

of producing at least a moderate quantity of as fine beef as has ever been raised in England, Scotland or Ireland, and from this they would go on to quote the marvelously low cost of beef production in America, giving invariably the figures which really referred to the raising of the worst quality of American beef."

He gives an instance of the erroneous opinion generally held on this subject, a Nebraska stock-raiser saying that he could show as fine cattle as he ever saw at Mintlaw or any other place—that he can sell there better beef than he ever saw in Scotland, and adding, "They will be sold here for 4½d. at present rates of freight."

Referring to such assertions, the commissioner says:—"These are no new statements; they have been made again and again during the past twelve months, and at every point they are misleading. I frankly admit there is a much larger number of really good cattle (besides Shorthorns) in America than I was prepared to find. In such States as Illinois, Kentucky, Indiana and Ohio there are a great many more beef cattle than I expected there were, that would rank among the average of Scotch cross steers; but in those large western herds referred to by the writer quoted, not a pound of beef is raised that could be placed on an equality with an average pound of Scotch or English beef; there is not one animal in every thousand that could be classed amongst even a second-rate Scotch herd. Supposing the very best American beef were as good as any this Nebraska farmer ever saw in Scotland, he deceives himself and others in believing and stating that he can sell it at a profit of 6d. per pound in Glasgow—sevenpence per pound would not pay."

He contends that even beef of second quality, though a little of it is exported, is shipped at great risk to shippers, and must be abandoned, and that such beef sells at from four to four and a half cents per pound, live weight, which would make the cost in Glasgow about 5½d. per pound. He says:

"I do not hesitate to affirm that the ordinary or common beef of America—the beef of Texans, Cherokees and the 'common' American cattle so often spoken of in my letters—will never meet a steady demand in Britain, or realize such prices as would remunerate its exporter—at least so long as it remains of the quality it now is. And I expect to be able to show that a very large percentage of the whole American supply of beef must be classed as common American beef. My first impression is that until both the class of cattle and the mode of their treatment are greatly improved the British markets will never be disturbed by the ordinary beef of America, but that the best quality of American beef will be poured in upon us, and will find a moderately ready sale at a certain price. The questions are, what is the probable quantity of what is called the best quality of American beef? and, what is the price at which it can be sold at a profit in British markets?"

We repeat our former advice:—Feed stock on a larger scale than you have hitherto done, as the most profitable mode of agriculture, and as the best and cheapest way to improve your farms. Feed stock of the best quality—such as mature early and lay on flesh and fat at comparatively little cost. Feed well for the highest prices in the English markets. It is fully recognized by all actually engaged in the trade, and by many others who think over the matter carefully and impartially, that nothing but the very best quality of American beef will ever meet with even reasonable favor, or really pay for exportation.

PLUMS IN NEW YORK.—Schenectady, N. Y., is famous for its plum gardens. The *Utica Herald* says: The plum trees are usually protected from winter's climate changes by high fences, interposing dwellings, and special care. The crop is very large this year, about 10,000 bushels having been shipped from Schenectady to various points.

### Correspondence.

NOTICE TO CORRESPONDENTS.—1. Please write on one side of the paper only. 2. Give full name, Post-Office and Province, not necessarily for publication, but as guarantee of good faith and to enable us to answer by mail when, for any reason, that course seems desirable. 3. Do not expect anonymous communications to be noticed. 4. Mark letters "Printer's Manuscript," leave open, and postage will be only 1c. per ½ ounce.

#### Selection of Animals for Breeding Purposes.

This is the primary and most important of all subjects for the consideration of the stock raiser. A serious mistake at this stage of his proceedings would undoubtedly affect him in a very material way in his after results. I cannot therefore impress too strongly upon my readers the importance of very careful thought combined with that best of all counselors—practical experience—being brought to bear upon this part of the our subject.

Taking the case of the purchase of cattle, there will generally be found to be one or two objects in view by the investor. These are, 1st, their dairy properties, or 2nd, their grazing and beef producing qualities. In the first case it is almost needless to remark that the milk producing properties of the animals are the chief consideration. Now, it is a well established fact that besides the udder and other ordinary lacteal parts of the cows, there are certain peculiar characteristics other than these which to the practised eye indicate a tendency to lactific secretions; and thus, as I shall show under "Breeding," we can reproduce and cultivate these natural tendencies and increase what we wish to establish. Again it is found that the true dairy animal is of comparatively little use for those fat producing qualities, which are so requisite in a grazier. To have a good milker we must avoid every tendency to fat, and in a like manner to secure the best beef, and those qualities which tend to the production of this commodity, we must get rid of all lacteal powers. Those characteristic points which indicate milk producing tendencies are: head small, but long; muzzle narrow; eye lively; neck long with little loose flesh hanging below; shoulders thin; forequarters light; hindquarters large; back broad behind; carcass deep; udder large and square, stretching forwards, not fleshy nor "flabby"; milk veins large and extending well up the stomach; teats short and wide apart.

