

Wheat for Cattle and Sheep Feed.

Some authorities urge that it is positively sinful to use as food for beasts the staff of life, which in their wisdom they regard was meant for man alone; but when wheat is abundant and cheap, it is absurd and illogical to object to its conversion into butcher meat or dairy produce. The important practical question is, How can it be profitably and safely used for feeding the animals of the farm?

Given whole and uncooked, as is done with oats or beans, wheat for most animals is difficult of digestion. Horses eating a feed of wheat instead of oats usually become uncomfortable, flatulent, and pained. From a full meal of wheat we have frequently seen horses suffer from enteritis and colic. The grain swells up and resists digestion, nor does gradual use appear to render raw wheat very suitable fare for hard-worked horses.

For cattle, sheep, and pigs it answers better than for horses, but requires to be given with some judgment. It cannot profitably be used whole. Roughly ground into meal, it may be advantageously mixed with cut roots, chaff cake, and other such food. Richer in albumens than most other articles of cattle food, excepting beans, peas, or lentils, it may very fittingly be conjoined with more starchy food, such as Indian corn, or with such purely saccharine food as treacle. We have repeatedly seen both cattle and sheep thrive, grow, and feed on 6 lbs or 8 lbs of a mixture of equal quantities of wheat and mangel meal, used as adjuncts with roots and straw, and in England with roots and hay. At present prices treacle is a palatable and convenient addition to these meals. About a pound may be given daily to an adult cow or ox, and even double that quantity does not unduly relax the bowels when it is given, as it should be, mixed with cut straw and other such dry food. It facilitates distribution to mix it with water, brewers' grain, or even with bruised cake or meal. Where there are facilities for cooking, wheat may be advantageously boiled into a gruel, mixed with treacle, and poured over the straw chaff, which, when thus sweetened, is eaten freely by most descriptions of stock. By intelligently carrying out such a system, fresh, sound straw may be largely and profitably consumed; the mixture is not very costly. Roots and hay, scarce this year in many districts, may be greatly economized; a large head of stock may be kept healthily growing throughout the winter, and an increased weight of beef and mutton may generally be produced. Even where roots are comparatively plentiful, farmers having abundance of straw will find that at present prices of the raw material, namely, the lean stock and the feeding stuffs, it will generally answer to use wheat meal, maize, and treacle tolerably liberally, and thus carry on increased numbers of good young stock, or even feed out well-selected animals for the butcher.

An ingenious friend was wont some years ago, when wheat was cheap, to grind it roughly with maize, oats, barley, or pulse, and bake the mixed meals into cakes or bread. This was used for every description of farm stock, for horses, pigs, and poultry, as well as for cattle and sheep, and for store as well as for feeding animals. The plan is, doubtless, theoretically correct. The baking cracks the starch granules, increases digestibility, and thus saves the animal some expenditure of vital force. The baked food is particularly palatable, is eminently suitable for young and weaker subjects, and for those being forced for showing; but the process is troublesome, requires a goodly amount of space and appliances, and for ordinary purposes the cost out-does the profit. — *N. B. Agriculturist.*

Best Sheep for Getting Fat Lambs.

A writer in the *Irish Farmers' Gazette* gives his opinion that the Shrop and Border Leicester are about equally suited for the purpose, provided the latter is purely bred, and not one of the many mongrels selling under the name. I have known ewes to be divided between a Shrop and a purely bred Border Leicester ram, the ewes after being done with the ram mixed and fed together, the lambs sold in one market, and to net the same money or all but the same price. There is, therefore, only a toss up between the one or the other so far as the getting of fat lambs is concerned, and only one thing that I know in favor of the Borderer over the Shrop, namely, that should the lambs not feed fat from any cause, or that the price for fat lambs is not sufficiently remunerative, the produce of the Border Leicester in either case answers much better for storing over than the produce of the Shrop. I may mention here that a Lincoln ram, if of the proper sort, will also get very good fat lambs, provided the ewes put to

him are well wintered and well fed while suckling the young. The Shrop and the pure Border Leicester are, however, more prolific than the Lincoln, and stand about equal in this respect. There is no finer or better sheep than the Roscommon species. Every body admires them, and on good land and with thin stocking to the acre they do well and pay well. As to their being purely bred, we will "let that fly stick on the wall. When the mud's dry it will rub off." One thing, however, must be said of the fine, large Roscommon sheep—namely, that they are still susceptible of great improvement. It is even a feather in the cap of the breed that they contain room for an alteration for the better. Their ridgepoles might be made fatter, and the backbone better covered with soft muscle, and were the tail-end heaved up somewhat in the best specimens, a level-topped, well-handling animal would be the result. I should say too that the tucked-up appearance of many of the breed might be altered with advantage, and the chest so widened that the temptation would be thereby offered to a "feller" intent on experimenting to try to wheel a barrow through between the fore legs. The present up- and down-form of the ribs of the large and fine Roscommon sheep might be also altered to the hoop or barrel form, on the principle of giving thereby plenty of room for the play of the heart and lungs, and at the same time for the carrying on satisfactorily of the "meat manufactory" within. A purely-bred round-ribbed, border Leicester ram on the Roscommon ewe would elicit wonders in the way of giving rotundity to the carcass of the produce. Nor is this a proposal which is mythical. The cross, to my knowledge, has been successfully essayed. It is now years ago since I gave a rather small but highly-bred and beautifully formed Borderer for the purpose of improving the shapes and quality of one of the crack Roscommon flocks, and of bringing "order" in the frame and appearance of the produce out of the "confusion" of the construction and "getting up" of the "thorough-bred" and large Roscommon ewe, so generally admired and so fully appreciated.

The Back and Loins of a Horse.

