that important article of food.

## MUTTON AS FOOD.

From the Prairie Farmer.

In the production of good mutton, much more depends upon feeding than upon the breed. The flesh of well-fed sheep, of every variety, from the Merino to the Downs, is palatable and delicious. The reason that Merino mutton is not better is because of age, bad feeding, and ill-treatment generally. A prominent agricultural editor who has for years said that Merino mutton was not fit to eat was recently presented with two quarters of a pure Merino, which were served upon his table and received the following comments: "Never, anywhere, or of any breed, have we tasted mutton more sweet or tender, and we have eaten the best of Southdown, thousands of times, upon its native heath. The mutton was from a four-year-old pure Merino ewe, weighing 117 pounds, and dressing 65 pounds. She was entirely free from wrinkles and would have sheared 18 pounds at the spring shearing. A sample of her wool was one of the best we ever saw, showing both length and quality, and an even texture throughout. No mutton equals a chop from a fat, well-fed young sheep."

I do not insist that Merino mutton is as good as that from the strictly mutton breeds, but I do contend that any sheep will make good and profitable mutton, if properly fed and cared for, an item which will go a long way in piecing out the short profits of wool-growing. None of the objections urged against the use of pork can be brought against that of mutton. It has never been known to impart disease to its consumers. Trichinæ, tape worm, and scrofula are produced by eating other meats. The sheep abhors mire, and will taste nothing that is not clean and cleanly served. It is wholly herbaceous, and very neat in its habits. Mutton is as wholesome as any meat, and may be variously prepared for the table. For steady diet it is superior to pork and costs no more. I have reference to *mutton*, for, in my estimation, only those sheep which are fat and healthy are muttons. Old, decrepid, broken-mouthed, foot-diseased animals, such as fill the general market, are not fit for food and do much to prejudice people against mutton. The majority of farmers do not kill a sheep once a year, because custom has made the American people great pork and beef eaters.

## WINTER CHURNING.

From the American Dairyman.

First, be sure and churn your cream not less than twice a week in winter, three times in summer. Put some sour milk in the cream-pot the first day, and keep the cream below sixty degrees. When ready to churn raise the temparature to about sixty-five and churn in a warm room. So soon as the butter begins to come (and keep looking under the lid of the churn so as not to be fooled on this point), stop the work when the butter forms in granules. Now have some water warmed to about sixty-five degrees; be sure about the temperatures; draw off the buttermilk and wash the butter thoroughly in the churn. After it is taken out and spread on the butter worker, and while still in the granular form, salt it much stronger than you would after it was worked, for the water in it will carry off much of the salt. Now work the butter until it is quite dry and set it away for two hours in a room where it will not get hard; mind that. Butter that once gets hard can never be re-worked without spoiling the grain. At the expiration of the two hours, re-work the butter until the mottled appearance has departed, and not one stroke longer. The less working you can do and secure a clean, smooth appearance, the better. Pack or mold immediately, and then let it get just as hard as you please. There may be plenty of other ways to make good butter, but the above is a safe and simple plan, and, in our experience, the best. We never had any more trouble getting the butter to come in winter than in summer, and if the temperatures are correct, we do not believe anybody else will. This matter of temperatures is not only a much more important matter than most dairymen believe, but it requires much more care to get them right than most men are willing to take. They would far rather be careless, and then lay the blame to the cows or the cold weather. Stir the cream and use the thermometer with just as much care as though you were taking an observation at sea.