communications to Agronomist, 73 Adelaide St. West, Toronto

The Calf and its Mother.

Eyery heifer calf that is to be raised for the dairy should have a good mother. Maybe I am putting the cart before the horse by mentioning the mother afterwards, but it is the calf that I want to say the most about. With the market for all kinds of dairy products rapidly advancing, and so few farmers devoting any special attention to the raising of better producing cows, it is clearly to our advantage to take greater pains in developing cows that have the capacity to produce greater quantities of milk and butterfat at a lower cost.

In the false of the first will minimize the danger of milk-fever and caked udder. Get her into a box stall and provide her with a clean litter of straw. It is always best to let nature take its course, but be near at hand in case any assistance may be needed.

Immediately after the calf is born due to take greater pains in developing cows that have the capacity to produce greater quantities of milk and butterfat at a lower cost.

way we feed and care for our calves is the cornerstone upon which we mild up our dairy business. If we are interested in getting good calves we must begin by feeding the mother a proper ration of good nutritious bone, blood and muscle-building foods. If these foods are withheld she cannot We make a serious mistake we think of the cow as a milkmother. It does not pay to leave her out in the cold, to exercise in a chillwind and confine her to a ration expect her to bring us a robust calf and give a profitable flow of milk during the year. The unborn calf suffers in the same proportion as the cow that is carrying it when such conditions

garget, or a calf born weak and poor-le developed in some way are the di-rect result of mismanagement on the part of the owner of the cow. We must come to realize that to nourish an unborn calf and keep her own body supplied constitutes a heavy drain on cow's system. Hence, the necessity of furnishing her with a properly talanced ration containing home-crown grain feeds properly supplemented with protein concentrates and of the good, palatable roughage, in of alfalfa, clover or mixed am a great sticker for corn in the rabecause corn is a food that ms to have a special value in buildng bone and muscular tissues. In a lest at the Wisconsin Station to ascertain the relative efficiency of various feeds used for feeding cows that were teins in corn were particularly valuable in supplementing the proteins in wheat. In the case of wheat alone as addition of corn seemed to produce nderful results in insuring strong

As calving time draws near the pru-

as soon as possible, as they both seem to forget each other and do less worrying. Be sure that the calf gets the first milk, as it acts as a gentle purge and starts its digestive organs to On the dairy farm it is the cows money makers, and the working naturally. Give the calf whole milk for the first few days and go slow in making the change from whole milk to skim-milk. After the whole-milk to skim-milk. After the first month the calf will be able to get proper nourishment from other forms of fat substituted in its diet to take

> the place of the saction milk by skimming.
>
> I have found rolled cats and old process linseed meal excellent grain feeds for young calves and I always them to eat a little try to encourage them to eat a little hay as early as possible. Second cut-ting clover alfalfa seems to give the best results; fine timothy is also re-lished by the calves and gives good re-sults, especially when their other of two or three high, when desired, lished by the calves and gives good to lished by the calves and gives good to sults, especially when their other feeds contain plenty of digestive protein. The use of roughage in the calr's toin. The use of roughage in the calr's an old shed or outhouse. Rabbits can stand a great deal of cold, but if their butches are out in the open it is best. ration should be encouraged as it tends to enlarge the digestive organs and enables them to make better use

of their grain feeds. Keeping the feeding pails and pens clean is another important factor in raising healthy calves. A little time spent in petting and fussing with the calves and teaching them to lead is time well spent as it will be easier to train them when they are ready to take their place in the herd. And when the time comes that they are ready to be milked they will not be afraid of you and have to have their legs strapped to prevent them from kicking.

When to breed the young heifers is

another important question that has an influence upon their future useful-ness in the herd. If they have been properly fed and cared for they may safely be bred for their first calf so that they will freshen when they are from twenty-four to thirty months of age. Some excellent breeders prefer to breed them early and give them a good, long, growing period between their first and second freshening. A helfer that freshens when she is twen.

cows carrying calves, the ty-four months of age and is given a period of five months before she is a crumbly mash of middlings and corn results in insuring strong- again bred will make a good growth period of five months below again bred will make a good growth and have a tendency to milk for a longer lactation period than is the case when she is bred back too soon and not given time to build up a more wisorous body.

| Mean than the doe should not be bred again by the does not be bred again by the does not be bred again. The does not be bred again by the does not give a more after wearing the young, so that she is in good fet the to mate again. By following this practice our does have four litters a practice our does have four litters a vear, which is ample. If bred too t caretaker will see that the cow's case when she is bred back too soon estive system is in good condition withhold all heavy, heat-productive vigorous body.

Secret of Raising Every Chick.

The egg from which a chick is to come must be from strong, healthy, vigorous stock, properly fed and cared for, so that the egg contains all the elements and strength to produce a vigorous chick.

