

of information, which he was ready to give his fellow-travellers the benefit of.

Passing through the vineyards, I was struck with what I thought peculiar cultivation of peas. I remarked on it, and was laughed at and informed those were vines. They were trained to stakes about three feet high, and though perhaps a hundred years old, were not allowed to grow higher or bear more than half a dozen bunches of grapes, completely upsetting my ideas of vineyards of high trellis work, forming arbors covered with luxurious vines, the rich clusters of grapes waiting to be plucked by the dark-eyed beauties, etc.

My German acquaintance continued the subject of agriculture, alluding to various customs of different countries, and among others mentioned a method of preserving maize, clover, and other succulent plants in vogue in Hungary. He described it thus:—

A well drained knoll being chosen, a long pit was dug about five feet wide at the bottom and of the same depth. This is filled with fresh cut green fodder, tramped down, and covered with straw, and then the clay heaped over and well packed on it. It is fed during the winter, coming out a greenish-brown mass, of a sour but pleasant odor, and greedily eaten by the cattle.

I had a vivid remembrance of sourkraut, so delightful to German taste, and thought that, although it was a mode worth noting, yet to use it we should require Dutch cattle to eat it, as no respectable English cow could be expected to do so.

Some years after, on coming to Canada, I found the question of wintering stock a very serious one, and recalling to mind this German mode, determined to try it on removing to this neighborhood. In 1877 I raised a quantity of kohlrabi, and thinking it a pity that the leaves should be wasted procured twenty hogheads, which I sank in the ground, filled with the leaves salted and tramped in, and covered with boards, on which the clay was put to weight them and exclude the air. About four of these were used as feed, but not finding it satisfactory, as the bulge of the casks prevented the covers being close enough when settled, the remainder were not opened until 1879, when I commenced to dig the pit for my present silo. In doing this we took up the casks and found much of the fodder in good condition, which convinced me that it would answer if properly done—that is, well closed and sufficiently pressed. My pits were dug but not completed until 1880. I had, from reading, found that it was necessary for complete success that the fodder should be cut very fine and very heavily pressed.

Goffart, having a low wet situation, was compelled to build his silos above ground of masonry, laid in and plastered with Portland cement. The maize cut very fine; well tramped in; covered with plank closely fitted, but not united; which were covered with clay to render the covering air tight, and weighted with stones.

The Americans who have adopted this system usually choose a side hill; also using masonry laid with water-lime, and in some cases using rubber around the covers to make them air tight and screws to give the required pressure.

Mine is a pit thirty-two feet long, ten wide and eight deep; divided into four compartments by double boarding, the sides lined with boards; a space of fifteen inches between the boarding and bank filled with concrete; the bottom of clay; covers of double boards bolted on heavy frames, fitted as close as the raising and lowering will allow; no other means of rendering them air tight is used. They are weighted with as many logs as possible.

The maize, "Chester County Dent," a variety that does not mature in this latitude, but gives a large amount of fodder, is mowed when flowering with a reaper and cut with a Watson cutter, specially made to cut to one-eighth of an inch. Two teams mow, haul and cut four loads a day. This is put in one compartment, the cover lowered and weighted. They are thus filled in successive layers, requiring about forty loads. When opened on the first of January the fodder was of a greenish-brown appearance, of a decidedly alcoholic odor, resembling brewer's grains. A layer, furnishing a week's supply for thirty head of cattle, was taken out, put in a close feed box or room, and underwent a further fermentation. The covers and weights are replaced. I would here caution to guard against the gas on entering a deep pit.

This mode of preservation is especially suited to maize, the fermentation rendering its stalky substance soft and nutritious; also the chemical change the constituents undergo—the yield also being larger than any other fodder. It increases the production of milk, but I doubt if it is a beef producer, although it will carry the stock well through the winter, which, I need hardly mention, is a very important matter in Canada.

Why are Ewes Shown in Pairs?

BY JOHN C. SNELL, EDMONTON, ONT.

Having been called upon in several cases during the late fair season to act as judge in the sheep classes, I have been confirmed in an opinion I have long held, namely, that there is no good reason why ewes should be required to be shown in pairs and not singly, as in all the other stock classes. Would it not be just as reasonable to require that sows, or cows, or mares should be shown in pairs?

