

From observation and personal experience I think the preservation of corn fodder in silos will be largely adopted by skillful farmers. It has several advantages, viz.: The comparatively small space required for a given amount; the great ease with which the fodder may be cut short while soft and green; avoiding the labor and risk of curing in shocks in the field; the readiness with which the stalks may be harvested in all weathers except pouring rains; the whole of the stalks being eaten by the cattle and the advantages of green, succulent food through winter; in advance in the flow of milk some ten or twelve per cent.—*John J. Thomas, in Mirror and Farmer.*

Green food in a tight silo and in a stomach of a cow, is closely analogous in respect to condition and changes. The paunch of a ruminant is a silo in miniature, or, if you please, a well-built silo is a large rumen for the reception and preparation of food for digestion. In each the food is partly comminuted, and in each exactly the same action is begun, namely, lactic fermentation. It may be carried a little further in the silo if it remain long, but as far as they go the character of the changes in both is alike.—*L. B. Arnold.*

Where there are gas works within reasonable distance it is better to get gas tar than to use coal tar from the kerosene refineries. It, when hot, penetrates the lumber better, dries harder, and smells less, and when one and one-half pounds of pulverised resin is put into each gallon of the hot tar and applied, it makes a remarkably hard and glossy finish. Such tar is very cheap, the barrel costing as much as the tar. The two cost about \$2.50 for 55 gallons and barrel, free on board the cars. Yes, put it on a month or so before you fill the silo.—*Hoard's Unknown.*

I have never regretted that I secured a two-horse tread power for cutting and grinding feed. This works well, is kept housed in a small space, and is very easily and quickly moved from one spot to another, furnishes good exercise for horses and colts in winter, can be worked in cold, stormy, blustering weather as well as at other times, and, best of all, these are now so governed that they are perfectly safe. The sweep horse power cannot be housed, cannot be worked in an ordinary barn, and are useless on stormy days, and with the same number of horses are only half as effective as a good tread power. In case of very large silos holding hundreds of tons I presume it might pay to secure an engine to cut the corn, but for eight or ten acres of corn and silos to hold a hundred tons of silage, I think the tread power will prove entirely satisfactory.—*Prof. A. J. Cook, in Silo and Silage.*

With a large silo I should prefer a partition; it is often more convenient in filling, especially if different crops are to be grown for this purpose. In feeding, so large a surface is not exposed, and, consequently, there is less liability of injury or waste. While we have always cut off a section of the contents near the door of the silo as we began feeding the ensilage, for convenience (as one would cut out a section of a hay mow) and without loss, I am inclined to the opinion that it may be preferable to begin feeding from the top and take from the entire surface if it can be done without too great an outlay of labor.—*Mich. Station Bulletin.*

We have been feeding corn ensilage exclusively to cows from which we make butter—twenty-six in all—of which twenty-three gave milk the whole time, seventeen that came in since October and seven farrow and strippers. The daily rations of these cows have been from 40 to 50 lbs. of ensilage, 12 quarts of wheat bran, and 8 to 10 lbs. of hay, fed in two rations, night and morning, no feeding in the middle of the day. The daily yield of butter has been 27 and 28 lbs., requiring but 18 to 18½ lbs. of milk for a pound of butter. The butter has been sold for 32c. per lb. in Chicago through a commission house. After feeding the smallest compartment, which, being measured, was computed to hold 4½ acres, we found that after paying \$120, the cost of the bran the cows had eaten, and \$80, the estimate value of the hay fed, we had \$460 and the skim milk for 4½ acres of the ensilage and our work. We have been winter dairying for fourteen years, but we think we have never before produced as much butter at so small a cost.—*Chas. R. Beath, Wisconsin.*

### Milk Decomposing.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR—Would you kindly inform me through the veterinary department of your valuable JOURNAL what is the cause of the following case: A heifer calved last February, two months before her regular time. She was milked regular in April and gave a good flow of milk, but her milk is no good. There cannot be anything wrong detected when it is fresh from the cow, but set it alongside of other milk for fifteen hours, and it will be very musty and smell very bad and the other milk good.

W. G. S.

ANSWER BY F. C. GRENSIDE, V. S., GUELPH, ONT.

The existence of any constitutional disorder, such as consumption, chronic inflammation of the womb, or retention of a portion of the after-birth, leading to contamination of the blood, may bring about this tendency in the milk to decompose. If any portion of the udder is inflamed and pus formed, this becoming mixed with milk, will have the same effect.

### Book on Cheese-Making.

EDITOR CANADIAN LIVE-STOCK AND FARM JOURNAL.

SIR,—Would you please give me the name of a good book on cheese-making, and oblige

J. W. E.

Nassagaweya, Ont.

