

Stock and Dairy.

Shorthorn Breeding.

CONDUCTED AS A SCIENCE, WITH A VIEW TO MAINTAINING THE HIGHEST EXCELLENCE IN USEFUL QUALITIES.

[Address delivered by Judge T. C. Jones before the American Shorthorn Breeders' Convention, at Toronto.]

(Concluded.)

Indeed, I insist that the argument, that by continuous incestuous breeding, we have a "concentration of blood," as it is called, which increases the hereditary power, is a mere assumption, which has neither reason nor experience to support it. I admit that incestuous breeding tends to produce certain characteristics, which are, as a rule, inherited by the offspring, such as to diminish the size and add beauty to the form of the head and extremities, as well as to improve the general appearance of the animal in style and elegance; but to assume that the power to transmit these, or any other qualities, is increased by the fact of inbreeding, is a grave error.

According to the teachings of science and experience, the hereditary power rests upon health, vigor and robustness of constitution, quite as much as upon purity of blood; and surely I need not add to what has already been said to prove that long continued incestuous breeding will impair these essential qualities. How far in-and-in breeding may be safely carried is a matter of dispute, but that the tendency of the system is to diminish the vigor and robustness of the constitution, I think the great mass of intelligent breeders admit.

Coming now, sir, to the very pith and marrow of our subject, I propound to this association of American breeders the question—what is, at this day, the pressing and all-essential matter to be attended to in our practice? Is it not true, as stated by the great British naturalist already quoted, that we have carried refinement far enough? And has not the external form been brought to all the perfection that art seems capable of communicating to it.

Have we not been wrong in assuming that we are to follow Bakewell and follow Collings, without considering the wonderful difference in the material we are working with?

If we are to credit the unsatisfactory and meagre history of the proceedings of these men, and the accounts given of the character of the stock in their neighborhoods, we must conclude that the tendency had been, as in the early history of Kentucky breeding, to increase the size without much regard to quality, and that in consequence the cattle were inclined to be coarse and indifferent feeders. Bakewell in breeding sheep found that refinement increased the fat; and he carried the practice to such an extent that it was said that his sheep were all fat, and another improver would be required to breed sheep that would produce flesh.

In the days of the Collings an animal with light, long structure, fine, delicate and well placed head, with beauty and compactness of form, was the essential model required, because the mass of the stock was coarse. Therefore, these characteristics were matters of real importance, as they were also in those days, in the absence of extended pedigrees, the material indications of good breeding.

But, sir, we find ourselves in a different era altogether. We are dealing with a well established and highly developed breed, in regard to whose purity of blood we are no longer required to guess by inspection of characteristics, but which, nevertheless, produce these characteristics with such uniformity that little or no attention is required to improve or perpetuate them. We have no well-bred Shorthorns in our day with coarse, ill-shaped heads and legs. It is rare indeed that we find a hide too thick, if it is only yielding and mellow. So that these indications of high breeding have come to be regarded as little else than mere matters of style and fancy.

And so it is, I respectfully submit, in regard to what is called "family type." We hear a good deal of the distinctive type of this or that particular strain, and of what is done, or may be done, to establish new types: What is usually meant by this? The form of the model Shorthorn—the level, round, cylindrical and deep carcass, with wide back, level hips and deep quarters, would seem to admit of very little variety in the way of

types, unless we attempt something that is not essential to useful and profitable excellence. And I think it must be admitted by practical men that the modern distinctions claimed for particular families are mostly based upon these peculiarities of fancy.

I have heard it asserted that a dark blue or green colored horn was a great thing, because a certain distinguished breeder was always partial to this color in the horn! And, again, I have heard men speak of a peculiar shade of red color, with big white spots on the flank, as if they were characteristics of importance. The gay and "up standing" carriage, we have reason to believe, has frequently captivated judges and purchasers, where the more important useful qualities were very moderate indeed.

I admit that a certain degree of refinement is essential to quick feeding and good quality of flesh; but I insist that this refinement is generally found in all well-bred Shorthorns, and so universally results from pure breeding in this race that further improvement in this direction is neither necessary nor practicable.

But with useful qualities the case is very different; for, while this great breed is capable of developing the most extraordinary excellence in these essential properties, it is nevertheless true that here, as with all other varieties of farm stock, there is abundant opportunity for the exercise of all the skill and care of the most intelligent and experienced breeder in bringing up our average to the maximum of excellence and keeping it there. Therefore, as in all efforts to improve we can only advance with a limited number of characteristics at a time, it is of the highest importance that we have a clear understanding of the relative value of the properties we wish to develop.

Much has been written in reference to judging cattle by a scale of points, and although I suppose the system in the minute details that have been suggested is impracticable, especially as a guide to the judges in awarding prizes, it is believed that some general scale may be devised that will aid the judgment in determining the relative value of the different points.

