

## Stock.

## Apples as Food for Stock.

BY ALEXANDER HYDE.

A correspondent thus writes:—"You spoke, in one of your recent *Times* articles, of the use of apples as food for stock. I have an immense crop of apples and so have my neighbors, and we want to know as definitely as possible how much apples are worth for feeding to milch cows, horses, pigs, &c. If they can be fed profitably, it will help greatly in getting rid of surplus crops. I am a temperance man and don't believe in making more cider than is needed for vinegar and apple sauce. Should apples be cooked or fed raw?"

The feeding of apples to stock is no new idea. We have always fed more or less every year as the crop was more or less abundant, and have always found great advantage from the feeding. We have often heard it said that apples had a tendency to dry up the milk of cows, but we have never found it true. Doubtless, if cows are let into an orchard, and allowed to help themselves to the extent of their stomach's capacity, they would eat too many, and the mammalian glands and all the viscera of the animal might be deranged, just as they would be from eating too much clover or corn. This effect does not militate against apples as food, any more than it does against clover or corn. The trouble is not in the apples, but in the injudicious mode of feeding. Fed sparingly at first, till the animal is accustomed to them and the keen edge of the appetite is dulled a little, they may be afterwards fed with impunity to any extent. Horses are extravagantly fond of apples, and will be tempted by them when grazing to come to the halter sooner than by the shake of a dish of oats. Of course, they will eat too many, if allowed the range of an orchard without some previous preparation for this diet. For six weeks past we have given our horses a liberal ration of apples daily, and at this moment they are grazing in an orchard where there are large piles of fruit, but they do not eat them to excess. When turned out in the morning they make for the apples the first thing, and when satiated go to grazing. Their hair and everything about them indicates health and thrift.

Sheep are especially fond of an apple diet, and are greatly benefited by it. We called on a neighbor this week who is celebrated for his production of good Durham beef and Cotswold mutton, and we did not wonder that his beef and mutton were tender, juicy and well flavored, when we saw the piles of apples laid up for feeding the Durhams, and his flock of Cotswold enjoying the free range of his orchard, in which apples literally paved the ground. We do not suppose the fat flanks of the sheep were wholly due to the apple diet they were enjoying, but that this made a good food in connection with grazing there can be no doubt. We spoke for a quarter of the next lamb our neighbor should slaughter, and expect to find it fat and well flavored.

Our correspondent wishes to know "as definitely as possible how much apples are worth for feeding." There is as much difference in apples as in other folks, as Mrs. Partington says. A ripe apple has much more virtue in it than a green one, and the different varieties differ greatly in their nutritive value. Thus, a fall pippin has more substance in it than a gilliflower. Prof. Salisbury studied up this subject of apples very thoroughly, and give the results of his investigations very fully in the transactions of the New York State Agricultural Society, vol. 9, to which we refer H. C. P., and others specially interested. The conclusion to which the Professor came may be summed up in the following:—"The apple, if of good quality, may be regarded equally, if not more, rich in fat-producing products than the potato. The apple is also richer in nitrogenous or flesh-forming products, and its inorganic constituents are peculiarly valuable." This is high testimony and high praise to the feeding virtues of the apple, and we doubt whether most practical farmers will subscribe fully to this theory.

This subject was also discussed at the country meeting of the Massachusetts Board of Agriculture, at Worcester, in the Autumn of 1876, when T. S. Gold, a gentleman of large experience and wide observation, read a paper on apples, in which, after stating that Prof. L. B. Arnold estimated the value of this fruit for milch cows at 12 cents per bushel, he went on to say:—"From my own experience in feeding thousands of bushels,

not only as falling from the trees, but gathered in the barn cellars for Winter stores, for neat stock, horses, sheep, and swine, I would place their value nearly as high as does Mr. Arnold. The sweet and firm-fleshed varieties would, of course, be preferred, but a mixture of sour ones need not be feared. The possibilities of yield of an orchard are such as to make its value for stock-feeding alone take the very front rank among cattle foods. At the very moderate yield of 10 bushels per tree, 40 trees per acre, we have 400 bushels, at 1 shilling per bushel, amounting to \$50 per acre, in addition to the crop of grass for pasturage."

In the discussion which followed the reading of Mr. Gold's paper, Mr. Perry, of Worcester, who is spoken of as one of the most sensible and level-headed farmers of that county, said:—"This question is one that interests most of us. I keep a large stock of cattle; I have a large quantity of cider apples, and I have fed them to my cows regularly. I have given my cows about half a bushel daily, and I think that those apples are worth 12 cents a bushel, as we are selling milk now in the city. Instead of selling apples at 8 cents a bushel, I should give them to my cows, because they not only increase the quantity of milk, but they furnish nutriment to the cows, and, of course, they require less of other articles of food. In my opinion, a bushel of apples is worth, in my location, from 8 to 15 cents to feed the cattle."

Mr. Hicks, another practical farmer, said: "I have fed a bushel of apples a day to each of my cows for the last six weeks—half a bushel night and morning—and the quality of the butter is better. I know their feed has not been as good as it was previous to feeding the apples, but the butter is better—its flavor is better. I am satisfied that apples not only increase the quantity of milk, but improve its quality also."