It is almost impossible to find two ewes that are equally good, and in passing on such exhibits judges are compelled to offset the merits of a superior animal by the defects of its companion. And so it often happens that the best individual animal in the show does not get even a second prize, while, if shown singly, she would have won the highest honors, and all will agree that the best ought to win every time.

I have mentioned this matter to a good many of the exhibitors of sheep, and they have almost invariably approved of the change suggested as being right in principle. I believe it would be more convenient for exhibitors, and I am sure it would be more satisfactory to judges; for it is much more difficult to decide upon the best two than upon the best one, especially if there is an exceptionally good one in one of the pairs. The only objection I have heard, and it has come not from exhibitors but from officers of the fairs, is that it might reduce the number of sheep brought out for exhibition. But now that at most of the larger fairs prizes are offered for the best flock or pen, of say one ram and six or more ewes, exhibitors competing for these must bring out a good representation to have a chance of winning a flock prize.

The Illinois State Board of Agriculture, some four years ago, at the request of the State Wool Growers' Association, adopted the plan of giving prizes for single ewes, and it gave such general satisfaction that they have continued the rule. The Kentucky and the St. Louis Fair Associations also give prizes for single ewes. The poultry associations have also adopted the principle and now give prizes for single birds, deeming it unfair to hold even a game cock responsible for the plainness or faults of his hen-wife, or vice versa.

I respectfully submit this idea, the result of experience and observation, for the consideration of breeders and exhibitors, and also of managers of agricultural societies, hoping that if it meets their approval, they will take the necessary action to secure its adoption.

Pleuro-Pneumonia.

The U.S. commissioners appointed to investigate the causes of the propagation of the cattle disease known as pleuro-pneumonia met at the Sherman House, Chicago. A large number of communications relative to the disease were read, but it was noticeable that all of them were from eastern points. In fact, Dr. E. F. Thayer, of West Newton, Mass., as well as Prof. James Law, of Cornell University, stated freely that such a disease as pleuro-pneumonia did not exist among the western cattle. They say the disease is contagious, but that all investigation shows that it is brought here by foreign cattle. The farthest place west where the disease has penetrated is Elmira, N. Y., and even at that point there was but one case, while there are doubts even there that it was a genuine case of the dreaded disease. Prof. Law is firm in the faith that the disease is contagious, however, and in this view he is endorsed by his associate. As proving the fact, the latter says that under the direction of the Governor of Massachusetts, stables thoroughly ventilated were built, and cattle some distance away caught the infection from the animals purposely introduced. The gentlemen cannot believe that either still feeding or close quarters have the least to do with the disease, and would impress upon the public that the thing to do in the premises is to stop the probable spread of an imported infection. Dr. Thayer says that he has no statistics upon which he might state that any particular breed of cattle brought the pleuro-pneumonia to this country, but he considers it of the utmost importance that its ravages should be checked at the earliest possible moment. The gentlemen visited the Stock Yards and endeavored to impress upon the dealers the fact that the cry of diseased cattle from the cause mentioned is costing the U. S. not less than \$2,000,000 per annum in England alone.

A report has recently come from Washington, U. S., to the effect that the commission has failed in its object; having very limited means they endeavored to obtain information from the State authorities, but found them very apathetic. If the above dreaded disease has not already gained a foot-hold in the Western and Northwestern States it is passing strange, as thousands of calves are each year shipped from the eastern sections to the west, or non-infested States, as they are called. This has been going on for years, and at the present time no restriction, to our knowledge, has been placed on the trade, and we know of no reason why thousands more will not be shipped from the infected to the non-infected States this fall. If, as the commissioners say, pleuro-pneumonia does not exist in the west to-day, what proof is there that it will not exist there a month hence? Some Canadians are in favor of importing cattle from the west into the Dominion, but we utterly oppose this. We are quite free from all diseases of a dangerous or contagious nature; but if we deal with our American neighbors how long can we hope to remain so? or, can we claim to be free if we import animals in which we have reason to suspect the seeds of the disease exists, or may, be lurking for aught we know? We are in favor of the Canadian Government exercising at all times and places the most rigid prohibitory measures against American cattle. If the cattle exported from Canada were subjected to the same conditions as those exported from the United States, the Canadian farmers would lose at least \$20 per head on all exported to England.

The attention of our readers is called to the article on Stilton Cheese in the Correspondence Department.