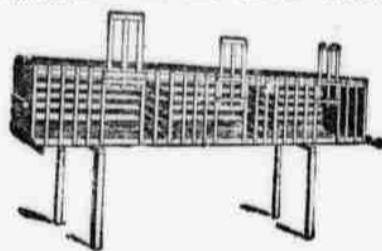




Fattening Fowls.
Herewith we show the kind of crate in use in the Ontario station for the fattening of fowls. The crate is easily built and every farmer can construct one or have it constructed at slight cost. If the experiment stations find it profitable to have such helps, surely the general farmer cannot afford not to have one. In such a crate his birds can be kept from moving around, and that is the desirable thing to do when fowls are being prepared for the market. The fatter the fowl the better the price that can be realized for it. Fat costs the farmer less than lean meat and the more of it he puts on his fowls the better. It is not a deception of the public, for the public understands the case and is willing



to pay a fancy price for lean meat that is in connection with fat; for it is recognized that a lean bird is a tough bird, if at all mature, and that a fat bird is a tender bird. The public likes juicy, tender meat and is willing to pay for fat to be thrown away, if in that way the tender flesh can be secured. The shorter the time of fattening the tenderer is the flesh of the bird, according to a popular belief. The idea may be correct or not, but the fact remains that the people want fat birds, and that this is the only kind of a bird that the farmer can sell with much profit to himself. Between now and the New Year there will be millions of chickens sold from our farm and many of them will be sold off in a half-fat condition. That doesn't pay. Fatten the birds.

Washing Fowls.

Perhaps it is not known generally that before exhibition fowls are thoroughly washed. One exhibitor tells the writer that he places his hens in a tub of water and rubs soap into their feathers. He works this soap and water into the feathers until they are covered with the lather. This not only takes away the dirt, but effectually destroys all the mites and lice. Some of these show men go to the length of using chamomile skins on the birds. Every scale on the legs is examined, and if found to have dirt under them, the soap suds is worked under the scales and the dirt worked out by the use of a small sliver of wood. Cleanliness counts for a great deal in the show room.

Best Grain for Show Birds.

We notice that some writer advises the feeding of wheat to birds in the show room. He says that wheat is the grain best adapted to this purpose. Just why he chooses wheat we do not understand. We believe that oats and corn constitute a far better food under such circumstances. Wherever we go into show rooms we notice that corn is very largely used and not wheat. Wheat is doubtless a very good food for fowls; but we see no reason for placing it first.

Scab on Apple Trees.

Apple scab develops best in cool, dark positions. The disease comes from a fungus, and this fungus cannot stand the light of the sun. It will therefore prove advantageous to thin the branches of trees that are affected by the scab. The more the sunlight gets in the less will be the chances of the fungus to survive.

LIVE STOCK

The Reindeer as a Farm Animal.

In all the northern part of this continent the reindeer has become practically the only farm animal that can be successfully bred and used. Under the auspices of the United States Department of Agriculture, they were some years ago introduced into Alaska, where they are now being used both for food and for draft purposes. There is just as great opportunity for improving the reindeer as for improving our other farm animals. In the regions where life is hard these animals thrive, and fall to thrive in regions where the ox and the horse are at their best. The zone of usefulness of the reindeer is north of that in which the luxuriant agriculture is possible. Its food is the lichen and herbage native to the region where the ground at some depth is eternally frozen. It is fortunate, perhaps, that the reindeer cannot live upon the kind of forage we feed to cattle and horses. In the far north where the moss grows rapidly in the summer and where it covers the ledges even to a great depth, these animals find their natural pastures. It is the medium for transforming this vast amount of otherwise useless material into palatable meat and rich milk. The industry of developing the reindeer is in its infancy. We may be certain that this animal, adapted by thousands of generations of habit to the cold north, will yet become a domestic animal of great importance.

Cattle in Cuba.

The number of cattle in Cuba is not great at this time, but is certain to become great. The problem of how to escape Texas fever is being dealt with both in the island and on the mainland. The Cubans are becoming quite large beef eaters, and it is necessary that they import special beef breeds if they are not to import the finished product. There is a law in the island at present prohibiting the killing of dairy cows. This is done to foster the dairy interest, but at the same time it shuts off one cheap supply of beef. The Cubans at the present time are eating seven times as much beef as pork, and about 4,500 times as much beef as mutton. According to a recent report the per capita consumption of beef in Cuba in 1902 was 43.07 pounds, of pork 6.82 pounds, while the consumption of mutton was only .9 pound per 100 inhabitants. This opens up a great possibility in the sale of beef stock by American growers.

Sugar as Feed.

In some parts of the United States, and especially in some of the islands now belonging to the United States, some forms of sugar and molasses can be purchased at a very low rate. It therefore becomes desirable, if possible, to use some of these as food for farm animals. Even in the European cities there are cheap grades of sugar and molasses that can be advantageously fed. Some of the Parisian cab companies have been experimenting with the feeding of these foods as to the time of digestion. When fed to horses it was found that sugar was digested in from 27 to 28 hours, while molasses was digested in about 16 hours. The molasses seemed to hasten the digestive processes. It has also been fed to race horses, and some dairy cows are now being tried. The general consensus of opinion among the men that have tried this feeding is that sugar and molasses are both good elements of food.

Training His Memory.

When David Livingston, afterward famous as a missionary traveler, was only nine years old he repeated the one hundred and nineteenth psalm on two successive nights, and his memory failed him only five times in the two recitations.

FARM MISCELLANY

Clean Surroundings for Milk.

