

butter in waggon from the farms, with better results than by the use of ice. I believe that the principle can be applied to shipping butter by rail to the eastern markets, with great success, and much cheaper than by the use of ice. There are three requisites at least to produce the desired result: shade, draft of air or perfect ventilation, and some open porous fabric or substance which will take up and hold moisture until evaporation shall dry it, when more water should be showered upon it. The principle of evaporation is very well understood, and known to be cooling. The West should, and I believe will, in no far future day, be the best dairy section of America.

The Sun should never be allowed to shine on butter, or a package containing butter. More butter is injured from the farm house to the village store, and in transportation by careless, unthinking or wilful parties, than from all other causes combined. The farmer has an easy and effectual remedy:—an old umbrella for a shade, green grass or wet flannels or any other substitute whereby a rapid evaporation can be effected for the cooling arrangements, and you can carry your butter for miles to market in good condition.

So long as dairymen travel through the country, pick out the best milkers, and keep them for milk till they grow old, without raising a single calf, no improvement of our milking stock may be expected.

MILK ESTABLISHMENT IN SWITZERLAND. — The *Utica Herald* states that an American company is establishing a milk-condensing factory near Lake Zug, in Switzerland. The machinery has already arrived there, and the necessary buildings will be completed during the present season.

WHOLE DAIRIES, says the *New York Tribune*, are now reported as yielding large quantities of butter, and generally the profit on each cow is \$100 a year, considerably more than the profit on a hired man. This is because farmers are raising cows for their own use, and more care is taken in the selection of dairy stock.

THE Butter and Cheese trade is constantly increasing in volume and influence, and already exceeds in value that of any other line of agricultural products. Its value is greater than that of hay, wheat, or cotton, and whatever is done to affect so widespread and powerful an interest should receive the most earnest attention.

At Belleville there is a decided decline in the cheese market, though quotations are very unsettled. Latest sales have been made at 1½c. It is impossible, at present, to predict what the future tendency of the market may be. The factories are in full running order, and pastures being better than known before in years the yield of milk is much above the ordinary seasons.

As I have been asked by a number of friends if the Butter Inspection Act requires any alteration in the size and make of tubs, for the information of those interested I would state that the new Inspection Act requires new kinds of packages; but the compulsory clause having been struck out, it is quite a dead letter, and no one is required to get it inspected; therefore, it is not required to alter the packages.

—Correspondence *Peterborough Times*

ANNATTO.—In the two French colonies of Martinique and Guiana, there are more than 6000 acres under culture with annatto (*Isaia orellana*), the annual produce being 3,000,000 lbs. Although French Guiana has nearly five times the extent of land under culture with this plant that Guadeloupe has, it only produces about two-thirds of the whole quantity. The production of annatto now exceeds the demand, as no fresh uses have been found for this coloring substance.

We find the following in the *New Westminster (British Columbia) Herald*. Mr. Harris is an old Ingerollonian, having left here a few months since to reside in British Columbia. "The necessary apparatus for a cheese factory, manufactured in this city, will be shipped this morning to Mr. Wellington Harris of Keatsey, who expects shortly to be able to supply the home market with first-class cheese, equal to the prime Canadian article."—*Chronicle*.

WHEN milk is selling for 6 cents a quart cheese should bring 30 cents a pound. It would be as profitable to sell milk at 3½ or 4 cents a quart, as to make it into cheese at present prices, and this reduction in price would double the consumption and supply a better article of diet than any form of cheese which is little used by the people at large. It is too indigestible and expensive. As an article of diet milk is used too little. Less meat, lard, butter and pastry, and more milk would be better for almost everyone.—*Little Falls Journal*.

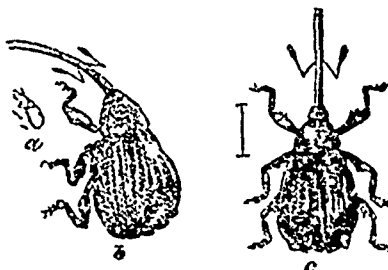
Correspondence.

The Apple and Pear Curculio.

(*Anthonomus quadrigibbus* Say.)

Mr James R Cook, of Mount Albion, Ont., has sent us some specimens of the above named insect, with the complaint that he has found them piercing his young pears, and that they have destroyed most of his "Anjous."

Four years ago we described and figured the insect in the CANADA FARMER, and shortly afterwards gave an account of it in the *First Report of the Entomological Society of Ontario*—in both instances referring to it as one of the pests of the apple. It is quite as injurious, however, to the pear, if not even more so. Happily it is not very abundant throughout the country, and consequently not very generally known, but here and there it makes its presence apparent by the injuries it inflicts upon the young fruit.



The accompanying illustration represents the insect highly magnified—b, a side view; c, a back view; while a exhibits the natural size.

