



From the Irish Farmers' Journal.

ON THE MANAGEMENT OF CATTLE.

This subject now demands much of the attention of the Farmer, and at the present time a few words on the subject will not be out of place. This differs in some respects according to the kind of live stock and the object in view. The treatment of young animals should be different from that of animals being fattened. On the treatment of each of these classes we shall, therefore, offer a few observations. In the case of the fattening animals, the acquisition of flesh is the sole object in view, and the treatment to be adopted will, of course, be that best calculated to facilitate that end. In the selection of food the circumstance of one portion of it being appropriated in the formation of muscle or flesh, as distinguished from fat, should be taken into consideration, as by so doing, not only may the animal be rendered sooner ready for the butcher, but meat of better quality may also thereby be produced. This latter point is too little regarded by the feeder, whose sole anxiety is usually confined to secure the acquisition of flesh as quickly as possible, without any reference to quality. This course, however, insures the production of meat of very inferior value to the consumer, and for which, as a matter of course, a lower price must be paid to the feeder. The force of this observation will be apparent to those who have witnessed the regular intermixture of fat and lean, which prevails in the London market even in the case of the fittest animals, or those which have laid on the largest amount of flesh in proportion to their size. This judicious intermixture arises altogether from a proper selection of food. The immense masses of fat, without almost any intermixture of muscle or 'lean,' as it is called, are produced by confining the animals too much to food in which starch forms a principal ingredient, starch and the fat of animals being altogether composed of the same elements, both being distinguished by the absence of nitrogen. When we wish, therefore, to produce those alternations of fat and lean, so much to be desired, it is apparent that we should also supply food rich in nitrogen. Of the ingredients suitable for this purpose, bran, pea and bean meal, and oil cake, are, probably the most valuable. The very inferior quality of a large proportion of the Irish bacon also arises from the pigs being fed chiefly, if not entirely, on potatoes, the poverty of which in azotised matters is well

known, though exceedingly rich in starch: but starch, however valuable as an ingredient of the food of animals, is not sufficient of itself for the support of animal life: and hence the necessity of combining articles of food rich in starch, as potatoes or turnips, with others of a contrary character, such as those mentioned above. The superiority of Swedish turnips over potatoes, for fattening animals, is well known: and they owe this property in a great degree to the larger proportion of azotised matters, as compared with their starch, which they contain. Swedish turnips, with the addition merely of hay or straw, may be used for fattening cattle, though it is desirable that a greater variety of food should be given; but raw potatoes, with hay or straw only, cannot be employed for fattening. The very large consumption of potatoes necessary to afford the required supply of azotised matters would be productive of the most injurious action on the bowels of the animals. When boiled, they are considerably improved in this respect, but still very inferior as a sole article of food. From these considerations it will be seen that the Swedish turnip can be very advantageously substituted for potatoes in feeding pigs, a subject now of much anxiety. Combined with a very small proportion of bran, or pea and bean meal, or even oatmeal, steamed Swedish turnips form a very valuable food for either store or fattening pigs.

So much for the character of the food itself. The other considerations in the case of the fattening animal are cleanliness, quietude, and the maintenance of an equable temperature. Nothing can be more conducive to the health and comfort of the animals than cleanliness.—The want of this cannot fail to produce an impure atmosphere, eminently injurious to animal life. Due precautions must, therefore, be adopted to keep the stalls clean, and especially to see that no decaying vegetables be allowed to remain about the feeding troughs, which should be frequently washed out. But in our efforts to insure cleanliness, we must take care to disturb the animals as little as possible. With the object also of contributing to the comfort and quietude of the animals, their food should be supplied at stated hours, the observance of which should be attended to with the most rigid punctuality, as they soon learn when the feeding hour approaches, and becomes restless if not then supplied. The common practice is to feed at six o'clock in the morning, at noon, and again at six

o'clock in the evening: but we believe it is an advantage to feed four times a day, instead of three times. After being supplied with the turnips or other root, the person in attendance should have the manure removed from them, and their litter adjusted; and having eaten a little hay or straw they soon lie down, not to rise until next feeding hour comes round.

The maintenance of a uniform and rather high temperature is also conducive to fattening. Exposure to cold is now well known to cause an increased quantity of food to be consumed to supply the waste occasioned by the maintenance of the proper temperature of the body. To most of our readers it will be unnecessary to state that the heat of animals is mainly, if not entirely, owing to the combination of the oxygen of the atmosphere with the carbon supplied by the system, and the consequent formation of carbonic acid gas which is extricated from the lungs. The greater the amount of heat given off by the exposure to a low temperature, it follows that an increased demand will be made upon the carbon supplied by the food: and hence it is that to some extent a high temperature is to be regarded as equivalent for food. A high temperature is, however, usually associated in the minds of Farmers with filthy houses, where there is want of ventilation, and little attention paid to cleanliness: but it need not necessarily be so. Due arrangements may be made for ventilation without subjecting the animals to currents of cold air.

From the Farmers' Gazette.

ON PRUNING ORCHARDS.

Pruning orchards, if judiciously performed, adds greatly to the health, early bearing, and long life of the trees. The more the range of the branches shoot circularly—a little inclining upward—the more regularly and evenly will the sap be impelled to every part, and the better the tree will bear. I would never be inclined to shorten a branch, unless for the figure of the tree. When it is necessary that a bough should be taken off, let it be cut as close as possible to the boll or stem, as the wound will heal sooner. See *Cook on Pruning*.

Do not let the range of the branches be too near each other; for remember all the fruit and leaves should have their full share of the air and sun. Let the middle of the tree be as free as possible from wood, so that no branch shall ever cross another, but all the extreme ends point outward. When the branches excoriate,