

selected strain of cattle, we discern in his pens a composite race, "a little of everything and not much of anything," as it is flippantly put on the corners. Charged with this, he laughingly assents, declaring, by way of banter, that he is not in the exhibition business, and has no time for dairy tests, but simply keeps cattle for the manure they make and the look of contentment they afford to the steading. In plain point of fact, the condition reproved is a common one here now, and it is chargeable, in a large extent, to the so-called teachers from the Government bureaus, who come to us every year with a new cow doctrine, until the public mind is altogether confused on the important matter of the breeding of cattle suitable to our circumstances. Mr. O'Brien keeps good sheep, however, and a good big flock of them. He has fowls of all sorts, and markets them and their products carefully. He is an expert hog man when pork can be fed profitably, and this he sees far in the distance. He prides himself especially on his fine seed grains and grasses, timothy and clover rolling up big surpluses for him every year. A general farmer in every sense of the word, he has something of everything to sell always, and either strikes a strong market when it is ready, or keeps it confidently till the market comes back to him to sell.

The stranger who visits "Glenahiry," called after the old O'Brien castle, near Tara, in the land of his ancestors, is sure to marvel at the picture of comfort and abundance it affords—great barns bursting with garnered grain; stables crowded with cattle and horses; cellars filled with roots and vegetables; machinery-houses containing everything that can lighten labor; and a house furnished from basement to attic with everything that money can purchase. He is sure that this is a homestead descended from a long line of ancestors, perfected and embellished by succeeding generations. He looks up at the tall, lithe, graceful form of the owner, whose every feature betokens intelligence, earnestness, and that energy of manner which always impresses, and refuses to believe the story we have just told, to wit, that he is only 39 years settled there; that the country was at that date a howling wilderness; and that he has made all about him, under God's blessing, with the labor of his own hands. People will talk of there being nothing in farming in Prince Edward Island. Long time will they be in any other country before they have James O'Brien's proofs of prosperity to offer. And what he has done, who may not do?

A. E. BURKE.

THE SPLIT-LOG DRAG ON PRINCE EDWARD ISLAND.

Editor "The Farmer's Advocate":

Seeing your descriptions of the split-log drag, and recommendation of the same, was sufficient guarantee for me to shoulder my axe and proceed to the wood-lot and select a nice beech tree, which was soon laid low, an 8-foot log cut off, brought home, and soon had the proud satisfaction of having the first split-log drag on Prince Edward Island, as far as I know. And then, when the time came, it was with confidence I hitched up a 2,400-pound team and struck for the highway. I expected much, and I can tell you my expectations were more than realized. The way it scraped off, pressed down, and drew the soft earth to the center of the road, was simply perfect. Several people happened along, and they pronounced it the best roadmaker they had ever seen. I went over the road (three-quarters of a mile) three different times during the summer, and each time it was like a driving park. It should have been gone over a time or two more later in the fall, but as I wasn't getting any remuneration for the job, and had plenty of other work to attend to, it was not done. However, enough was done to demonstrate its worth as a road-maker, and that it should be used on every foot of clay road in the Province. There should be two in each district or precinct (ours are from 1½ to 2 miles), and have the men paid to go over the road when required. This would make an ideal road.

The split-log drag is the best implement I have ever seen used on the road, and you, Mr. Editor, deserve great credit for bringing it so prominently before the public.

Do you know whether anyone has tried giving the pieces a little cant under, so as not to scrape quite so heavily? A. A. MOORE.
Queen's Co., P. E. I.

[Note.—One of our competitors, W. B. Rittenhouse, winner of the second prize in Western Ontario, made a second drag, with the face inclining forward, as suggested, and found that it did the work well, with less draft on the team. Some have reversed their drags on soft places, round side to the front. These are points which one gets onto with experience. Each piece of road and each drag should be studied and adapted by the operator.—Editor.]

RE IMPORTED HORSES AND BOYS.

