

easily vary 50 per cent. in butter-making value. Small cream globules do not separate so fully from the milk as large ones, and hence make a cream less rich in butter than large ones; and the latter make a cream poorer in butter than where the globules are of very unequal size; in which case the smaller globules nestle in among the larger ones, adding little or nothing to the bulk, while they contribute to the yield of butter; just as bullets and shots may nestle among cannon balls without adding anything to volume, while they would increase the weight of a given bulk.

The Ayrshires were at a disadvantage in this trial, since the cream globules of that breed are noted for being very unequal in size, and making a very compact cream, rich in butter. Since the size of cream globules diminishes as the distance from the time of calving increases, they might in the Short-horn grade be reasonably expected to be small in comparison with those in the milk of cows recently in, and hence to make a cream carrying with it a comparatively larger proportion of milk and a smaller proportion of butter. The fact that it required 24½ lbs. of milk yielding 17 per cent. cream, raised in cool air, to make a pound of butter, corroborates the supposition that it carried with it a pretty large proportion of milk. That percentage of cream, if of average quality, ought to require less than 20 lbs. of milk for one of butter. The only reliable and exact way to test the value of milk for butter is by churning. Secondly, in this way of testing, it was assumed that the milk after the cream was off was all equally rich in cheesy matter and other constituents, which might or might not be true. This might be determined approximately by curdling the milk, and exactly by desiccation and weighing the dry solids.

Request to our Readers.

Our request is that each one of our readers would take a little pains, and, during the coming autumn and winter, introduce the *ADVOCATE* to some friend who is or ought to be interested in the prosperity of agriculture. Use your influence and obtain \$1 from a new subscriber. There are hundreds in each section who do not take the *ADVOCATE* whom it would benefit many times its cost. This you know, and by sending us one new subscriber each you would confer a benefit on us, on your neighbor and on yourself. Is there any manner in which they could expend \$1 to better advantage to themselves and their families? As our subscription list has every year increased, your paper has been improved. Aid us to continue our well doing. There always have been and always will be opponents to every good cause. If you find in your canvass a wilful opponent to right, pity, but do not censure him. If you find one in ignorance of right, try to convince him. To those who will accept a small recognition of their trouble, we will with pleasure send one of our prizes. We have selected such as we believe will be of use, profit and pleasure to every one. To those who will act as local agents we will send good inducements for them to exert themselves, but each one can help a little. If there is a will there is a way.

New rope for halters, etc., may, *The Ohio Farmer* says, be rendered permanently "limber and soft" by boiling two hours in water and then drying in a warm room.

At the Montreal Exhibition Messrs. Wm. Parks & Son, of St. John, N. B., make their usual good display of knitting cottons, goods most favorably known; also, carpet and beam warps, sail yarn, apron checks, etc., and have added some eight or ten first prizes to their list of laurels, among them being a prize for best general display.

J. A. Simmers, 147 King Street East, Toronto, has issued his usual catalogue of Dutch Flowering Bulbs, &c. There is not a more desirable class of flowers than the Dutch bulbs, but the buyer wants them true to name or color, and sound. We can recommend you to give Mr. Simmers a trial.

"Please show our paper to your friends; they may subscribe."

Stock Notes.

Stock raisers are directed to an article in this issue on the Hurdle system of grazing, from the *Live Stock (Eng.) Journal*, and are referred to an illustrated article on the same subject in our May number of 1881, page 112.

Geo. Whitfield, of Rougemont, P. Q., has presented the Agricultural College at Guelph, Ont., with a fine West Highland bull.

Mossom Boyd, Big Island stock farm, Bobcaygeon, Ont., has purchased from Geo. Whitfield, of Rougemont, P. Q., 5 head of Polled Angus Heifers, at a very high figure.

The noted Clydesdale mares "Lovely" and "Nancy," imported in May last by Mr. Robt. McEwen, of Alloway Lodge, Westminster, arrived in London on 19th Sept., and were taken to the above farm. They were exhibited at the Western Fair.