In the selection of animals for grazing purposes alone, we must, as I have already said, look for those qualities which produce fat and avoid any tendency to milk. Now, as in the former case, we have here also destructive peculiarities which by constant observation have been ascertained as being characteristic of animals which take beef and fat on quickly, and these are found to be also capable of reproduction and enlargement. I now give those particular "signs" which indicate good grazing properties, frame large, though not coarse; back broad, loins strong; ribs well arched; hindquarters deep, and the "ham" carrying flesh well down; all well-filled up; forequarters deep and great width between the legs; head broad at base though not coarse; eye soft; hair soft and "touch" pleasant. Much also depends upon the eye of experience in little matters about the "look" of an animal which cannot be described.

For the purpose of ordinary farming, instead of having animals radically predisposed for either of the conditions to which I have just referred, it is perhaps better for all practical purpose to select animals whose progeny would combine, by careful selection, heavy flesh and strong constitution with good milking properties. This assimilating of the two grand constituents in modern stock breeding—milk and beef—is only a matter of careful observation and the mating at first of individual animals whose characteristics show a leaning, however faint, towards this point; and again by their progeny—weeding out the undesirable—and so on until the qualities wished for

are fully and permanently established. The desirability of this kind of animal for general farming purposes will at once be apparent to my readers.

Again, in dairy herds, where the animals are kept entirely for their lacteal power, if the progeny are required for a similar purpose, we must of necessity select sires from herds which are famous for their attention to the milking properties of the animals in it. Should, however, the female progeny not be required to fill up the blanks in the ranks of the dairy cows, or the male calves as bulls, then, for all practical purposes, both for the individual profit of the farmer and the gain to the public generally, we recommend the use of sires whose progeny will have the beef-producing qualities highly developed. The utility of this is at once apparent when we consider that the calves will thus have a cross in their blood which will materially aid their feeding; and whether they are fed by the dairyman himself or sold to the grazier, the advantage to the community is the same, as we have an animal which will feed more quickly with less amount of food and produce more beef with less offal than a like animal whose parents are both noted for their milk producing organs.

Well, in order to secure and permanently maintain all the desirable qualities in the stock to which I have referred, it is necessary that we have thoroughbred animals to work upon. I think that in these days when so much practical and daily proof is being given of this, it is hardly necessary to maintain it by argument. Still, in order that we may thoroughly comprehend the matter and understand the natural laws by which the fact is established, we must first of all realize what a thoroughbred animal is. A thoroughbred animal, then, is simply one which by a system of selection through several successive generations—always keeping in view any particular qualities which we may wish to preserve, and weeding out those properties which we wish to lose sight of—in the course of a certain time these particular qualities preserved and worked upon, become hereditary and certain of reproduction in a very marked degree. We can thus, in a succession of years, make nature produce an animal to suit our views of what it should be, and thus again taking advantage of nature's own laws, make these qualities permanently transmissible. A thoroughbred animal, then, may be said to be one of man's own making, and embraces the qualities in a high degree which he may wish to be reproduced, but which may be only partially visible in the original breed.

By the use, then, of thoroughbred animals (I mean the acceptance of the word in reference to all the different breeds of our farm stock) introduced from herds or flocks of well-known excellence, we have at once, without having recourse to the tedious system explained, introduced certain known qualities into our stock, and thus realize the advantage of these at the earliest opportunity.

Of course, as present prices go for home-bred stock, it is altogether out of the question to suggest that all the farming stock of the country should consist of that class of animals. However advantageous it might be, it is at present not attainable. But although this may not be attained all at once, it is still possible to do it by degrees and at very little expense. What we want is all our farmers to become either a Bakewell or a Colting. How simple a matter and how honorable a sight to see all the farmers of this or any country trying to improve their stock, not so much by paying extravagant figures for high-bred animals as by attention to those common grade animals now in their possession in the way of selection and weeding. What I would recommend the farmer of this country to do in order to improve the quality of his farm stock is to use sires of known high pedigree and excellent points upon their grade females, and by weeding out every year those unimprovable, bony animals so irreconcilable with modern agriculture, they would in a short time realize the change in a better quality of animal produced and a consequent increase in the value received for them.

I shall take up the subject of "Breeding" in my next article.

J. E. B., Port Elgin, Ont.

#### The Immigration of this Year.

SIR,—I send you a copy of the *Manitoba Real Estate Register* that you may see what our progress is in the Prairie Province.

The ever rolling wave of emigration from the eastern Provinces and Europe is now tending