Advantages of Dairying.

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One reason why dairying is bound to come more and more into favor is because of the increased production of the cow over the steer. Laws & Gilbert, of England, found the increase of a fattening steer in one day to be as follows:

	Per Cent.
Ash	1.47
Protein	7.69
Fat	66.2
Water	24.6

On the following ration of 30 pounds ensilage, 4 pounds cotton-seed meal, 4 pounds bran, 4 pounds of corn meal, and 10 pounds mixed hay per 1,000 pounds live weight, a good dairy cow ought to produce 20 pounds of milk, and a steer should make 2 pounds of gain per day. By reference to the table given below, the returns from each can be readily ascertained:

In 20 pounds cow's milk—	Per Cent.
Sugar	0.94
Fat	0.72
Protein	0.80
Ash	0.14
Total	2.60

In 2 pounds increase on steer—	
Sugar	0.00
Protein	0.15
Ash	0.03
Fat	1.30
Total	1.48

The cow's milk contains over 1 per cent. more solids than in the 2 pounds gain of the steer. The cow has produced 9¼ per cent. of sugar against the steer's nothing, five and one-third times as much protein, and over half as much fat, and if the sugar is reduced to its fat equivalent, nearly as much fat as the steer. Practically all of the constituents of milk are digestible, and it constitutes the best and most nourishing of foods. It is thus apparent that the cow is by far the most economical machine for the condensing and manufacturing of our coarse fodders and grains into cheap food products.

In an experiment conducted at the Ontario Agricultural College, one of the group of steers fed on a ration of 53.50 pounds of ensilage and 9.64 pounds of mixed meal for 150 days gave the following financial results:

Cost of steer at commencement of test	$51 92
Cost of food	19 60
Cost of attendance	3 13
Total cost	$74 65
Value of steer at close of test	$92 88
Value of manure	6 75
Total value of steer	$99 63
Net gain	$24 98

A good cow fed this same ration for the same period, cost of attendance the same as for steer, ought to produce twenty-five pounds of milk a day. Assuming the milk to contain 4 per cent. of fat and the cow to be worth the first cost of the steer, we have the following financial results for butter dairying:

Value of cow	$51 92
Milk produced (25x150 days) 3,750 pounds	
Equal to pounds in butter, 168.75 pounds	
Worth at 25c. per pound	42 18
3,200 pounds skim milk, at 25c. per 100, for feeding purposes	8 00
Value of manure	6 75
Total value of cow and product	$108 65
Net gain of cow over steer	9 22

This seems to be a fair comparison of the relative value of the cow and steer in the production of agricultural wealth.

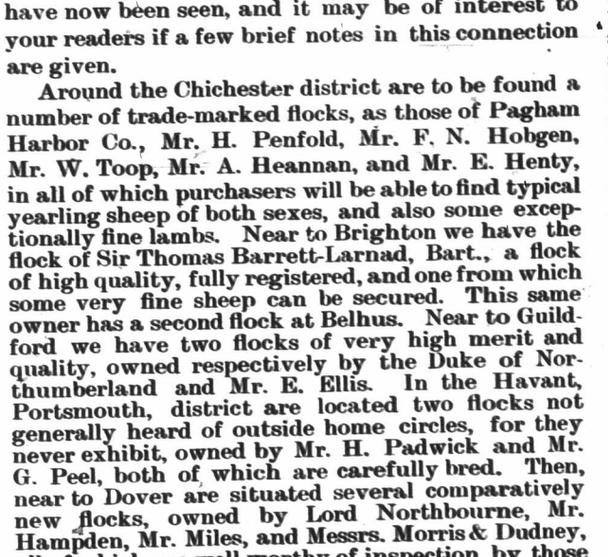
Improving Hogs.

Writing the *Prairie Farmer*, G. W. Baumwart, of Fayette Co., Iowa, says:—"There are many farmers who feed their hogs a year and then wonder why they do not weigh more than 150 pounds. I have a farmer in mind who feeds his hogs on dry corn and water, and then cannot imagine why they do not do better, as he has a fairly good breed. He might just as well feed his family on dry bread and water and expect them to get fat. I believe a pig farrowed early in the spring ought to be ready for market before cold weather sets in, and this can be done if they are given the proper food and care. It is the winter feeding that costs the most and from which the poorest results are obtained. If a hog holds his own during the coldest weather, that is about all you can expect of him. Every farmer should have a good forage pasture for the hogs to be turned on during the summer months. The small cost of seeding such pastures should not prevent the farmers from having them. In driving through the country we see many bare hog pastures, and in consequence many hungry-looking hogs are also seen. It seems as though with the number of papers that find their way into our homes there is no excuse except carelessness for the number of poor-looking hogs that find their way into our markets."