Editor "The Farmer's Advocate":

Being a subscriber to your valuable paper, and one who reads with interest, I have been more than disgusted to see the manner in which the all-prosperous Canadian farmer is crowding the English farm hand to the wall, and I can only come to the conclusion that it is being done without one moment's thought, common sense or reason. It is a well-known fact that Englishmen have a bad name amongst the majority of Canadian farmers, and yet, some who have had English farm hands employed, prefer them to the native, which I will prove presently. I am not going to criticize the Canadian—far from it. All I ask for is more equalization, as the English farm hand is equal in merit to the Canadian, and in some cases superior. Now, as a standpoint, I take it that "Subscriber," as he calls himself, in your issue of January 9th, classes all men that cross the big pond as one, when he states he would not take six Englishmen for one Canadian; but I will endeavor to enlighten him on this subject, which is far from just and fair. The English farm hands are men who do nothing else but farm work from youth to manhood. They go to farm service when they are yet boys of ten or twelve years, and are brought up to manhood with this every-day life which fits them with that durability and practicability which we expect of them. These are the sort of men Canadian farmers must cater for if they intend to solve the farm-labor problem of this country, and not the city boy, who practically never saw a farm in his life, unless they have patience to train him, and not expect too much from him at the start. Go into the cities of Canada and take Canadians out on the farms, and how much difference would there be between them and some of these men "Subscriber" has been unfortunate enough to run against. But this leads us on to the point, Who is to blame? Here is a question that wants more consideration than has yet been given it. These men come out here with an idea that in farming in Canada "all is gold that glitters." The Canadian farmer, on the other hand, offers them wages which he dare not offer his neighbor, and yet he expects the same from them as from a practical man. What is the result? Nothing but disappointment on both sides.

Now for the merits of the English farm hand. Some seventeen months ago, the Rathbun Farm Company, of whose dairy department I am foreman, were wanting men. On came an Englishman, who, of course, was greeted with "Another Englishman!" But, being short of help at the time, they took him on. He was put in the dairy barn—and at that time there were six men working in the barn, tending to some 100 head of cattle, forty-five of which were milking. He was set to work to milk ten cows, which proved the hardest in the barn, but he managed them all right, and asked where to start next; the others had not yet finished, and before he got through with them he was milking two cows to their one. But he did not stop at this. One morning, in particular, he stepped into the barn at five o'clock, and at half-past seven had milked 29 cows, thus accomplishing the task in two hours and a half. Then there came a time when men were leaving, and more help was needed. He was asked if he knew of any more good men, and, knowing a particular friend, another Englishman, at once secured him. These two Englishmen, along with the assistance of an English boy, who only immigrated last June, and who practically never saw a farm, now do the work that it took six men to do. The boy milks his nine cows morning and night, and tends to the dairy work, including buttermaking. The other two men do the rest of the milking, which consists of some fifty head, and tend the cattle, along with 150 hogs. And, what is more, the second man has had letters from two different Canadian farmers, offering him handsome wages to manage their farms, and actually stating in their letters they preferred him to anyone else. Now, does not this lay claim to some credit to the English farm hand. Yet, these are only instances of many, if time and space would permit me to point out, and I conclude by saying, if "Subscriber" has no heart to help a "lame dog over a stile," don't kick at him, but pass him by quietly, and do not press too hard upon the feelings of the English farm hand, but give him a show, which is all he asks for. A LOYAL ENGLISHMAN.
Hastings Co., Ont.

GOOSE 62 YEARS OLD.

I saw in one of your recent issues an item about a goose living to be about 40 years old. We can beat that. One of my neighbors, Mr. H. B. Hyman, had a goose for 62 years, and then a double wagon ran over it, or it might be still living. JAS. McALLISTER.

Argenteuil, Que.

THE DAIRY.

ALFALFA AS A SUBSTITUTE FOR BRAN.

The people in Eastern Ontario don't do enough winter dairying, said Henry Glendinning, of Manilla, Ont., at the Eastern Dairymen's Convention, in Picton. Two objections are raised, viz., labor and feed. The former is not so serious as generally imagined. Winter dairying helps to afford employment all the year round, and enables us to hire much more reasonably than for the summer only. In his locality, many of the summer workers start every spring no further ahead than they commenced the year before. They pay out the summer's wages for winter living. When a man has yearly employment, he can afford to work for less money per month.

