

low-set, well-filled out calf from our pure beef strain than from our dairy strain, and in practically every case we can sell these more beefy calves for a sufficiently more profitable figure to offset the profit from the increased yield of milk from our milking strain. Therefore, it pays us, as breeders of pure-bred stock, to breed the pure-beef sort. But that does not prove that it pays the country best. If we would advocate the milking Shorthorn, our experience is that we must advocate a somewhat different type of Shorthorn from the one that wins in the show-yard. True, I am quite aware that there are Shorthorn cows, such as Mr. J. Deane Willis' "White Heather," that can win in both the beef and dairy classes, but, as far as my experience goes, this is the exception rather than the rule. Our Shorthorns that are in the highest favor to-day are not fulfilling the function of milk production so well as they might.

Experience will teach any breeder of Shorthorns that his best breeding cows—i. e., the cows that produce strong calves regularly and rear them well—are almost always above the average as milkers. So much is this the case, that such a world-famed breeder as Mr. Duthie, of Aberdeenshire, considers a good udder an indispensable requisite of his Shorthorns, and taboos those cows that cannot raise a calf well. But this is not all that is wanted in a milking Shorthorn. She must produce more than enough milk for her calf. The question, therefore, arises, how can the milking qualities of Shorthorns, as a rule, be improved, or, if you will, restored? In answer to this, it appears to me that there must be a popular movement along the line, similar to that which to-day puts the premium upon the more beefy sorts. Our exhibitions are our best educators and popularizers. Therefore, inducements in the shape of special prizes for Shorthorns of this sort should be held out at our exhibitions and fairs. It is true that attempts made along this line have not as yet met with large response, but, nevertheless, the present demand for such cows is growing, and this will cause more interest to be taken in the matter. The proposition made by the English Shorthorn Society, to give cash prizes for four-year-old cows giving not less than 25 pounds of milk per day, if calved within three months of the date of the show, etc., is a good one, and will, I believe, accomplish much.

Further inducement for the milking competition should also be held out. But in this connection I do not think that the inducement should be for Shorthorns capable of excelling in milk production the pure dairy breeds. This is more than can reasonably be expected of a breed that is primarily intended for beef production. A Shorthorn that can produce 30 to 35 pounds of milk per day, as compared with a pure dairy cow that, under the same conditions, will produce 40 to 50 pounds per day, is a good paying sort, for her calf, when he is fed, will pay the difference. The beef breeds should stand in a class by themselves in this competition.

Then, there is the practical management. Allowing calves to suck their dams after the first week, is not so conducive to as good a flow of milk as if the cow were milked by some person, and the calf pail-fed. Moreover, attention must be given to the feeding of rations conducive to good milk flow, rather than to fat production.

The establishment of an appendix in which to register cows of the milking sort would also, I believe, be invaluable. However, it occurs to me, for the same reason as mentioned above, that the amount of milk a cow must give, in order to be entered, might be considerably below the amount required by the American Shorthorn Breeders' Association. A beef cow that can produce 6,000 pounds of milk per year and raise a good feeding calf, is a paying proposition for anyone. Perhaps the standard could be subsequently raised to 8,000 pounds, as required by the American book. How to make the tests is the difficult point. Weekly tests would not be satisfactory, for many Shorthorns will give a good flow for a few weeks, and then drop off in their milk flow. It's the yearly test that counts. Arrangements are now being made by some of the Dairy Associations for the carrying on of authentic yearly tests. When these are perfected, the Shorthorn men can surely fall in line. Testing cows for milk production is in the air, and we feel sure that the Shorthorn men will not be the last to acknowledge the merits of the system and adapt themselves to it. Success to the milking Shorthorn! The farmers want her.

M. CUMMING.  
Principal N. S. Agr. College.

### The Significance of "Imp."

To earnest students and breeders of live stock the word "Imported" has always had a definite, rational meaning, and the value of "Imp." attached to a pedigree has ever been measured in their minds in the light of careful knowledge. The use of imported animals in the herds, flocks and studs of such men has been an evident, if silent, recognition on their part of the British stockman. Until on this continent some certain breed or breeds may have attained a standard of excellence equal to, or surpassing, that of the corresponding breed or breeds in the mother country, until then, selected animals of such breeds may be successfully and profitably imported, to be used in the improvement of our herds. And even then, when Canadian and American breeders have reached such a position, an interchange of blood may serve a useful purpose. But in the common parlance of the country there has been such a magic charm surrounding the word "Imported" that a consideration of the utility of an imported animal may call to mind some facts that may have been forgotten. If our thought is fettered to such a degree by our regard for imported stock that in private and public sale a premium is placed upon such stock, sometimes at the expense of equal excellence, both of individuality and of pedigree, in the animals produced by breeders in our own country, then it would appear that, to a certain extent, we are allowing our judgment to become perverted by this regard, and we are waiting too long to give due acknowledgment to the intelligent and patient effort of the stockmen of our own land. Moreover, it may be we are tacitly admitting that we cannot produce in Canada either the men or cattle that are to be found in England and Scotland, or at least we are not giving an independent recognition to the progress of stock-breeding on this side of the "water," nor are we holding ourselves prepared to take the fullest advantage of it. Such an attitude, if at all manifested on our part, cannot but make for retrogression rather than for advancement, and serves but to stamp us as imitators, while we inherit the right to be fashioners of our own destiny. The superiority of British-bred stock is due largely to the following suggestive facts. It has been bred pure for a goodly number of generations, and the sires possess, therefore, such prepotency as enables them uniformly and impressively to reproduce in their offspring the distinct and peculiar characteristics of their own breed. It has been bred for a sufficient period of time with a definite, specific object in view to allow the specialized, dominant characteristics of the different breeds, i. e., the characteristics by which the utility of each of the breeds is judged, to become firmly fixed and established. It has been bred, each breed in its own locality, so that the breeds, in process of their improvement, have become naturally adapted to the climate, food and environment of particular sections of the country, and possess, therefore, the constitution, ruggedness and vigor that is so essential to animals kept under the somewhat artificial conditions of domestication. Herein, then, lies the value of imported stock for use in the improvement of our herds. From purity of blood we get prepotency, or the ability to transmit the desirable characteristics of the different breeds. From long continued specialized development we find the ability possessed in typical representatives of these breeds to improve our stock in particular, specialized characteristics whether it be mutton production in sheep, bacon production in swine, the capacity for speed or power in the horse, or beef or milk production in cattle. From the natural adaptation to external conditions of climate and treatment, we find very often in imported animals a robustness of constitution and a development of bone and frame that, when their blood is introduced into our own herds, while not making our animals any more hardy or healthful, it tends to increase the size, and at the same time to retain and frequently improve the quality of our stock. These, it would appear, are the advantages to be derived from the use in our country of selected imported stock.