When a horse's back is short the loins will be found to be broad and strong—what is called good; a circumstance arising from the circularity of the chest and the breadth of the hips—these four formations, viz., shortness of back, circularity of chest, breadth of hips, and strength of loins, generally being found in combination. It is a great matter that a horse should have good loins, and when these are associated with a long back, and the requisite length and substance of hind quarters, we may take it for granted that the animal possesses both speed and endurance. Look at the hares and rabbits, greyhounds, deer, and such-like animals, and note what thickness of loins, and length and muscularity of hind limbs they all exhibit; while their fore parts amount to hardly anything in comparative substance. It is impossible that a horse with thin narrow loins can last; the moment his feet sink in the dirt, that moment he will fall. It is the good loin that can—and the only point that can—compensate for hollow-ness of back. When the loins are good, not length, not even hollow-ness of back, are to be accounted objectionable points.

It is nonsense to pretend to prescribe that the back should be long or short, of this length or that; although we may, in a general way, fall in with the common description of what a back ought to be, and say, "that to be a good one, it should sink a little below (behind) the withers, and then run straight." The back will be too large or too short, or (though, to the observer, of unusual longitude or shortness, still) of the proper length, depending upon the formation and dimensions of other parts with which, in structure and action, it is associated.

A long back would ill accord with short legs, defeated in their operation; a short back would not require long legs, they would do too much for it. We have therefore long backed horses and short-backed horses, and yet with backs of proper length; because the longitude, whatever it may be, is that which is the suitable length for the machine of which it forms a part. A very common, but not less on that account reprehensible, custom among "judges of horses," is to find fault with a point, without any reference whatever to the general or particular conformation with which that point is conformed. Abstractly considered, it may be out of proportion; but considered correlatively, with out-of-proportioned other parts in the same frame, it may be in the best proportion, or of such proportion as serves to compensate for faulty dimensions in other parts. A part most faultlessly fashioned and proportioned may be placed among certain other ill-formed or out-of-

proportioned parts—appear itself to be the faulty piece in the fabric.

In an animal body, as in machines made by man's hands, the great object to be sought for is harmony between the constituent members; at the instant, we are not hastily to condemn any apparent disproportion, least, on critical examination, it should turn out to have been given for the purpose of compensation—to make amends for some defective structure elsewhere, which may not at first sight have struck our attention. — *Prairie Farmer.*

The Value of High-priced Cattle and Sheep.

Those high-bred and high-priced Short-horns which have of late come in for a considerable amount of abuse at the hands of certain agricultural journalists, cost perhaps too much money, but that can't be helped; but to say that breeding entirely from certain strains is a mistake is open to question. Take two representative bulls, the Duke of Devonshire's Duches bull and Lord Irwin; say nothing about pedigree, the latter may in a sense be the best beast; but there is no man half a judge, not to speak of pedigree, would prefer him to the Duches bull.

Lord Polwarth's rams are the Bates of the Border Leicester sheep. Look what they make every year! There is no man who has done anything in the show-yard in Border Leicesters but has drawn more or less from Lord Polwarth's stock. Are they themselves show-yard sheep? Why does a practical hard-working farmer give Lord Polwarth 195 guineas for a tup? He could buy one at 20 guineas that would beat him in a show-yard. The latter would beat the former in a show-yard; but the practical farmer knows that his stock would not, and that makes all the difference. It is well known that Lord Polwarth has bred from the best of his own stock for a great number of years. They are close bred, but they improve the stock wherever used. If he were to follow the advice of the writers in the *Agricultural Gazette* he would not stick to high-bred ones, but would select a thick-fleshed well-woolled sheep from "A painstaking breeder," and would, I have no doubt, spoil his own flock, and thereby also injure the breed of Border Leicesters throughout the country.

So it is with Bates and Booth cattle of high descent. The big prices are the very thing that keeps the stream pure and helps to fertilize the whole Short-horn world. There is a certain potency in a small quantity of this high-bred blood—latent it may have been in the original—but when mixed with that of more plebeian origin it finds its way into those thick-fleshed animals which "painstaking breeders" like to see. — *North British Agriculturist.*

Feed for Stock—Selling Hay.

Is it cheaper to feed good straw with meal or roots than early-cut and well-cured hay, clover, and other grasses? This is a question of importance. We have tested and seen tested this more or less for many years. We find that circumstances alter cases. For the past few years it has been most profitable to feed straw, corn stalks and clover, with such additions of more concentrated food as was necessary, and sell the hay. In many cases we have known this to realise the most profit, and in some cases highly gratifying returns. The reason was, hay brought a higher price, and the coarser and cheaper fodder could be made to carry the stock, and with little expense for additional food, the stock coming out good in the spring. It was done in the most successful cases by feeding clover and corn stalks, sometimes with, sometimes without roots or oil-meal. The latter could be dispensed with where the fodder was early and well secured—corn stalks cut when the corn was glazed, and put into stalks so as to give a chance for gradual curing, thus ripening and filling out well the corn, and keeping green and sweet the stalks. If the season is favorable—fall dry—this can be done, and the forage may be stored in bulk. The autumn of 1871 was a favorable one, and cured large corn stalks, so that they kept in bulk during the winter. This is a cheap fodder, and one or two feeds of this, and the rest of good clover hay, also cheaply obtained (two cuttings per day), will keep stock in good condition during the winter. This more particularly with milch cows, steers and heifers; horses with little to do, and colts will do well upon it. This is a cheap and nutritious feed. Straw of the different grains, if cut when the grain is in the dough, and well cured without rain, will, when run through the straw cutter or steamed, answer a good purpose as a substitute for the corn-forage where corn has not been raised. Clover alone, however, will do it, and is preferable not only to all the coarser fodders, but may be used for all stock to the highest advantage, working horses excepted. Sheep, tugs, calves,