

## The Breeder and Grazier.

### Extreme Fatness and Health.

The condition of the animals lately exhibited at the different fat cattle shows, and especially at the show at Islington, proved unquestionably that the system of feeding has lately undergone a very material change. With the exception of the pigs, it could not be said that the animals were fat to any excess, although it is certainly a question whether, even now, there is not more than there ought to be, having regard to the health of the animals themselves, and of the quality of the flesh, as to its fitness for human food. A proper admixture of dry and succulent fodder tends to bring up the flesh and fat evenly distributed throughout the carcass. Oil-cakes and other artificial foods are given to stimulate the appetite, and, so far, the business is conducted *secundum artem*. But, is the animal thus fattened in a healthy condition, and is the flesh really fit for the table? This brings us to the point.

The question of fat in the human subject has lately been made the basis of much discussion and controversy. In this case, however, the object was not to lay on fat indefinitely, but just the reverse, to rid the unhappy victim of obesity from his unhealthy superfluity; the process in this case consists not so much in the reduction of the quantity as in the matter of the quality. Without going very deeply into the medical treatment, it will be enough to state that the two articles which chiefly go to the production of fat are sugar and starch, and in fact both may be ultimately resolved into the one article of sugar. In all cases where fat has abounded, it has been found that the abstinence from saccharine matters generally will bring about by degrees a reduction of the fatty tissues. Now it has been discovered that the liver of all animals secretes sugar, which in proper proportion supplies the waste of the system; but if those substances are introduced which tend to increase the secretion of saccharine matter, the excess thus engendered is distributed over the system as fat, whilst during the process the organ itself undergoes a change, and from being in a healthy condition becomes enlarged, and then performs its functions irregularly; the whole system thus becomes vitiated, and a liability to disease of all kinds is engendered. Now this condition is analogous in the human and the animal subject; and it will be found that as the secretion of sugar increases, the whole system is liable to disorganization, and the tissues of the body are necessarily brought into an abnormal state. Taking then this starting point, we may fairly ask, can it be considered that animals thus treated and brought into a preternatural fatty state are really fit food for the population—assuming, as is almost necessarily the case, that the liver is thus in an unhealthy state, and that the tissues generally are unhealthy too? The whole question is thus brought to a very narrow issue. If the system of fattening produces as a necessary consequence disease, ought it to be continued? Is it right year after year to bring together, for the admiration of the public, animals proved from the premises above deduced to be in an unhealthy state, when a very slight relaxation from the ordinary rules of judging, by giving the prizes only to animals in a healthy condition, would do away with the whole evil? We may for a time shut our eyes to these facts, but the truth must at last prevail, and sooner or later a change must come over the entire system of shows of fat cattle. When it becomes more generally understood under what conditions necessarily the animals are brought into this state of obesity—when it is known that fat in excess is only a form of disease by bringing an important internal organ of the animal into undue activity, and thus stimulating the production of an unhealthy secretion, it is easy to foresee that a revolution must in time be effected, which will materially affect the whole process of feeding animals throughout the country.

We have assumed here that sugar is the basis of fat. Now, this fact, which is an important consideration in the fattening of animals, ought to have its weight in measuring the food to be administered. In the catalogue of the late show at Islington, treacle and molasses are introduced more frequently than

hitherto as having been used for food. Now, if these substances are essentially fat-producing, the process of adding a little fat to an animal a short time previously as a preparation for the shambles, might easily be done by this addition to the feeding stock, and with this advantage—that the amount could almost be regulated, and all done, too, on the cheapest scale possible. A cask of treacle or molasses would be a very cheap substitute for oil-cake and artificial foods, and the animal could be brought to market in just the fit state for human food. This point may, perhaps, be worth the attention of the agriculturist, more especially at this time when the production of meat is admitted to be profitable, while the failure of green food makes the keep of an animal a very serious matter. The whole argument is based upon a simple fact, which can at any time, and easily, be brought to a practical test.—*Field*.

### A Good Lot of Pigs.

ENS. CO. GENT.—I noticed in your paper of Jan. 5, an account of two pigs, 7½ months of age, that weighed 640 lbs. We have just dressed seven pigs, all of one litter, just four months and one week old, that weighed 789 lbs. nett—an average of 112 5-7th lbs. They were weaned at two months of age, and then slopped with house-slops, cooked pumpkins, and shorts, until corn gathering, when they had the soft corn until two weeks before they were dressed, when they had sound corn on the cob. They have not had to exceed 20 bushels of corn altogether. It is not a brag operation, but we like to let our New England friends know that we are not asleep when we read the *Country Gentleman*.

Richmond, Ind. CHARLES G. CARPENTER.

GREAT DEPOSIT OF FAT IN AN OX.—A four year-old ox of the Shorthorn breed, slaughtered at Wooler the other day by the Messrs. Rutherford, of that place, by whom also it was fed, though only weighing 74 stones, contained no less than 131 lb. of fat.

TO PREVENT CATTLE FROM JUMPING.—“A Soldier Boy” writes to us that he has always succeeded in breaking cattle of the habit of jumping, by piercing the ears of the unruly animals, and tying them over the head, with a piece of twine or ribbon. The philosophy of this is that an animal always droops its ears when about to jump. When thus tied, this cannot be done, and the idea is abandoned.—*Prairie Farmer*.