The first volume of the British American Short Horn Herd Book is now in the hands of the printer, and it is expected will be out by the end of October. The book will be supplied to members of the Association free, and to non-members at \$2.00. J. C. Snell, Cor. Sec.

Powell Bros., Springboro, Pa., U.S., announce the first arrival of their fall stock importations. Three large shipments reached them the first week in September, and they had advice of six others on the way. The senior member of the firm is now in Europe supervising their large purchases.

Mr. T. C. Patteson, of Eastwood, has imported thirty more Shropshire ewes, which reached Quebec last week in good order by the SS. Quebec, of the Dominion Line. They were bought at the great autumnal sale at Shrewsbury, from the flocks of Lords Powis, Chesham, and Willoughby de Broke.

John Snell's Sons, Edmonton, report a fine demand for first-class Cotswold sheep, at good prices. They have lately sold ten ram lambs to different parties in Canada and the United States, at an average of \$55 each, including one extra ram lamb sold to Mr. J. H. Ranson, of Jacksonville, Ill., for \$100.

Mr. John Thornton will sell by public auction on Thursday, October 26, about fifty Shorthorns, the property of B. St. John Ackers, Esq., at Prinknash Park, Gloucester, including many first-class animals of Booth blood that have been prize-winners. Catalogues may be had of John Thornton, 7 Princes Street, Hanover Square, London, W. England.

Your attention is called to the sale of Jersey cattle by Messrs. Cooke & Smoke, at Woodstock, Ont., on the 26th inst. These cattle, twenty-eight head, are from imported stock, fine milkers, and in good condition. The sale is imperative and without reserve, on account of the termination of a partnership. Send for a catalogue and attend the sale.

Copenhagen, the charger ridden by the Duke of Wellington the entire day of the battle of Waterloo, was born in 1808, passed his last years in a little paddock on the estate of Strathfieldsaye, receiving, it is said, a daily allowance of bread from the hand of the Duchess, who wore a bracelet made of his hair; died and was buried with military honors in 1834, and has a massive memorial stone with appropriate inscription.

GEARY BROS. POLLED ANGUS SALE.—Geary Bros., London, Ont., on Sept 20th, sold at Dexter Park, Chicago, a herd of Polled cattle at remarkably good prices. The lot included 14 cows and heifers, which sold at \$305 @ \$1,555, making an average of \$741. Of bulls, 5 head sold at \$315 @ \$800, averaging \$429. The sale was well attended, and bidding lively, soon over. They also sold a Hereford heifer at \$275.

The high prices of Hampshire Down sheep have been again illustrated at the sale of the well-known breeding flock of the late Mr. Edward Waters, near Salisbury. Nearly 1,000 ewes and lambs were offered. Sir Edward Hulse, Bart., bought at 102s. per head a prime lot of the four tooth ewes, which averaged 76s. 8d. The two-tooth ewes ranged from 64s to 102s., Mr. Lyne buying at the latter figure. The six-tooth ewes fetched from 66s. to 87s., the average being 74s. 8d. The full-mouth ewes sold at 63s to 78s., average 68s., and the chilver lambs 48s. to 90s., average 56s. Two-tooth rams ranged from 4½ gs. to 11 gs. per head.

Sir William G. Armstrong, K. C. B., has sold from his Bates herd at Cragside, Rothbury, two cattle to Mr. R. Gibson, Ilderton, Ontario, Canada, who will take them, with selections from other herds, to that country. The Cragside pair are Wild Duchess of Geneva 3rd, a red eight-year-old daughter of the Brailes Duke of Geneva 9th 23,381 and Wild Oxford. Her red bull-calf of April last, by Duke of Oxford 48th, accompanies his dam.

