

steamed bone flour, and that we uphold coprolite chiefly as a material that happily puts a check upon the undue raising of the price of other forms of phosphate. It seems, indeed, to have actually had this effect, and steamed bone flour can now be purchased at so low a rate, and so near the rate of the coprolite, as to enable the farmer to use steamed bone flour alone. Care should also be taken that the coprolite used may not be to great extent composed of useless phosphate of iron, which will be known by its having a brownish or reddish colour. It should be of a light grey colour, if Cambridge coprolite be used. These were the two forms that we employed, and they occur largely in nature. I trust the Norfolk society will see that these or some such form is used, in order that they may not unknowingly condemn coprolite by using faulty forms of it. *Among these faulty forms, must certainly be included crystalline apatite, also red and brown or yellowish coprolite, and possibly also the gritty Belgium phosphate.* Of the latter, however, I am not quite sure, as I have not experimented with it.

I have been at pains to enter fully into this matter in view of the proposed experiments by other societies, but I hope I shall be excused from entering upon further correspondence on the subject meantime.

THOS. JAMIESON. (1)

Dairy Breeds in England.

The British Dairy Farmers' Association have just issued the second part of the second volume of their Journal, containing among other papers a full report of the milking competition at the London Dairy Show in October, 1886, now published for the first time.

On that occasion two prizes were offered for pure-bred Short-horns, two for Short-horns not eligible for the Herd Book, two for Jerseys and Guernseys, two for other pure or cross breeds, and a champion cup for the best of all the breeds. Sixty-three entries of cows and heifers were made, and tables in the report give their breed, name, age, time since calving, yield of milk in twenty-four hours, percentage of cream analysis, and points allotted to each animal. From these the Irish Farmer's Gazette quotes the first and second prize-winners in each class. One point is allowed for each pound of milk, two points for each percentage unit of solids, three points for each unit of fat, and one point for each ten after the first twenty days that have elapsed since parturition. It is not convenient to copy the table at length, but we give below the aggregate points accorded to the several prize-winners :

Pure Short-Horn—1.....	Total points.	80.53
do 2.....	do	79.78
Dairy Short Horn—1.....	do	98.30
do 2.....	do	98.10
Jersey or Guernsey—1.....	do	92.31
do 2.....	do	88.03
Other cows—1 (Ayrshire).....	do	97.72
do 2 (Ayr. & S. H. cross).....	do	85.03

Our contemporary adds the following remarks. One of the most valuable results of this annual competition is the opportunity it affords of comparing the milking powers of the dairy breeds under similar conditions.

(1) Better late than never. A complete, though a most dishonest recantation of a poisonous heresy.

A. R. J. F.

The following table gives a summary of averages, extending over seven years, 1879 to 1886, inclusive :

	Lbs. Milk.	Analysis.
Of 55 Short-Horns...	42.89	12.69 solids... 3.62 fat.
42 Jerseys .....	27 34	13.70 do ... 4.17
23 Guernseys.....	27 43	13.87 do ... 4.52
9 Cross-bred.....	43 53	12.71 do ... 3.57

The free milk-yielding character of the dairy Short-Horn is rendered very apparent by these tables. The circumstances surrounding public exhibitions are not favorable to the production of large quantities of milk; cows are too sensitive to external influences to settle quietly, and the food obtainable at such places is not always the most suitable for deep milking; yet it is seen that 55 animals of this type, 78 days after calving, are credited with the good average of 42.89 lbs. (about 17 quarts) milk daily of the high quality of 12.69 per cent. of solids, of which 3.62 is fat. Certainly, no other breed in the country possesses such a record, and it goes far to prove this race to be the most profitable for the dairy farmer. (1)

In the Channel Islands cattle, the relative position of Jerseys and Guernseys has been changed since 1883. At that period the Jerseys were leading in weight of produce by nearly 4 lbs. daily, and this superiority was fully maintained in 1884. In 1885 a large proportion of Jersey heifers in competition reduced the average of the race considerably, while some well selected cows of the Guernsey tribes raised theirs, until, for the first time in the tables, the Guernseys are slightly in front in quantity and quality. Whether this superiority is to be permanent remains to be proved. Doubtless, much time and attention have lately been devoted to developing the excellences of the "lemon and white;" and the patrons of the "self-colored" tribes must look to their laurels if they intend their favorites to keep the place of vantage they have hitherto undoubtedly possessed. (2)

Country Gentleman.

GLoucestershire Chamber of Agriculture.

EXPERIMENTS IN WINTER DAIRYING. (3)

The CHAIRMAN, prior to reading his paper, said he had received a telegram from Dr. Bond, explaining that his absence from the meeting was enforced, as he had had to go to Cornwall. The chairman then read his paper as follows:—  
 "When I took the presidency of this Chamber in January last I expressed the hope that during the year other subjects than those connected with the politics of agriculture would be discussed here; and perhaps it is, therefore, right that I should take the lead in introducing an extra subject, the one I propose to introduce to you to-day being an experiment in winter dairying. Well, I say "we" because I am in partnership with my sister, without whose assistance I should certainly not have attempted my present system of dairying, began on

(1) I have no doubt about it, where the land is fit to carry them. In fact, a very short sojourn in different parts of England would convince the most obstinate that the dairy-farms of that count, are almost entirely tenanted by the "dairy-short-horn." A. R. J. F.

(2) I have great faith in a cross between Shorthorns and Guernsey, where the land is of moderate quality, or where extra food is given on pasture. A. R. J. F.

(3) An article well worth studying. The author is a near neighbour of ours in Gloucestershire, and perfectly trustworthy. A. R. J. F.