

canadian breed, no rival superiority. And this means is *the improvement of our milking breed by itself.*

More than any other we are convinced of the advantages of this means of improvement. It is sufficient to select in the breed to be improved the reproducers which present to the highest degree the qualities looked after, and to treat them with all the care which maintains these qualities. Their young products are reared with the same care, and those amongst them which are distinguished from others, are coupled together or with their offsprings and ascendants. We obtain thus after some generations the development and fixation of the characters we desire.

This process would offer all the chances of success. Operating with a breed which is the result of local circumstances, it is probable that it would experience no unfavourable modification. Besides in coupling in this way animals of the same breed, the characters of which have an equal tendency to transmission, we would obtain products as resembling as possible to the generators, result we cannot rely upon with different breeds.

In continuing during some generations the improvement *in and in*, we would have the incontestable advantage of fixing the characters of the new improved breed, of diminishing the bigness of the bones and developing precocity. It is true that, carried too far, this method would lead into serious inconveniences, the principal of which are : the decrease of the vigor and rusticity of the products, of the reproductive power in the males and the fecundity in females ; but we would avoid these evils, in selecting, out of the improved family, but always in our canadian breed males, or even females which, resembling them the most possible by their conformation,

would be reproducers. This new infusion of primitive blood would be sufficient, without being considerably prejudicial to the perfection obtained.

The result would be more certain, if the breeder could have subjects from the same stock, but belonging to another family of the canadian breed improved in the same way, living in rather different conditions, and having with its own breed but a remote consanguinity. We would thus follow the process of improvement called by the english improvement *in the same line*, process the most followed in England.

Consanguinity and improvement *in the same line*, separated or combined, are certainly the surest means to succeed in the improvement of our canadian breed, but besides they must be given by adapted alimentation and cares.

Indeed what is a breed ? A breed is a type, modified by the soil, management and care, transmitting by generation the characters it has acquired and which are permanent, *as long as the circumstances which have produced them persist.*

Then if our breed is what make it the soil, management and care, it is evident that if we want to improve one we will have to modify the other. We will have then to wait till we have improved our system of culture before we will undertake the improvement of our breeds ? It is not more reasonable to avail ourselves of the infusion of the Ayr blood, in obtaining a greater produce in milk with the same feeding, &c.

But besides the delay occasioned by the improvement of our canadian breed by itself, there is a much greater difficulty. Are we well determined on the characters to be looked after ? Will we give a food apt to bring these characters ? Let us bear in mind that the Ayrshire has only been produced after 50 years of