By way of illustrating this matter we will suppose the valuable properties of the cow to be divided into four parts, the value of each to be indicated by numbers, as follows:

1st. Robustness of constitution, with good growing and feeding habits.....	20
2d. Proper form of carcass, low, deep, cylindrical, barrel-shaped, wide and level, especially the loins and hips.....	40
3d. Quality—thick, mossy and abundant hair, hide mellow and elastic, but not thin, well marked and fine grained flesh, which must be evenly distributed over the carcass.....	20
4th. Good milking quality.....	20
Total.....	100

These divisions may be subdivided to suit the fancy; but in this general form they indicate where we are to look for the real value of the animal, and how we should aggregate and balance the characteristics in judging the general excellence. And it seems to me that some method that shall direct the mind to what are the substantial and controlling points of excellence is absolutely essential in guiding the practice of the breeder, so that, instead of looking at the form of the horn, the peculiar mold of the face or muzzle, the gay carriage of the head, etc., and selecting his breeding animals with reference to his model type, in these and similar characteristics, which can only be valuable as they indicate the presence of more useful qualities, he shall rather insist upon the presence of these useful qualities themselves.

I fear I have detained the Convention too long. Gentlemen will understand that I am not opposing beauty of form, with style and elegance in their general appearance—not at all. On the contrary, I have as keen a relish for these things as any man, and for many years I attributed to them more importance than they deserved, as I think more men who have a taste for the breeder's art are apt to do, especially in the beginning of their career. My plea here is for the useful qualities, these we cannot dispense with; and I plead for that system and practice in breeding that will establish and maintain them.

I object to incestuous breeding, especially where it is practiced merely for the purpose of continuing in the line; because, when it is thus practiced, as I have attempted to show, it tends to impair constitutional vigor, and the growing and feeding properties, although it produces that high refinement of form that is so fascinating to stock fanciers.

And to this connection I submit to the candid judgment of gentlemen, whether it is not true much of the reputation which has been made by in-bred bulls has not been on account of these indications of high breeding and style in the progeny, rather than their excellence in substantial qualities? I do not object to breeding in the line so long as the line produces animals that are up to the maximum in useful qualities. I know that we occasionally find an animal that is far superior in excellence to the average of the race; and when the progeny of such an animal exhibits the same excellence they are of course reserved for breeders, and in such case we indulge in a little in-breeding so long as we are able to keep up the desired excellence.

While a breeder can show me cattle that are superior in useful properties, I have no right to condemn his system for him. And on the other hand, if I could show that his stock, though superior in style and refinement and of the most fashionable blood, bred strictly in the line, are yet defective in robustness of constitution, or in thrifty, growing kind feeding qualities, it is obvious that his system as faulty and should be changed.

I beg the indulgence of the Convention, for a moment longer, to add a word or two in reference to the public registry of pedigrees, because I conceive it to be so intimately connected with a main point I have attempted to urge in these observations, to-wit: the practical utility of our vocation as breeders of Shorthorn Cattle.

As we have seen, succession of good ancestors insures excellence in our stock, and the account of such succession is furnished by the pedigree. The written pedigree and its registry; though of recent origin, which have been found very important aids in the improvement of live stock. The idea that the publisher of such register had the right to determine what was and what was not thoroughbred, is quite modern; and it is amazing that a private individual should assume such authority. In the beginning the pedigrees of all animals that were claimed to belong to the race were recorded without any other condition of restriction, and that they should be accurate and truthful. But it was found that generally only such pedigrees were presented as shown good breeding—say four or five crosses of bulls of recognized merit. And thus, by a sort of general consent of the breeders, this number of crosses came to be regarded as the maximum that would justify the application of the term "blood," in the sense before explained. The same custom was observed in the registration of the lineage of the thoroughbred horse.

This liberality resulted from the judicious method so often observed by our British friends in dealing with public questions. That is, instead of pressing arbitrary enactments in advance of public necessity, their practice has been, in many instances, to allow custom to ripen into law, thus insuring a code, founded upon great principles, deducible from the necessity of the people. In this case the custom was based upon the most intelligent understanding of the public policy involved. The practice of keeping written pedigrees and their public registration was found to have a marked influence in stimulating improvement in the care and management of stock, and, therefore, it was obviously important that as large a proportion of breeders as possible should be encouraged to record their pedigrees. It was also known that every animal of approved excellence, and of such breeding as would penetrate that excellence, ought to be reserved for use as a breeder.

Here, then we had two powerful reasons, founded upon consideration of public policy, demanding the adoption of the most liberal rule for the admission of pedigrees to the public record. Experience had demonstrated that four or five crosses of the blood of an established race would insure the presence of the characteristics of such race, with reasonable uniformity, in the subsequent progeny. This, therefore, was established as the maximum from which the recorded pedigree should begin. The breeding, of course, advancing with each subsequent cross, nearer and nearer, to the absolute purity of blood that is so much talked of, but is never realized!

The Great Shorthorn Society of Britain has recently, by unanimous vote, indorsed and approved this liberal rule, and resolved that it shall apply to the publication of National Herd Book, now owned by the Association. It is possible that any considerable number of American breeders, in the face of all this, will insist upon or defend the harsh requisition, in all crosses, of connection with imported animals, though it require a genealogy of twenty generations, and consign one half

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