Prof. Arnold's book, "American Dairying," though published in 1879, is undoubtedly the best in this respect. Stewart's "Dairyman's Manual," a later work, is also very good. The latest information on this subject will be found in the last two or three annual reports of the Ontario Agricultural College, which we would advise our correspondent to write for.—*ED.*

### Poultry.

#### Rouen Ducks.

The beautiful form and rich coloring of this breed has secured for them many friends, and made them almost universal favorites with those that endeavor to combine, as far as possible, pleasure and profit in the yards. They do not, however, rely solely on their charms of personal beauty to secure patrons, as they have been bred with a far-seeing eye to profit as well.

As to the origin of the breed or their name very little is known. Some have conjectured that it is a contraction of the word "roan," and others that it is derived from the French "Rouen."

For late fall marketing, there are no other breeds that will equal the Rouen in point of weight. The Aylesbury will mature earlier and be ready for market first, but will not be as plump as the Rouen. The standard weight of the latter is given to be 9 lbs. for the drake and 8 lbs. for the duck. The flesh is plentiful, full flavored, and of excellent quality. They are also prolific layers of good sized, pale green eggs.

In general appearance there are few of the domestic birds that look as gay as the typical Rouen with its beautiful markings and brilliant colors. In the summer the drake has much the same appearance of the duck, but as winter draws near, his plumage becomes more striking. The head of the drake should be nicely formed, and rather long, and of a rich metallic green, reflecting different shades with every movement. The bill should be a greenish yellow, narrow near the head but widening towards the extremity. The eyes a dark hazel, almost black; the neck should be carried gracefully, neatly curved, and a beautiful green color, with a distinct band of white not quite meeting at the back, but occupying about two-thirds of the neck; in front and below this, an authority states, the green should not extend, either behind or

in front. The breast should be of a rich, solid claret color, and not running white towards the edges, free from gray feathers, and the claret coloring running back as far as may be towards the legs. Coming next to the body: this should be lengthy with plenty of depth and breadth. A pleasing gray on the under part and sides, growing lighter near the vent, and becoming solid black under the tail. The back should on the upper part be an ashy gray color mixed with green and running into a rich lustrous green on the lower part and rump. The wings should not cross over the back, but should be close and snug and the long feathers should be a deep dark grey, with a clear, broad ribbon of rich purple, with metallic reflections of green and blue, edged with white. The tail is composed of dark ashy brown or black hard, curled feathers. The legs are short and thick, with orange colored shanks, and toes of same color with black toe-nails.

The duck in form very much resembles the drake, but is slightly deeper in keel. The head is a more sombre color, being a deep brown or chocolate, with two dark hues running from the bill behind the eyes. The bill is of a brownish orange, with a spot of black of medium size on the upper part. The principal difference between the necks of the two sexes is the absence of any indication of the white ring on the neck of the duck. The breast is round and prominent, of dark brown and pencilled with a lighter shade. The flank and back are also of same color and similarly pencilled. The body plumage is grayish brown, each feather clearly pencilled with rich dark brown to the point of the tail. The rest of the standard varies but little, if any, from that given for the drake.

#### Cross-Breeding.

BY SIFFHEN BEALE.

There are, we believe, many advantages to be gained by the use of cross-breeding for ordinary purposes, because if care be exercised in the selection of the stock, any given quality can be increased. It is by this means our present exhibition birds have been brought to the state of perfection in which they are found, and as we are seeking for qualities of utility, we must follow on similar lines. The advantages of crossing depend very largely upon the skill of the breeder, but the chief one is the greater strength and hardiness obtained. This of itself is most important, and when feather is not the chief end in view, it overrides mere questions of fancy. For commercial purposes we advocate very strongly cross-bred fowls, and we shall now seek to indicate the most useful of these as layers. But before doing so, we must utter a note of warning, and that is, no cross-breeds must be bred from, or a rapid deterioration will be the result. The best way is to keep a pen or two of the pure-bred birds for stock purposes, breeding from these alone, and renewing as required, but never using their progeny to breed from. By this means a good result will be obtained, the size and stamina of the strain will be kept up, and the birds will always be kept well in hand. It ought to be a rule in every yard where eggs is the object sought for, that the hens shall be fattened and killed off when about nineteen months old, that is, just before the second moult, as they will still be tender at that age; whereas after then they become tough and dry, every moult is harder and more prolonged, and the number of eggs laid becomes fewer and fewer. On the system we have been recommending, about half as many birds (calculating the proportion of cockerels to kill off at three months old) as the stock of layers should be bred each year, and the older hens killed just in time to provide room for the pullets when they commence laying. This is the way to make a poultry yard profitable, and will be found best in practice.

For layers we should recommend one of the following crosses: Game-Houdan; Leghorn-Houdan; Game-Minorca; Leghorn-Minorca; Leghorn-Scotch Grey; Leghorn-Plymouth Rock; Leghorn-Langshan or Game-Langshan. The progeny of any of these will be found capital, both as layers and for the table.

"Am very much pleased with your JOURNAL, think it just the thing for a young farmer"—B. C. Parker, Stodderville, Man.

"To those who are anxious to secure improvement in breeding a better class of stock, I believe the JOURNAL is an invaluable guide."—Alex. J. Dolson, Chatham, Ont.