As for feed, he made the assertion that it is possible to produce milk more cheaply in winter than in summer. To do so, we require abundance of cheap, palatable, succulent food of the right kind to produce milk.

DIGESTIBLE NUTRIENTS OF FEEDSTUFFS PER 100 LBS.

	Per cent. Dry Matter.	Per cent. Ash.	Per cent. Protein.	Per cent. Carbohydrates.	Per cent. Fat.	Per cent. Nutritive Ratio.
June grass ...	34.9	2.8	3.0	19.8	.8	1: 7.2
Corn silage ...	20.9	1.4	.9	11.3	.7	1:14.4
Mangels ...	9.1	1.1	1.1	5.4	.1	1: 5.1
Timothy hay...	86.8	4.5	2.8	43.4	1.4	1:16.7
Red clover hay.	84.7	6.6	6.8	35.8	1.7	1: 5.8
White clover hay ...	90.3	8.3	11.5	42.2	1.5	1: 4
Alfalfa hay ...	91.6	7.4	11.	39.6	1.2	1: 3.8
Wheat bran ...	88.1	5.8	12.2	39.2	2.7	1: 3.7
Oats.	89.	3.	9.2	47.3	4.2	1: 6.2
Milk ...	12.8	.7	3.6	4.9	3.7	1: 3.8

Corn silage and roots are the two succulent, winter foods. Silage will give succulence and bulk, and is palatable. It lacks only one essential; it is deficient in the important element, protein, as reference to the accompanying table shows. Its nutritive ratio is very wide, 1:14.4 (i. e., only one part of protein to 14.4 parts of carbohydrates and fat—the starches, sugars, vegetables, oils, etc.). A properly-balanced ration for a dairy cow is one with about 1 part protein to 6 of carbohydrates and fat. As protein is essential in the animal body, and enters largely into the composition of milk, a considerable proportion of it is necessary for good results. In certain parts of the Province, he believed, the silo had not come into such favor as it deserves, because some dairymen have fed silage without supplementing it with feeds rich in protein, and consequently have obtained indifferent results. Those who have fed bran liberally along with their silage have balanced it up, because, consulting the table again, bran is very rich in protein, having 12.2 per cent., or one part of protein for every 3.7 parts of carbohydrates and fat. But bran, at \$23 to \$28 per ton, is too high for economical feeding. It might still be used if there were no substitute, but the margin of profit would not be large at present prices. Now, 100 pounds of milk contains 13 pounds solid matter and 3.6 pounds of this protein. How are we going to furnish the protein?

Well-cured alfalfa hay contains nearly as much protein per ton as does bran, 11 per cent., in fact, whereas bran contains but little over 12 per cent. What does it cost to produce a ton of alfalfa hay? On his own farm he has done it for \$2.00 per ton, taking an average crop of three cuttings on an eight-acre field.

Q. Have you any to sell at the price?

A. I never sold but half a ton of hay in my life, and I waited years for the payment of that.

Not to lengthen this article unduly, we leave Mr. Glendinning's points on growing and making alfalfa hay for separate treatment elsewhere. Suffice to say that a good average crop of alfalfa, in three cuttings, will yield 5 to 6 tons of hay per acre per annum, and 20 pounds of good alfalfa hay will contain as much protein as 18½ pounds of bran. In other words, taking his figure at \$2.00 per ton as the cost of production, a feed of alfalfa hay costing 2 cents to produce will practically take the place of 19.45 cents' worth of bran.

As for its effectiveness, he related the case of a Jersey cow in his herd that freshened the last of June. In July, on pasture, she gave 28 pounds of 4.4-per-cent. milk per day, and on New Year's Day she gave 25 pounds of milk, which, judging by her average test in December, contained 5.2 per cent. fat. Figuring it out, her average weekly butter yield in July was 9.9 pounds, and at New Year's it was 10.47 pounds. Her winter ration consisted of corn silage, mangels and alfalfa hay, with no grain but the corn in the silage. By suggestion from the audience, Mr.