

This record only corroborates many others which were made with less care, but are substantially correct. The very large difference caused by buckwheat bran—the cow fell off in flesh very much in those two months, and took two months more to fill up again—is almost exactly paralleled by glucose meal, which increased the milk of some other cows, but considerably reduced the quantity of butter; and also, but not to so great an extent, by new process linseed meal and by brewers' grains; all of these make more milk, but less cream.

I should like to hear from some other dairymen and butter makers in regard to this question, because it is one that is important as well as interesting. If we cannot get any richer milk by feeding richer food, we are throwing away money by buying and using cottonseed meal and corn meal; and the dairymen who think it necessary to supplement the succulent grass which makes milk, with grain feeds which make cream, are all wrong, and are making a big hole in their pockets. I must say I have little confidence in the conclusions of the German scientific people, and in the mass of food tables and various rations they give, and still less in this idea that the quality of the food has no effect upon the quantity of the butter, and should be very glad to have it shown that they are mistaken. But we must have facts, and very clear ones, to show this. (1)

HENRY STEWART.

HOW I JUDGE.

I.—*Shorthorns.*

BY MR. G. R. HEDLEY, ELSWICK GRANGE, NEWCASTLE

I TRUST that some system may be evolved from this discussion which will place the miscarriage of justice in the arena of public competition beyond uncertainty. I may at once remark that my syllabus, in its minute application, will only embrace Shorthorns, although I should be glad to hope that some of its tenets might be found acceptable with regard to all our domestic animals.

The first thing that arises for our consideration is the manner and the purpose of the judge in the ring, so as to get easiest and happiest through his work. Well, in the first place the true judge will never go over near to his subjects when they are first introduced to him. He will stand quite still at a given point and see them walk around him in an oblong ring—not too large. He will then quickly, and almost without an effort, draft the worst ones back to their stands. Then he will draw the others up in line and inspect closely. By this method I have never seen but what the largest class could in a few minutes be drafted down to four or five. If the number left are very much alike in shape, substance, and symmetry, an inspection of the age, quality, and action, will soon determine which are to have the first, second, and third honours. The correct judge will always bear in mind that a moderately sized animal, perfectly even, is to be preferred to a much larger one that is uneven, and that no excessive development of one or more parts will compensate for other parts that are dwarfed and meagre. He will also bear in mind that the first essential in a Shorthorn is a straight back from shoulder to tail. Then when he comes to the neck he will always know that that of the male requires to be thick at the base, should taper along the sides, and rise on the top a little towards the head. That of the female should be fine and long, and on a plane with the shoulders and the whole of the back. The sides of each animal should be as near the form of the sides of a barrel as possible, the ends of the barrel being the foremost parts of the shoulders and the hindmost

parts of the thighs. The legs should not be much crooked, and the head of the male should be strong and massive, covered on the front with long shaggy hair, that of the female tapering, clean, and fine. The eyes of both should be prominent, and those of the female very soft and placid. A good judge will always pay great deference to thickness of flesh, and there are cases when a little fault in complexion or outline may be overlooked for that great desirability. The skin in the best breeds will always be found to be soft and springy, moderately thick, and clad with long, bright, silky hair. If there is a doubt about the supremacy of quality, that with the finest hair and most pliable skin along the top of the loins should be placed first. Any deviation from a gentle curvature in the horn is to be eschewed, and the fashionable colour in the horn is yellow and crimson in youth, and white in age. My proclivities go in the direction of strong horns, instead of small ones, as they mark constitution, and, as to the mouth, I contend it should always be rather large if it has to feed a capacious frame. I propose to approach another phase of the subject in a subsequent communication.

II.—HEREFORDS.

BY MR. JOHN HILL, CHURCH STRETTON, SALOP.

In judging Hereford cattle at breeding shows, in my opinion too little attention is frequently paid to the question of whether the animals brought into the ring are in a healthy breeding condition or not. I believe that the judges should first satisfy themselves on this point, especially in the older classes. If they have been fed abnormally fat, and cannot walk free and easily, and are bad upon their legs and feet, or even go cramped and crippled, I should certainly vote for their rejection at once. When judging a bull, I should look for good masculine character, and a pronounced style and good carriage, that would intimate that he is likely to stamp his own form on his get. A bull without these characteristics is sure not to be a good and impressive sire.

The head should be well set on—not carried too low and stuck on like a pig's, as some are. It should not be narrow or too long, but wide between the eyes, which should be full and prominent, yet mild, showing a quiet disposition and aptitude to fatten. I like a good wide muzzle, and clear nose. Usually a good body follows a good head. I would never give a prize to a bull with an effeminate weak head if I could find another in the class at all passable, and failing such, I would withhold the prize. The crest should be well developed, and have a good white mane. I do not fancy any Herefords without some white on their shoulders, although of course, its absence is no great point against an animal; and I dislike a bull with narrow crops, and think this a very bad fault; for Herefords are most emphatically a beef breed, and narrow chins are most objectionable where beef is wanted; on the other hand, the narrow chine is a special attribute of the deep milking sorts—for example, the Jerseys. A young bull having good crops, wide between the top of shoulder-blades, and having a good for-flank, will, even if he is not quite filled up behind the shoulder, nearly always "come" in that place as he matures, so that it should not be thought a very great fault if he is slightly deficient there. A good back is a point that should carry a great deal of weight with the judges; a bad-backed one should be put on one side, as most of the best cuts of beef worth most per pound come from that part. I think there is a difference between a low loin and a weak loin; the former may be well covered and packed with flesh, and is not such a fault as one that is bare and lean. If an animal has rather prominent hips and is high on the crup, the loin often looks lower than it really is; as also, when the ribs are especially well sprung the hollow behind the shoulder looks more than it really is. These points should be

(1) I quite agree with Mr. Stewart in his opinion of the German rations: as to the value of the food tables, that is another thing. The above article is well worth attention.