This is all about an old polled cow:—"Poor old lady! Age was now telling heavily on her, and she could not support her calf. Consequently it had to be put on another cow to nurse. Grannie did not seem to understand this, and she mourned over her lost child for many a day. No caresses from old Jamie Thompson could soothe her. She would follow him about the field, moaning, talking to him, seemingly asking him what he had done with her baby; actually tears of sorrow rolled down her old sweet maternal face. Lord bless our *doddit* Grannie." Nothing in Shorthornology beats this. It is quoted by the *Breeders' Gazette* from a history of Old Grannie, by Mr. W. Watson, son of the breeder, Mr. Hugh Watson, of Keiller.

J. G. Snell & Bro., of Edmonton, Ont., report sales to Samuels & Sons, Pleatsville, Ky., 10 Cotswold lambs and 4 Berkshires; S.W. Macy, Colfax, Iowa, 1 boar and 2 sows; F. G. Fauquier, Ilfracombe, Muskoka, 1 boar; John McKellar, Belmont, Ont., 1 boar; R. J. Turner, Brucefield, Ont., 1 boar; Dalton McCarthy, M. P., Barrie, Ont., 1 imported boar; John Clugston, Rocklynn, Ont., 1 boar; W. J. Winter, Massie, Ont., 1 imported boar; Louis Wigle, M. P., Leamington, Ont., 1 boar; W. Shepherd, Imotitition, Muncy, Ont., 1 boar; A. Terrill, Wooler, Ont., 1 imported boar; Walker & Sons, Walkerville, Ont., 1 boar; B. McNichol, Orangeville, Ont., 1 sow; John McDonald, Dundalk, Ont., 1 boar; Robert Kerby, Guelph, Ont., 1 boar; James Caldwell, Jarvis, Ont., 1 boar; H. Snell & Sons, Clinton, Ont., 1 boar; David Nichols, Glendale, Ont., 1 boar.

The L. & N. W. R. R. are making a large yard at "Crewe" for the disposal of foreign and English live stock; also abattoirs for that left on hand. They are going to appoint auctioneers. They have bought 40 acres of land which cost £1,000 per acre, and are laying out 5 acres to start on immediately after Christmas, the remainder to follow. Stock from Canada and elsewhere can arrive in that yard (via Hollyhead) 18 hours before they could be landed at Liverpool; and Crewe being nearer the centre of England, and within easy access of those who have to buy food for millions of our people, it is bound to become a great mart very soon. It will also be a good centre for store stock to be sent to; there is a great demand for that now. From the Board of Trade returns, England is one million cattle and over six million sheep short to what we had four years ago.

Messrs. Rogers, Hamar and Pie inaugurated on the 30th of August last year their annual sale of rams and stock ewes. On August 15th of the present year the number of rams and ewes in the catalogue was an increase over the number disposed of at the first sale, there being about 60 rams and 1,100 ewes. In introducing the first lot, Mr. Thos. Rogers pointed out that all the lots mentioned in the catalogue were present, with the exception of one lot. Speaking of the Shropshires he remarked that Hereford cattle and Shropshire sheep were the leading features at this year's Royal and other agricultural shows, and for both those breeds the demand was becoming keener. The sale then proceeded. There were many pens of grand sheep among the various breeds, and the black-faced (Shropshire) ewes and rams were looking firm and very much better even than that breed showed up at this sale last year. Mr. Pulley's Shropshire Down rams included one by Colossus, which was hired in 1875, at 75 gs., and sold next year for 90 gs. Colossus was by Hereford, a ram which was bred by Mr. Pulley. The second ram was by Grand Duke, hired by Mr. Pulley for half the season at 50 gs. The third was by Old Sultan, purchased by Mr. Pulley for 250 gs. Another was by Dorchester Hero, a great prize winner, and sire of Hereford. The dams of Mr. Haywood's rams were by Lord Odstone, with pedigrees extending further back.

We would be very unwilling to dispense with its monthly visits. Our scientific farmers, of which we have a very respectable number, all place the *FARMER'S ADVOCATE* at the head of the list of agricultural papers. Yours respectfully, J. WOODSBURY, Middleton, N. S.