19 ton 19 cwt.; of straw chaff, 1 ton 16 cwt.; of linseed cake, 8 cwt. 2 qr.; and of meal, 7 cwt. Total value of food consumed, £17 15*s.* 10*d.* Average cost per head per week, 6*s.* 4½*d.* Lot 2, of swedes, 24 ton 17 cwt.; straw chaff, 2 ton 2 qr.; linseed cake, 8 cwt. 2 qr.; meal, 7 cwt. Total, £19 10*s.* 11*d.* Average cost per head, 6*s* 11*d.* And lot 3 consumed of swedes, 29 ton, 18 cwt., 2 qr.; straw, 2 ton, 9 cwt., 2 qr.; linseed and meal, the same as the others. The total cost, £22 5*s.* 11*d.* Average per head, 7*s.* 11*d.* This shows that the least consumption of food was by the cattle in the stalls, the next by those in the boxes, and the most by those in the sheds. In round numbers the cost per head per week of lot 3 was 1*s.* more than lot 2, and 1*s.* 7*d.* more than lot 1. Further particulars as to increase of weight, &c., are given, the results being that the greatest profit from a given consumption of food was from the cattle fed in boxes, while the least profitable mode of consumption was by cattle in open yards. Judging, then, from the experiment, I should say that box-feeding is the most profitable way, but this is one of the points raised by this dicussion, as to which we may have opinions and experiments as valuable as those I have quoted.

Having, then, determined on box-feeding, the next most important thing is the regular and plentiful supply of the proper kind of food; and as this depends in great measure on the cattleman, great care should be taken in the selection of the right kind of man for this post. He should have his heart thoroughly in his work. An apathetic, careless cattleman is most objectionable. He should be good-tempered, patient, observant, and active. His whole soul should be in the beasts. He should never be in bed after five in the morning, nor before ten at night; and he never should be absent beyond a few minutes from his charge. He should, moreover, be cleanly and thrifty, and if to all this you are fortunate enough to have a cattleman with a fair share of general intelligence, so much the better. But I have seen men with very little general intelligence make excellent cattlemen, and what they want are the special qualifications above indicated. Having, then, procured a good cattleman, your next care should be to form a correct estimate of the quantity of food which you have to give, and it is essential to form a correct idea of the time your food is to last. There can be no greater mistake than to lay in more cattle than your supply of food will be sufficient for. The turnips should be taken home and stored by the middle of December. It has been proved by experiments, reported in the *Transactions* of the Highland Society, that the value of stored turnips was superior to that of those newly drawn from the field. The quantity of turnips consumed by cattle varies. Mr. Pringle, in his work on this subject, says that, as a general rule, cattle which will weigh when fat from 5 cwt. to 6 cwt. will consume from 10 to 12 stone each per day, and cattle that will weigh from 8 cwt. and upwards will use 14 to 16 stone, that is, when fed solely on turnips and straw. The usual rule for fattening cattle is to give them as many turnips as they can eat, with fresh straw or hay, and no doubt excellent cattle are produced in this way, but it will undoubtedly hasten the process if a regular and gradually increasing supply of artificial food is added. The cattle should be fed three times a day, and nothing is more essential than regularity in feeding, both as to time and quantity. The temperature of the byre should be moderatdly warm, and the regular use of the currycomb is most desirable and advantageous. So much for the treatment. As to the proportion of beef produced to food, as a general rule, it may be stated that 1 ton weight of turnips will produce 14 lb. weight of beef and tallow. The quantity of turnips given per day, of course, varies considerably, as I have already stated. When artificial food is given liberally, 1 cwt. of turnips to 8 stone per day is sufficient. And a very successful rearer of fat cattle in this district has given this as his allowance, 1 cwt. of turnips per day, ¼ cwt. of straw or hay, 4 lb. of mixture, consisting of 2 lb. bran and 2 lb. bruised oats, diluted with treacle water, besides from 2 to 4 lb. oilcake. And he says that, with such treatment, well-bred beasts ought to increase 2 lb. daily.

I have now come to the final consideration of all this fattening and labour being of profit to the farmer, and on this subject I make an extract from a work by J. Coleman on fattening cattle. He says: —"Few pretend to say that house feeding can be made to pay *per se*, but great will be the advantages of the increase in the animals over the outlay in food, and we have the manure as our profit, for that represents a very considerable item. We may calculate that during four months which is about the average time fresh beasts require to housed, each animal will make from 10 to 12 yards of manure, which, at 6*s.* a yard, a fair price for such manure, gives a return of from 60*s.* to 72*s.* per head." Of course this only refers to the four months of actual fattening; the profit on the animal from the period of its calving to the time when it is put in to fatten must be added, and if, when the animal is two years old, it produces from £22 to £24, I consider it has been well attended to, and has paid well. I am quite aware that much larger sums are got, but that involves large expenditure, and not necessarily more profit.

Mr. Paterson, Balrobert, thought that in putting the price of manure at 6*s.*, Mr. Colvin was too high.

Mr. Mollison, Dochfour, thought in some instances it might be put even higher than the figure mentioned by Mr. Colvin. A young growing bullock would no doubt, extract all the nitrogenous element from its food, but others would not, and the balance, of course, would go to the dunghill, and make it valuable. He strongly advised the careful preservation and protection of manure.

Mr. Elliot, butcher, Inverness, said thas the beasts fed in stalls or boxes were preferable to others; the flesh was better mixed and of better quality than the flesh of animals tied up in byres, though the latter laid on as fast, if not faster.

Mr. A. Macdonald, flesher, had not the least doubt that a bullock rising three years old was much more valuable in beef than the same at two yeass old. If the calves did not lose the first fat, it was possible to feed them off as two-year-olds; but when allowed to lose the milk fat, these seldom fed so sure as the cattle rising three years old.

The Chairman, in closing the discussion, concurred with Mr. Mollison and Mr. Colvin as to the probable value of the manure.—*Agricultural Gazette.*

## VALUE AND IMPORTANCE OF THE APPLE CROP.

BY A. WARD LONGLEY, ANNAPOLIS.

*(From the Annual Report of the Nova Scotia Fruit Growers' Association.)*

The value and importance of the Apple Crop of the Annapolis Valley is now pretty well understood, but there are some features connected therewith which demand some special notice, as they relate, not only to the present, but reach far into the future.

The length of this rich and beautiful valley, is about eighty-five miles, with a breadth varying from three to eight miles —average breadth, five miles, perhaps. It is traversed its entire length by the Windsor and Annapolis Railway, offering a ready means of transit to market.

The Apple Crop of this Valley probably now reaches one hundred thousand barrels annually; worth, taking one year with another, two dollars per barrel; equal in value to $200,000 per annum. This product may be divided between the three Counties of Annapolis, Kings and Hants in the following proportions:— Annapolis 50,000 bbls.; Kings 30,000 bbls.; Hants 20,000 bbls.

This quantity is rapidly increasing, and in ten years from this time there is likely to be an addition of fifty per cent. to the present yield.