Here we have the united testimony of the professors and practical farmers that apples are worth from 8 to 15 cents per bushel for feeding purposes. That there is more virtue in them than is commonly supposed we do not doubt. They are often spoken of as watery trash, but the per cent. of water is only a little more than in fresh beef, and less than in many vegetables that are highly esteemed for feeding, 1000 pounds of fresh apples containing, as the average of several analyses, 170.4 organic matter and 2.6 ash or inorganic constituents. This inorganic matter is rich in hair and bone producing material, the ash of an apple yielding 1.14th per cent. of phosphoric acid, 2 1/2 of phosphate of iron, 42 of potash, and nearly 20 of soda. It would be exceedingly desirable if farmers and all men would eat more apples and furnish more for their families, as well as feed more to their stock. There is not only bone and brain in an apple, but there is health and elasticity of spirit. The 2 1/2 p.c. phosphate of iron found in the ash of an apple makes it a tonic of no mean value, and the acid (malic) of the apple is more congenial to the stomach of most people than any other vegetable acid excepting grapes. The fattening constituent is chiefly sugar, of which on the average there is 8 per cent., the amount varying but little in sweet and sour apples so that one is just about as good for feeding as the other. We can see but little difference in the relish with which they are eaten by stock.

Our correspondent asks whether apples should be fed cooked or raw. We formerly cooked apples for swine, but have not done it for years. Cooking drives off the volatile aroma of apples, and of most fruits, and we prefer to eat them ourselves and feed them to stock uncooked. For a change it may be well to cook them sometimes, but cooking costs something, so we prefer to make a change of food for stock in some other way. We can't forbear to say in conclusion that in this year of plenty we hope every farmer will make a thorough trial of the virtues of apples for feeding stock, and will lay in a bountiful store for family use.—[N. Y. Times.

## A Young Shepherd.

Among the entries of the late New York State Fair, says the *Husbandman*, were some sheep bred by a lad who a few years ago started his flock with a ewe purchased of his father. He has bred his sheep with great care, securing the use of high-bred males, and has now a flock of twenty-three head of first-class sheep, which sheared the present season six pounds each of washed wool, which brought him something over \$40. He has his flock of sheep and \$125 at interest. The money was derived from the sale of lambs and wool.

## American Association of Shorthorn Breeders.

The Lexington *Live Stock Record*, in referring to the coming meeting of this Association, makes some very appropriate remarks on the importance of this subject to breeders. He says:—

This is a very important assembling of the Association. At it, the officers, from President down, for two years are to be elected. Hotel and railroad charges are to be reduced to members attending.

There never was a more important period in the career of shorthorns in America. The now existing and increasing demand for American beef in England, the annual increase of our own population, and the decline in the relative consumption of pork in all its shapes, bacon, hams, salt pork, &c., accompanied by an increased relative consumption of beef by our people, all indicate a great increase of feeding cattle. The merits of the shorthorn, and the large number of breeders of shorthorns show that they are the only cattle now able to meet this increase of demand for beef. For months the export of live cattle from America to England has exceeded 1,500 a week, and as an average of 1,000 of American cattle have during those months been offered and sold every week in the London Metropolitan market alone (one market only), and all this beside the dead meat exported from America and sold in the dead meat market of that city. This live cattle export originated only last spring, and it is already in amount equal to one-third of all the live cattle sold in all London, English, Continental and American, all together.

Such is the present state of this great cattle and meat traffic in America for England. Its future no man can predict.

This American Association soon to meet is the representative in a combined form of the great shorthorn interest in the country. There has never been in its existence a year so important for its assembling as this one, and out of it should come great good to the interests and the capital engaged in producing shorthorns which it represents.

## Turnips for Cows.

Mr. Nathan Hart, at a recent agricultural meeting in Connecticut, in advocating the use of turnips for feeding milch cows, said: "A few winters since I was feeding common turnip, and when the supply was exhausted I had the curiosity to estimate the value of turnips per bushel for feeding purposes from the returns that I actually received from the milk. We were then getting 6 cents per quart for our milk. The diminished flow of milk resulting from its discontinuance shows that turnips were worth 25 cents a bushel to feed to cows. I refer to the common flat or field turnip. But as to their saving hay I do not think they do. I think they act as an alternative, and their use will cause the cow to more perfectly digest her food. It seems to be adapted to the wants of the cow, and produces a good digestion. I feed just before milking."

Mr. Hart practiced feeding the turnips just before milking at night. Immediately thereafter the last feed for the day is given. He could not find that they induced any bad odor in the milk, but thought it important to begin feeding them gradually and to slowly increase the amount to the full feed, and also important to feed just before milking.—[N. Y. Evening Post.

## The Best Cow for Small Farms.

Our opinion and also that of the principal dairy-men of the country is, that the Jersey, commonly called Alderney, is above all others the best cow. They are easily kept, very docile—a point not to be overlooked—and beautiful, give milk of superior richness, from which is produced finely colored, solid butter, having an equal texture and flavor. Butter made from such milk has been known to keep when placed in a dry, not cold, cellar, without the use of ice, and when taken out was in a hard, firm condition, and was then sold 12 to 18 cents per pound higher than best ordinary butter.—[Live Stock Record.

Henry Milward & Co., brokers of Chicago, in their eighteenth annual report in regard to the prospects of the coming season's supply of hogs and corn, say that it is generally believed that there is an increase of fully 20 per cent. in the hog supply, while the corn-crop will be the largest ever known.