## Feeding Roots to Cows.

A subscriber asks:—"Will carrots, mangel wurzel or sugar beets injure the flavor of butter?" While there are instances in which people have found, or fancied they found, a slight taste in the milk produced by cows that have been fed on such food, we think it perfectly safe to feed them in reasonable quantities. It should be borne in mind, however, that the butter is less liable to be injured than the milk. It is also well to bear in mind that succulency is or should be the chief object in feeding roots, as the same amount of nutriment can be produced and handled much more cheaply in grain, hay and straw than in roots. Grow plenty of roots wherever practicable, but do not by any means substitute them for grain.

## Dominion Dairymen's Association.

The Dominion Dairymen's Association was called into being by a number of leading dairymen of both Quebec and Ontario. But Mr. Lynch, of Danville, Que., took the most active part, and did the preliminary work necessary by issuing invitations to the leading dairymen to meet in Ottawa at a certain date in 1888. At that time quite a representative meeting of leading dairymen was effected. After a free and full discussion it was the unanimous opinion that the Federal Government should do something to further the prosperity and success of dairying in all the provinces of the Dominion. A grant of three thousand dollars was asked to carry on the work of the Association, as well as the appointment of a Dairy Commissioner to perform the work that was found necessary to do; such work was organization of dairymen in all parts of the Dominion, so as to acquire the best and latest knowledge of carrying on all the work pertaining to the dairy business in a better and more profitable manner; to assist and direct the farmer to produce a better article, cheaper and more of it; to improve the facilities of transport for preserving the quality, both by "rail" and "boat," and also to find out the different wants of the different markets and supply those wants in the best form and condition. The work of the Association will be to co-operate with the Commissioner, to strengthen his hands in approaching the Government for assistance to carry out the above plans, as well as to be a medium of sending out reports to different parts of the Dominion of what has been done, what has been found out, and what is needed. Each delegate attending the Annual Convention is supposed to be the best representative man, to take the best ideas to the Convention, and take back with him the best practical experience of the whole Dominion, and so on from year to year a healthy improvement will be effected at the least cost and in the best manner. These things were considered by thoughtful and observant dairymen more required just now than atanyother time, more particularly as the Federal Government has instituted the several experimental farms for the use of farmers. And as dairying has, and will be in the future, the pillar of strength to all classes of successful farming, and the foundation of prosperity, the importance of having that foundation properly defined and constructed at the present time cannot be over-estimated.

The following clauses were adopted as the basis of a constitution at the first annual meeting, 9th and 10th April, 1889:—

1. The name of the new Association shall be:

The Dairymen's Association of the Dominion of Canada.

2. The aim of the Association shall be to promote the general interests of the dairy industry in the Dominion of Canada.

3. In order to become a member of this Association, it shall be necessary for the applicant to be a member of one of the regular district or provincial associations, except in the case of senators and members of the House of Commons, who shall be ex-officio members of this Association.

4. The Association shall be under the control of the President, a Vice-President for each of the provincial associations, a Secretary, a Treasurer, and three Directors for each of the provinces of the Dominion, in conformity with the act of incorporation, all of whom shall compose the Board of Directors of the Association, and report to the said Association, at its general meeting.

said Association at its general meeting.

The following resolution was carried at the second annual meeting held in Ottawa from the 17th to the 19th of February, 1890:—

Resolved. That delegates appointed by an agricultural society in any district, which has not a provincial or district dairymen's association in active existence, be admitted members of the Dairymen's Association of the Dominion of Canada, and that the President of this Association and the Dairy Commissioner be a committee to draft by laws for the Association to be submitted to the next annual meeting.

## Cost of a Cheese Factory—A Movable Fence.

1. Sir, --Give the approximate cost, profits, &c., of a cheese factory with a capacity of 300 cows? We are situated in a new section, where our grain crops are frequently damaged more or less by frost. We are beginning to realize that we cannot make any headway selling a few bushels of oats or other grain, and a few tons of hay. We must turn our attention to other methods.