A PRIZE OX.—Last week we noticed the fact of a fat ox being slaughtered in Elgin, the weight of which was 1½ cwt., and 240 lbs. of tallow. This is, however, completely cast into the shade by the weight of the prize ox at Forres. The animal was shown by Mr. Harris, and purchased by Messrs. Harold & Ross, fleshers, Forres. The carcass of the monster weighed 1890 lbs., or 135 stones at 14 lbs. the stone, to which must added 264 lbs. of tallow; which, added to the weight of the beef, makes 2154 lbs. avoirdupois, or about 153 stones. What the weight of the hide, horns, hoofs, &c., may have been we cannot say, but we well remember the time when an ox of 160 stone was a perfect wonder, and as such was dressed out in ribbons, with a piper on his back, to play through the streets before the ox went to the shambles. Is it not possible that oxen as large as elephants may yet be seen in the north of Scotland?—*Elgin (Scotland) Courant*.

WINTER FOOD FOR STOCK.—The following are a number of different plans:—(1), 4 lb. of bean straw, 12 lb. of oat straw, 3 lb. of bran, 4 lb. of rape-cake, and 40 lb. of swedes (Mr. Horsfall); (2), 2 lb. of crushed linseed boiled in three gallons of water, 5 lb. of ground corn, 10 lb. of straw chaff, 80 lb. of yellow bullock turnips, with a little wheat straw (Mr. Marshall); (3), ½ stone of linseed cake, 140 lb. turnips; (4), eightpence worth of linseed and ground corn, 70 lb. of Turnips (Mr. Hutton); (5), 1½ lb. of linseed, 5 lb. of bran meal, with turnips; (6), 3 lb. of oil-cake and 3 lb. of bean meal, with 40 lb. more turnips than in No. 5; (7), 40 lb. of steamed potatoes, 4 lb. of ground corn, 6 lb. of cut straw (Mr. Marshall); (8), 1½ to 2 cwt. of turnips and straw (O. S. I.); (9), 4 lb. of oil-cake, 2 lb. of barley meal, and 100 lb. of turnips (Harkness); (10), 4 lb. of linseed and bean or barley meal cooked, with three seeds of turnips (about 40 lb. each), straw *ad lib.*; (11), straw *ad lib.*, and 4 to 8 lb. of oil-cake each, and water (Lincolnshire).—*Agricultural Gazette*.

WHY SCALDED MEAL IS MORE NUTRITIOUS THAN RAW.—The nutriment afforded to animals by seeds and roots, depends upon the rupture of all the globules which constitute their meal or flour. These globules vary in different roots, tubers and seeds. Those of potato starch for instance, are usually from fifteen ten thousandths, to the four thousandth part of an inch; those of wheat rarely exceed the two thousandth part of an inch, and so on. From experiments made on these globules by M. Raspail, the author of “Organic Chemistry,” and M. Biot, of the French Academy of Sciences, the following conclusions have been drawn:

1. That the globules constituting meal, flour and starch, whether contained in grain or roots, are incapable of affording any nourishment as animal food, until they are broken.
2. That no mechanical method of breaking or grinding, is more than partially efficient.
3. That the most efficient means of breaking the globules is by heat, by fermentation, or by the chemical agency of acids or alkalis.
4. That the dextrine, which is the kernel, as it were, of each globule, is alone soluble, and therefore alone nutritive.
5. That the shells of the globules, when reduced to fragments by mechanism or heat, are insoluble, and therefore not nutritive.
6. That though the fragments of these shells are not nutritive, they are indispensable to digestion, either from their distending the stomach, or from some other cause not understood; it having been found by experiment, that concentrated nourishment, such as sugar, or essence of beef, cannot long sustain life, without some mixture of coarser or less nutritive food.
7. That the economical preparation of all food, containing globules or fecula, consists in perfectly breaking the shells, and rendering the dextrine contained in them, soluble and digestible, while the fragments of the shells are, at the same time rendered more bulky, so as the more readily to fill the stomach.—*Mass. Ploughman*.

## Shery Husbandry.

### Mr. Cowan and the Cheviots.

To the Editor of THE CANADA FARMER:

SIR.—At the Convention held at Hamilton on the 20th December last, J. Cowan, Esq., M.P. for Waterloo, made a dashing speech against the Cheviot breed of sheep, without giving any cogent reason for his dislike of them. This was the more strange as he is the father of that class of sheep in this country. Nevertheless, he now says they will not answer this climate. To this I will just say, either Mr. Cowan is a fanciful judge, or utterly ignorant of Cheviot sheep. I might remind him of the fact, that I had the pleasure of judging, along with him, at Beverly Township Show. In the shearing ewe class, a pair of pure-blooded Leicester ewes, bought from Mr. Cowan, and shown by an exhibitor, and a pair of Cheviots, competed with one another. Without hesitation, the Cheviots were awarded the first prize, and the Leicesters the second, showing Mr. Cowan's opinion then of the “absurd patronage of the breed of Cheviot sheep, which are utterly useless for this climate.” Take Mr. Cowan to witness, sixty sheep out of every hundred standing without either shed or shelter, and with food of the poorest kind, which is too often the case all over Canada, the Cheviots can stand such keep better than any others can. I imported at first Leicesters, but found they did not pay so well as the Cheviots on ordinary keep, either in wool or lamb, which induced me to prefer the Cheviots; and until I find a better breed, I shall continue to do so. I would rather take in hand to keep five Cheviots, than I would three of the larger breed on the same amount of food, and they would produce a greater profit, barring fancy prices. I hope to see, before long, that the Provincial Board will find the necessity of providing a class of sheep to prove the best first cross from a pure breed on the one side, and exhibit the same at the Provincial Show, that everyone may be able to judge for himself.

I read in an old country paper last summer, of a lot of lambs just weaned being sent to feed in winter for the fat market, that realized thirty-eight shillings, or nine dollars and a-half each. The lambs were a cross between a Cheviot ewe and Leicester ram. This shows how far we are behind still in preparing sheep for the fat market.

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