But there is another phase of the question which should be briefly touched upon, and there is a biological principle involved that must not be forgotten. These much-to-be-desired characteristics are at best but artificially developed, and are possibly more easily acquired than retained. The variation of the animal organism has made possible, under the control of man, the improvement of our domestic animals through intelligent breeding and systematic selection. Further, the animal organism varies, naturally, under, and is in-

fluenced directly by changing conditions of climate, food and habit. Contrast the Shetland pony with our modern draft horse. Characteristics thus acquired, whether through artificial selection or natural adaptation, can only be successfully retained under like conditions and under similar treatment. Herein lies the danger of too great dependence upon imported stock. We may and should be able to continue the same systematic and intelligent selection that is practiced by the British stockman, but it is scarcely logical to expect a reproduction in our country of the environment and treatment that the animals have become accustomed to at home. The change is evidently not a marked one, but it is often great enough to disturb the equilibrium of the organism sufficiently to cause a modification in the offspring, to a greater or less degree, of form and character. Moreover, we sometimes find a distinct modification in an imported breed when bred pure in this country for some length of time. Contrast the St. Lambert and Island type of Jersey. In this principle of natural adaptation there are problems of breeding to be solved.

It is not the purpose of this article to advocate the evolution of new breeds. We have breeds enough, perhaps too many. But may not this business of importation be encouraged too far; is it not now too easy a way out of a difficulty? At one time imported stock was necessary to the country, and we honor the enterprise of those who brought it here. But now, choosing the best of what we have, might we not make greater progress if we imported less and bred better? The independence of the Hereford breeders of the United States has won them an enviable reputation. Can Canadians not have a like courage and a like resourcefulness? Selection is the vital principle of improvement. Patient and unwearied perservance is the price of success. Can Ontario, can Canada not mould and fashion animal form into a purely Canadian product, which shall at once be a monument to the energy and intelligence of our Canadian breeders, and a factor in establishing the reputation of Canadian stock?

O. A. C. Guelph.

H. S. ARKELL.

### The Dairy Shorthorn.

1. Is the mission of the Shorthorn cow in Canada to make beef only, or beef and milk?
2. If beef and milk, is she fulfilling that function as fully as she might?
3. If desirable to improve her milking qualities, how can it best be done?
4. Is the establishment of a special record for milking Shorthorns desirable?

Ans.—1. Both, but, unfortunately, purchasers, while they ask about milking qualities, will accept nothing unless of an entirely beef type, hence breeders are obliged to cater to their wants, and very often at the expense of—one might almost say—the eradication of milking qualities.

2. No, for reasons given above, milk is a secondary consideration.

3. By educating purchasers to allow any animal due credit for milking qualities, and not look upon them as food for the block only. Heavy milker scarcely ever look as well as the beef type, and are consequently ignored by visitors to a herd, with the quite natural result that the breeder tries his best to supply the animal most admired by the public.

4. I think it would improve the standing of milking Shorthorns to have a special record, as it would draw particular attention to them and encourage the breeder of such to persevere in his good work. Besides, it would be something of a guide to those looking for or particularly interested in milking Shorthorns.

Bruce Co., Ont.

W. D. CARGILL

### Makes a Good Plumb Line.

Dear Sirs:—As I am practically a new hand at farming, I do not feel able to dispense with the aid which the Farmer's Advocate gives me. It not only confirms many of my ideas, but points out new ones, and saves me by its timely advice many a mistake. I have recommended it to my friends many times and shall continue to do so as I feel that no farm library could be complete without it. Yours truly,

Hill Side Farm, Leavitt.

J. M. COOMBS.

### Once Tried Always Used.

Dear Sirs:—We enjoy your paper very much, especially the Quiet Hour Department. I have been a subscriber to your paper for upwards of fifteen years, and can truly say that as a farmer have been helped by a great many practical ideas. Yours truly,

Emerson.

W. G. FORRESTER.