We used to have a great deal of trouble with the quality of the butter made at our house, and sometimes the milk itself became sour early and at other times had a peculiar taste after it had stood for only eight or ten hours. After visiting one of the great dairy schools of the country I became convinced that the trouble with our butter and milk was that things were not clean enough where we kept our milk. I went home and examined the cellar. It was summer and all the old vegetables had been taken out, but decayed leaves and roots were left here and there. I tried hard to find if they were sending off bad flavors and found that I could detect some smell that was not desirable in butter. Moreover I noticed that here and there flies were active and that they visited the milk and cream as well as the decayed and half-dried roots and leaves. I am now sure that the insects help carry the germs of different kinds of things to the milk and complete what the bad air begins.

We had always kept the cellar windows closed in summertime to keep the cellar as cool as possible. We used to think that it was useless to have a cellar and yet let it get up in temperature. But in keeping the windows closed we kept all the bad odors in, to the detriment of the milk and cream—consequently of the butter. I determined to have a cleaning up and I did.

For three days I kept out of the cellar all milk and cream. I had a boy dig out all the remnants of potatoes and other things that had decayed or could decay. I had him even take up some of the boards that were lying on the cellar bottom and holding moisture. The cellar was most thoroughly cleaned from bottom to top. The top was swept carefully but energetically. The windows were opened and the cellar aired. I had the windows hinged so they could be opened with ease, and then had them fixed so they could be left open a little way for ventilation if desired.

Lastly I had the cellar whitewashed, both as to the woodwork and the brick. The bottom is of earth. It should be of cement. But we have not yet got around to putting a cement floor in the cellar. It costs money. The whitewashing helps kill all moulds and then helps us see whether the cellar is getting dirty or not.

When the milk and cream were put back the flies had all been killed off and hanging shelves erected for the milk. After that time we had no trouble with the milk or butter. The windows have been frequently opened in the evening and again shut after they had been opened for an hour or so. We have screens also to keep out the flies. This cleaning up did not cost much money, but it was worth a good deal in the improved quality of the butter made.—James Addison, Bureau Co., Ill., in Farmers' Review.

Calcium and Magnesium.

Calcium and magnesium are both soil elements which enter into the composition of plants. They are, however, so generally distributed in the soil that they are little considered by the students of plant nutrition. One German expressed a theory that there must be a certain ratio maintained between the calcium and magnesium in the soil or plants would not grow. Some German scientists have recently completed some experiments to determine the truth of this expressed opinion, and it was found that there was no needed relation between the presence of calcium and magnesium. Hence what is known as the "Loew hypothesis" is discredited.

PUT UP JOKE ON NATURALIST

Scotch Professor Has Much Fun With Learned Brother.

One of the professors at a great university in Scotland recently wrote to an eastern university to the following effect.

"Walking in the dusk through the grounds of the university the other evening, my attention was arrested by a low murmuring sound near me, which was neither a hiss nor a whistle. On looking I saw a creature lying on the ground, larger than a cricket. Two antenna-like protuberances projected above the eyes. It had no wings; and the covering of its body was variegated, though certainly not like down.

"Mindful of the danger to myself, I did not venture to turn it on its back, so as to count the legs. On the ground lay a small quantity of snow-white substance, which had evidently exuded from the body. Can any of your professors identify the creature from this imperfect description?"

The naturalist connected with the eastern university fell into the trap—baited, probably, especially for him. He wrote learnedly about various insects, and concluded that the one observed must be one of the two whose long Latin names he gave.

"The antenna-like protuberances are used for burrowing in the ground," he wrote, "and these insects secrete a fluid which they have the power of ejecting to protect themselves in case of attack."

The tutor wrote again to thank the naturalist for his information, and to say he need not trouble him further, as he had fortunately observed the creature again more closely under exactly similar circumstances, and was able now to identify it himself as the *Vacca vulgaris*, or common cow.

The Way to Do It.

- Exercise three time a day;
- Feed yourself on simple fare
- Mostly made of bran and hay;
- Revel in the open air;
- Never give way to your fears;
- Sleep just like a baby;
- Then you'll live a hundred years—
- Maybe.
- Wear no wraps about your throat;
- Do not eat late lunches;
- Do, oh! do not, rock the boat;
- Shy away from punches;
- Do not drink too many beers;
- Let not debts distress;
- Then you'll live a hundred years,
- More or less.
- Don't dispute with men who wear
- Larger fists than you;
- Do not give way to despair,
- Though the rent is due;
- Do not waste your strength in tears;
- As for trouble, scout it;
- Then you'll live a hundred years,
- Doubt it?
- Do not umpire baseball games;
- Don't for office run;
- Do not call a fellow names
- If he has a gun,
- Unto wisdom lend your ears;
- Shun the festive schooner;
- Then you'll live a hundred years
- If you don't die sooner.
- Piqua (Ohio) Call.

Threat of the Grave Digger.

In Castine, Maine, there used to live a man named Ordway, who numbered among various employments that of grave digger in the village cemetery. He was very loud spoken and wonderfully profane.

On one occasion he finished the task of burying a woman pauper, who had been noted in life for her corpulence. Mr. Sargent, chairman of the selectmen, overlooked paying him, so Mr. Ordway appeared at Mr. Sargent's store a day or two afterward, and began demanding his pay in no uncertain terms, to the amazement of the summer visitors who filled the store at the time.

He ended his harrangue as follows: "Look a-here, Sargent, if I don't get my pay before to-morrow night, up she comes!"

Mixed Dates.

Four-year-old Sarah had two uncles (living out of town) who were about to be married.

"So you are going to your uncles' weddings, dear? And where will they be married?" asked an interested friend of the family.

"One is going to be married in Washington," answered the child, "and the other in January."—Lippincott's Magazine.