English Notes.

Once a year I visit many of the principal Southdown flocks. The majority of those in my rota have now been seen, and it may be of interest to your readers if a few brief notes in this connection are given.

Around the Chichester district are to be found a number of trade-marked flocks, as those of Pagham Harbor Co., Mr. H. Penfold, Mr. F. N. Hobgen, Mr. W. Toop, Mr. A. Heannan, and Mr. E. Henty, in all of which purchasers will be able to find typical yearling sheep of both sexes, and also some exceptionally fine lambs. Near to Brighton we have the flock of Sir Thomas Barrett-Larnad, Bart., a flock of high quality, fully registered, and one from which some very fine sheep can be secured. This same owner has a second flock at Belhus. Near to Guildford we have two flocks of very high merit and quality, owned respectively by the Duke of Northumberland and Mr. E. Ellis. In the Havant, Portsmouth, district are located two flocks not generally heard of outside home circles, for they never exhibit, owned by Mr. H. Padwick and Mr. G. Peel, both of which are carefully bred. Then, near to Dover are situated several comparatively new flocks, owned by Lord Northbourne, Mr. Hampden, Mr. Miles, and Messrs. Morris & Dudney, all of which are well worthy of inspection by those who desire to obtain selections which combine merit and quality; and last, but by no means least, we have a grand flock of high-class sheep at Newmarket, Cambs., owned by Mr. McCalmont, from whence, unless appearances are misleading, some very prominent sheep in this year's showyard contests will come. This flock, only recently started, has been founded upon the best lines, and its produce will be sure to give full satisfaction, notably those by a grand ram from the Pagham Harbor Co.'s flock, which has a high reputation. From information given by public announcement and otherwise, it appears that there will be several very



STANDARD-BRED STALLION, DASHWOOD 12486.
First prize, Canadian Horse Show, 1900. (See Gossip, page 339.)
OWNED BY JAS. WETHERELL, BLAIR, ONT.

important dispersal and other sales of Southdown sheep during July and August next, amongst them being the whole of Sir James Blyth's flock, whose record is widely known. Earl Bathurst's old-established flock at Cirencester will be sold. The entire flock of Mr. W. Toop, at Aldingbourne, Cinchester, will also be sold. This flock is one well deserving the attention of buyers, as is likewise a flock of high merit and quality, though not so extensively known abroad as some of those named above, the property of Sir Thomas Barrett-Larnad, Bart., which will also be dispersed in its entirety. Then there is the bi-annual sale of the Sandringham flock, property of H. R. H. the Prince of Wales, notice of which has already been given in the columns of the ADVOCATE. Several other smaller flocks are also for sale, and it may be stated that any buyer who needs only breeding sheep, not show animals, would certainly find it greatly to their advantage to attend these sales either in person or by agent who should have a free hand, for in all cases no reserves are allowed, and all are sold to the highest bidder, the values thus realized being much lower than those asked for privately.

W. W. C.

The following reasons for having cows come fresh in the fall are credited to Prof. T. L. Haecker: "In the first place, the cow will give a larger yield of milk for twelve months, if she comes in the fall than if she comes in the spring; in the second place, it will cost less to rear the calf during the first six months if it is in winter time than it will in summer time; in the third place, we must feed a calf anyway from four to six months, and we might as well do that during the winter; then in spring it is let out to pasture and you have no more trouble with it. Therefore, when your calf is a year old, you have given it personal attention for from four to five months; the balance of the time it has taken care of itself."

Making the Most of the Land.

