by Baron Westbury 19287, g gr d Raspberry by General Canrobert 12927,—Nightshade by Earl of Derby 10177—bred from the stock of Mr. Nesum, Kirklevington.

Lord Waterloo 2nd bred by Mr. Hanvard of Winterfold, by Third Duke of Wharfdale (Col. Gunter's) from Waterloo Cherry, of the Waterloo tribe.

Seventh Duke of York, bred by Col. Gunter, of the Duchess tribe, was one of the most celebrated sires on record.

Fourth Duke of Oxford, bred by Earl Ducie, by Grand Duke from Oxford 6th, bred by Mr. Bates.

Maid of Oxford, bred by Mr. Bowly, of Siddington, Gloucestershire, from a tribe that had been many years in his possession.

Maid of Oxford sold at the Revere sale, 1876.

CCLX.—Lady Mary. Red and a little white. Calved November 11th, 1872; sire Grand Duke of Clarence 28750. Marked |||| on each horn. Bred by T. G. Curtler, Esq., Revere House, Worcester. Imported by Central Board of Agriculture of Nova Scotia, October, 1876, and sold to John Parker, Esq., Halifax.
dam Lovely by Wild Boy 23219,
gr d Lady by Sir James 16980,
g gr d Loyalty by the Corsair 15378,
g g gr d Lucy Locket by Usurer 9763,
g g g gr d Lavender by Dan O'Connell 3557,
g g g g gr d Lily by Brutus 1752,
g g g g g gr d Violet by Fred'k 1060,
g g g g g g g gr d Vestris by Cato 1794,
g g g g g g g g gr d Verbena by Son of Wellington 679,
g g g g g g g g g gr d bred by Mr. Robertson of Ladykirk.

Served April 1, 1876, by Ragman 35198, roan, calved April 19, 1873; bred by Lord Fitzhardinge, Berkeley Castle; got by Grand Duke of Waterloo 28766, dam Raspberry 4th, bred by Mr. Thos. Pell, by Earl of Gloucester 21644, gr d Raspberry 2nd by Baron Westbury 19287, g gr d Raspberry by Gener Canrobert 12927,—Nightshade by Earl of Derby 10177—bred from the stock of Mr. Nesum, Kirklevington.

Grand Duke of Clarence, bred by Mr. R. Pavin Davies, by Third Duke of Clarence (bred by Col. Gunter) from Kirklevington 9th by General Canrobert 12926, &c.

Wild Boy, bred by Mr. G. Graham, by Touchstone of Knightley-wood, from Lady Wild Eyes of Mr. Bates' Wild Eyes tribe.

Lavender was bred by Sir Charles Tempest, and at his sale in 1849 was purchased by Earl Ducie for 150 gs.

Lady Mary sold at the Revere sale, 1876.

AYRSHIRE CATTLE.

[Dr. E. Lewis Sturtevant has addressed the following letter to the American *Practical Farmer*.]

The value of thoroughbred stock is usually admitted by the better class of farmers, but yet their belief is hardly of that character which leads them to patronise the thoroughbred for themselves. The statement is but an illustration of a fact, that farmers have too little confidence in their business, and distrust the accuracy of their own impressions at the time of action, but never at the time of argument.

At Waushakum Farm, our herd of Ayrshires attracts many visitors; and it is a frequent question whether we can furnish an animal which will be superior as a milch cow to the natives of any particular farm yard or neighbourhood. We usually reply, let any one keep accurate account of his yields for a year or series of years, and he will find the thoroughbred always in the van. "How much will your thoroughbreds yield?" is asked. We only reply, "How much do your natives yield?" "Don't know." "Then do you expect us to compete with your guess, by giving our absolute facts?" We all know what erroneous beliefs exist as to the average yields of herds. However, it has been our practice to furnish our yields, simply as a contribution towards agricultural knowledge, and we are satisfied to have them rest on their own merits, and care not whether they compare favourably or otherwise with assumed yields.

The practice of publishing exceptional yields only, and not herd averages for a year or a series of years, has much to do with the present exaggeration of belief in the yield of the average milch cow. A careful examination of the cheese and butter factory yields of New York State for a number of years lends countenance, and, in fact fully justifies the assertion that the average yield per cow for the dairy regions of the United States, is not in excess of 1200 quarts; and the average richness of this milk is as 23 lb. of milk for 1 lb of salted butter, or a butter yield per cow of 112 lb. In these figures, 1200 quarts and 112 lb., we have a constant reference which we can safely use as a standard for comparison.

Then, again, by collecting all the dairy returns in our power, we find another standard, and that is the average yield of superior dairies for a series of years. Let us place this at 1800 quarts yearly, or 168¾ lb. of butter, and we are not far from right.

A third result is, that the possible average of native herds for a series of years (at present) is not far from 2300 quarts of milk annually, or 215 lb. of butter. (See *Country Gentleman*, Oct. 30, Nov, 6, 13 and 20, 1873, for figures bearing out these statements.)

Now let it be understood that many accounts of individual cows are published, whose yield is far in excess of any figures I have thus far offered. It will be remembered, however, that the true discussion is with herds, and not with individuals; with a series of years, not a few months, or one year.

These figures we have given, and from their importance as a standard, we repeat below:—

Annual Averages for the Dairy Regions of the United States.

Average yield, 1200 quarts milk, or 112 lb. butter, or 263 lb cheese.
" " superior dairies, 1800 quarts milk, or 168 lb. butter, or 395 lb. cheese.
" " possibilities, 2300 quarts milk, or 215 lb. butter, or 504 lb. cheese.

May be of service to each and every farmer who will keep an accurate account of his dairy products. Whoever can show average annual returns in excess of 1800 quarts of milk or its equivalent in butter or cheese, should rank high as a successful dairyman. Whoever reaches 2300 quarts may well call attention to his practices through the public press, and claim to be heard as one who knows his business.

In 1867-8-9, Waushakum Farm stock consisted of natives, which were selected with great care as of the best, and fed liberally, on the theory of forcing for milk, and sale of inferior animals to the butcher. Our yields were 2174 qts., 2248 qts., 1943 qts., or for the three years, 2122 qts. annually. This sum, it will be seen, is far in excess of the sum given for average superior dairies, and comes very near the possible limit for the native cow.

In 1870-1-2-3-4, our herd has been Ayrshire, and as a breeding herd has not been forced for milk, but has been kept in a thriving, growing condition. Yet their average yield during five years has been 2599 qts.—a result about 300 qts. larger than the figures which I have given as the largest possible average yield for native herds; and 425 qts. more than ever given by our natives under far more liberal feed.

After a most careful study of all the milk records that I could obtain, I published in 1873 the following result, as giving the practical advantage in milk yielding of the Ayrshire cow over the native. I divide the yields into three classes as below:—

	For Natives.	For Ayrshires.
	Quarts.	Quarts.
Common average.....	1300	2000
Average of best dairies....	1800	2500
Possible average.....	2300	3000