2. Will you kindly give an illustration or description of a movable board fence?

1. Cost. -- A cheese factory of 300 cow capacity can be erected and equipped at a cost of about \$1,500. Where lumber can be purchased for less than \$10 per M, a smaller sum will suffice Working .- A better plan is for the joint stock company, or individual owner of the factory, to charge the several patrons such a rate per lb. of cheese as may be agreed upon, to cover all manufacturing expenses and to provide a dividend for interest on the investment, etc. After that charge has been deducted from the sum realized by the sales of cheese, the balance should be distributed among the patrons in proportion to the quantity of milk which each one supplied. It is customary for the patrons at an annual meeting to appoint the manufacturer, or one or more of themselves, as a salesman or selling committee. Profits. - I suppose information is asked for about the profits to the farmers who supply the milk. That the sending of milk to a cheese factory is a profitable practice, is evident from the continuous growth of the cheese-manufacturing interests of Ontario and Quebec. The average returns per cow for the average season of about five and a half months is lamentably low, between \$22 and \$25. Many patrons, who keep good cows, that are well fed and looked after, receive from \$35 to \$40 per cow for six months' milk. Cows of enlarged milking capacity, fed upon cheap feed in the form of fodder corn and ensilage, are needed to increase the profits.

2. Will some of our subscribers send us an answer to the enquiry regarding the movable fence:

The Farm.

## How to Keep Up the Fertility of Our Farms by Breeding Cattle and Sheep, and Feeding for Profit.

BY CHAS. SIMMONS, DELAWARE, ONT.

Prepared for the late meeting of the Dominion Shorthorn Breeders' Association.

In breeding cattle it requires great care and perseverance. If a man has not a special taste for it he never will succeed. In fact it may justly be called a science; and when we consider the great results of Collings, Bates and Booth, of England; of Cruickshank, Campbell, Mars and Duthie, of Scotland, and what they have achieved in fashioning types of the different families of the Shorthorn-now scattered all over the continent of America - those types are known by all close observers by their characteristics. In the Bates line they are easily recognized by all who make it a study. The same can be said of the Booths. Those strains and their branches have taken the lead for a great many years, and are highly prized by a large number of the breeders of to-day.

The Scotch Shorthorns have been built up out of the above families by using sires of a uniform type and character for a number of years. In the hands of the renowned Messrs. Cruickshank, Campbell and others, breeders of Aberdeen, they have become famous, and are very popular in Canada, and are taking the lead among our American neighbors. They are known by their compact, thick bodies and feeding qualities.

As I stated, breeding is a science. He who has become skiiled can change the character of his herd by using sires of a uniform stamp for four or five crosses. For example, if you want a herd of cattle with a long head, or what is called stag-horned, a herd light in the crops and heart girth, or flat ribbed, low and bare over the loins, short in the quarters, light in the flanks, a big tail or long legged, you can establish any of those characters by using a sire with the above defects, or good points, if you so call the Therefore I maintain the whole matter rests with the breeders in choosing the sires of their herds. Some breeders put great stress on a long pedigree, or will overlook many defects if he finds certain families are in his pedigree, or will use a bull should he be kin to some other that had been sold up in the thousands, or simply because Mr. So-and-So had one of that line of breeding in his herd.

All lovers of good cattle respect a good pedigree, and especially so when the animal is a good representative of a breed, and has good representatives on the side of both sire and dam. A bull, with four or five crosses on top of exceptionally good quality, will be an impressive sire in a herd. As proof of this, I mention the celebrated Barmpton Hero. I will mention a few of the many sires which have left their mark in Canada: - Bell Duke of Oxford, imported by George Miller; an Oxford, owned by Col. Taylor, at London; Crown Prince of Athelstane 2nd. imported by the Hon. David Christie; Royal Barmpton, imported by Mr. John Dryden; the Prince of Northumberland and Wellington, imported by Mr. John Isaac, and Vice Consul. imported by John Miller & Sons, were and are impressive sires. So it may be said of females the Queen of Athelstane, the Rose of Strath-