It is practically certain that on the average farm, by the adoption of a system of soiling or summer feeding of green forage, cut and carried fresh from the fields to the stock more or less confined in stables or yards, and by storing corn ensilage in sufficient supply for part of the following summer's feeding, as well as for the winter, three or four times as many cattle could be well sustained as are now kept in an indifferent way. The question of the expense of labor required in the attendance upon the animals during the summer months is the only one which could possibly militate against the success of the system, and it is by no means an insurmountable difficulty. The steady and uniform growth of flesh and flow of milk which could be produced under such a system judiciously carried out would, we are confident, far outweigh the disadvantage of the extra labor bill; indeed, we are strongly inclined to the opinion that the extra manure, made and collected in convenient form ready for application where required, would of itself more than balance the labor account. There are at least six distinct advantages in soiling cattle: First, the saving of land; second, the saving of fencing; third, the economizing of food; fourth, the better condition and greater comfort of the animals; fifth, the greater product of milk; sixth, the attainment of manure. Cattle kept in the pastures during the day in the hot months of summer, when the burning sun and the flies worry them, cannot possibly gain flesh or give a full flow of milk, but if kept in well-ventilated and darkened stables in the heat of the day, and fed liberally of cheaply-grown fodder, and pastured at night on heavy-producing forage crops, they may be kept increasing in weight of flesh if intended for beef, or producing the fullest flow of milk if they are dairy cows. The economy and profitableness of the soiling system has been well proven in European countries, and a writer in the *Breeders' Gazette* recently gave the result of his experience under this system on his 240-acre farm in Nebraska, which well confirms the opinion that soiling will grow in favor as it is more generally tried and practiced. The writer above referred to had on his farm 35 acres of permanent blue grass pasture and 7 acres of fall rye, and by sowing at intervals of time during the spring and summer, mixed grains, rye, oats and peas, also corn and rape, he successfully carried a large stock upon the produce of a few acres, as stated in his own words, as follows:

"At the beginning of the pasture season, after selling our beef cattle, our herd was reduced to sixty-five mixed cattle, such as would be expected in any breeding herd. These were put into the thirty-five acre blue grass pasture with fourteen horses and twenty-three sheep; in all, 102 animals. A slight fodder ration with the grain on it was fed up to the middle of May. At that time the animals were given access to the seven-acre lot of fall rye, which carried them well for two weeks, or to June 1. By that time the four-acre lot sown to rye, oats and rape was ready to cut. And such a crop! The lot was 220 feet wide; two swaths with the mower across it was all a heavy team could draw, and more than the stock could use at a feed. We fed morning and evening. At this time we removed our little bunch of sheep from the pasture and confined them on one acre of rye that had a slight seeding of clover. This acre was fed off, one half at a time, the hurdles being moved when the one half was fed reasonably bare and the sheep put on the other, then back again when the first had started nicely. This served them well.

"The seven acres of rye that was fed down by June 1 we immediately worked over and seeded to rye, oats and rape for pasturing again when required. We fed from the four acres two loads each day, morning and evening, to the end of the third week of July, when our first planted corn was ready to cut and feed. But the four-acre plot was by no means finished. We had still one-half to three-quarters of an acre left to make into hay, and we had never been called upon to interfere with our mixture of oats and peas. The supply had gone clean beyond our most hopeful expectation.

"Harvest had now come, and required our time without extra attention to our stock. The seven-acre field was ready with its rye, oats and rape, and when we opened the gate there was no extra inducement, further than what was there, required to coax the cattle to enter. Their wants were supplied and we were freed from their care until our grain was in shock. As we did not think it would be well to put them on a full feed of new corn at once, we, as time allowed, gave them a load of fresh cut corn. So that by Aug. 1 we had them ready to take a full feed of corn as we drew it from the field. From that time on their feed has been corn, and corn and sorghum after Sept. 20, with the liberty of a straw stack.

"The seven-acre field was plowed the second week of August, worked down and seeded to clover and Brome grass. Thus it is growing the third crop in the same season, the first two being fed off. Our cattle have increased to eighty-six head during the summer, and we have used in supporting them, with fourteen horses and twenty-three sheep, from May 1 to Jan. 1, a period of eight months, thirty-five acres blue grass pasture, seven acres rye, re-seeded to rye, oats and rape; twenty-two acres of corn; three acres of sorghum; one acre sheep lot. In all, 68 acres.

"The blue grass could not be expected to carry more than one animal to the acre for the months of May, June and July, for then it dries up, especially