In size it is very similar to the well-known Plum Curculio (*Conotrachelus nemophar* Herbst), but it may easily be distinguished from it by its much longer and more slender proboscis, its dull brown or reddish color, and the four prominences on the wing covers behind the middle. Its natural food is the fruit of the hawthorn and wild crab and other allied indigenous trees, but it frequently, as in the case before us, finds its way from the woods to the gardens and orchards, and takes only too kindly to the various varieties of apples and pears. It makes round punctures in the fruit, not the crescent-shaped marks of the "Little Turk," and produces in pears hard, woody spots that very much impair the beauty and value of the fruit. The only reliable remedy for its attacks is vigorous and persistent "jarring."

Leaking Teats.

(To the Editor of the CANADA FARMER.)

Sir—Could you give any information to a constant reader of your valuable paper as to what can be done in the case of milk leaking out of the teats of cows between milking times?—I am, &c., J. C.

[The following reply to a similar inquiry, propounded by a correspondent of the *Western Rural*, is so applicable, and covers the ground so fully, that we quote it verbatim:—

"The teat, both in its shape and office, somewhat resembles a funnel, and possesses considerable elasticity. It is formed of the skin and muscular fibre, the cuticle not only covering the teat, as in the other parts of the body, but the cuticle also turns upward and lines the interior as far as it is contracted, and is terminated with a frilled edge. The rest of the teats and the ducts are lined with a mucous membrane. If the milk were allowed to run down directly into the teats, it would soon overcome the resistance of the contraction at the extremity, and pass out; therefore, each main duct, as it enters another, has a contraction or valvular apparatus, so that each is a pouch or sack, which together hold the body of the milk. Consequently, in the act of milking, it is necessary to give motion to the udder, or lift it, in order to

produce a flow. Thus the milk, being displaced, flows into the teat and is pressed out; and from the peculiar formation of these valves, it is prevented, to a great degree, from again returning.

When the udder becomes over distended, the motion of the animal will cause the milk to flow into the teats, and when this takes place to such a degree as to overcome the contraction of the teat, the milk escapes. This contraction, in some cows, is so slight that the milk is apt to leak at all times, and it is not unusual to see the milk escaping from the teats of an extra milker when driven home for milking, during the full flow of milk.

Various devices have from time to time been resorted to to overcome this. India rubber bands have been used around the teats, or collodion has been applied to the ends of the teats, to form a film over the ends of them, but so far as we know, none have proved satisfactory. The only real and perfect remedy we know for such extra milkers, or those having weak valves, is to milk three times a day, and to drive carefully from the pasture to the milking yard. There are very many cows whose udders are not capable of holding for twelve hours the milk secreted. If not drawn, the milk supply will gradually diminish to such quantity as she can hold. We should not advise mechanical means, for, by the undue distension of the udder, inflammation, garget and other troubles are apt to arise. The reason why the hind teats leak first is, that the portion of the udder connected with them secretes more milk than the forward parts, and sooner becomes over loaded. The longer the udder continues to be distended, the weaker, in all probability, will become the power to retain the milk."

How to Construct an Ice-House.

(To the Editor of the CANADA FARMER.)

SIR:—Could you advise me in your columns of the best way to construct an ice-house in an economic manner? It seems in this country where the heat in summer is so great, to be absolutely necessary, if anything like good butter is to be turned out, that ice should be provided; and a description of the manner in which it could be cheaply stored and kept would no doubt be appreciated by many.—I am, &c., A NEW SUBSCRIBER.

[On page 31 of the CANADA FARMER for January 15th, of this year, will be found a cheap and simple method of constructing an ice house, which, for the benefit of "A New Subscriber," we reproduce. It is as follows:

"No excavations are needed, nor double walls with expensive roofing for an ice-house; any out-house, however cheap, may be used. In fact, for two years I have used a part of an outer wood-shed, and my ice has kept perfectly.

"Now for the manner of storing. Sprinkle the earthen floor with saw-dust, and you are ready for operations. Saw the blocks of ice as large as can be conveniently handled, and as nearly square as possible. Place them neatly together, leaving a space of ten or twelve inches from the boards. Eight feet by ten or twelve feet is large enough for an ordinary family. When one layer is completed, fill all the cavities with pulverized ice; then place another tier, and so on until your block is four or five feet high. Then enclose the remaining two sides, leaving, of course, the space from the ice. This fill with saw-dust, covering the top the same depth, and your work is completed. This may seem too simple, but experience has taught me that a building through which you can 'throw an old hat' is as good as one costing hundreds of dollars."

A BRITISH COLUMBIA correspondent wishes to know whether there are any Jersey cattle in the Dominion, and at what figures they may be obtained. Will breeders please take the hint?