R must be properly insulations that furnishes the results of what we call brooding induces sleep. Little chicks, if put in comfortable, dark compartments several times a day, especially after each meal, so they will sleep, will live, grow and thrive. Such a compartment is called a fireless growing or the compartment is called a

# six Years.

It must be properly incubated to Chat during its twenty-one days of acres, and there Lysaw an old wafacebation the egg must have exactly gon which was doing the farm work about the proper degree of heat. Too high a temperature is one of the main causes of diarrhea in chicks. Too

## Rabbits as a Sideline.

Nowadays any sideline that will help reduce living expenses is worthy of serious attention. In this connec-tion we have found rabbits most intion we have found rabbits most in-teresting and profitable. They can be kept in almost any backyard and usu-ally require less room and are cheaper to feed than poultry. They are also rapid multipliers and a few breeders will keep an average-sized family well supplied with meat.

A small start can be made with only one or two does. We prefer either purebred Belgian hares or a cross between a Belgian hare doe and a Flemish Giant buck. For a beginner the best way is to buy a doe already bred and get her from a reliable breeder. If she can have a small range she will pick up most of her food. Weeds, dan-delions, plantain, etc., are all good foods. Any green stuff from the garden, such as lettuce, cabbage, carrot tops, mustard, parsley, and turnip tops may be utilized to advantage. The supplied feed should be a hand

ful of good oats to each rabbit at night, while just before she is due the doe should have a warm mash in the morning—at least in cold weather— and bran and middlings are excellent for this purpose. In the winter, when green stuff cannot be procured, rab-bits readily eat dry clover or alfalfa hay. One can buy a bale at any feed store and feed it a little at a time

the place of the fats removed from the Each doe should have a hutch at least five feet long, two feet wide and two feet high. This allows sufficient room for exercise. Part of this should be divided off and closed in the front, so as to form a sleeping compartment The front of the run can simply be fine

> hutches are out in the open it is best to put them in as sheltered a position as possible and see that the top is thoroughly waterproof.
>
> Give each doe plenty of short bed-

ding, with which she can make her nest. It is best not to be inquisitive about the little family when it first arrives, as the mother usually resents in terference and we have found most of them quite capable of managing their offspring without assisance—at least for the first two or three weeks. Litters usually run from three to ten number—six is a good average.

The youngsters will not eat any sup plied food until two or three old, when they should begin to have grass or hay and oats. Feed the mother well in the meantime, as this thrive while she is nursing them. We have found it best to wear at six

their rist and second treatments. A native with the state of the state

numerous nor the individuals of maximum size or strength.

Birds are the farmer's friends. Remember this while the snow is on the ground and see that crumbs and suet wonderfully in the amount of grain are placed where the birds can get food required to keep them in a good, thrifty condition.

The Welfare of the Home

Labor Savers Are a Good Investment.

# THE CHEERFUL CHERUE

love to see a tragic play Where things are wrong as they can be It makes my own life seem more bright— Things sometimes happen right for me.

he possibly can. In no other way is the result of bad feeding. It shows could he so well keep his help. Some-up with continuous scratching behind times the hands have families in the ears and under the armpits, which times the hands have families in the ears and under the armpits, which town; sometimes they only come in to soon become red and sore. The diets spend their money; but to make sure I have given above will guard him that against it. Also treat his coat with a morning this farmer either waits for half-and-half mixture of crude oil and them or goes or sends after them. It flowers of sulphur.

The diet months his yard breaking as a hunting dog will begin, if he is one of those breaks.

Roaming, and disobeying at what the dog considers a safe distance, can be checked with an air rifle. The case of dordom. It is warr life working the control of the control of the case of dordom. It is warr life working the control of the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom. It is warr life working the case of dordom in the discipline and punishment are necestancy and when parents need to correct their children they should do so in private. The case of dordom in the case of dor

ly planted onlons each winter in ash teen days.
boxes in the cellar, occasionally wat-

the hogs may be turned early in the spring and on which they may feed while the other forage crops are be-

# Ways to Keep Your Dog Well and Train Him Right

A good healthy dog should have no more diseases than a well-cared-for horse. Worms are usually present in pupples when you get them, and a teaspoonful of syrup of buckthorn once a week will rid him of them. Watch his feces when you take him for a walk, as they are a certain indication of his general health. If too bursts of temper at some one of the

boxes in the cellar, occasionally watering them, and with uniform good results. As a crisp table garnishing for "thy good stomach's sake," and to reduce the H. C. L. we heartily recommend the plan to others.

A field of winter rye upon which lowed by the utmost care during distemper, and must be fed forcibly. The rest is hope and careful nursing followed by the utmost care during concluded to the control of the control of

Things sometimes happen right for me.

Watch his feces when you take him for a walk, as they are a certain indication of his general health. If to loose, he is getting improper food, and you need more biscutt and should cut out the vegetables for a while.

Never Is Short of Help.

I was skting on the porch of a country house one evening last summer, when an automobile stopped at the gate and a farmer friend came in Voices were heard in the machine at the gate and he was invited to bring his friends in.

"Oh! no," he said. "They are a couple of the hands who wanted to go to the movies. We have a busy week ahead of us, so I brought them along, I will wait about town and drive them back tonight."

I' won you will poison the punds a couple of the hands who wanted to go to the movies. We have a busy week ahead of us, so I brought them along, I will wait about town and drive them back tonight."

I' will wait about town and drive them back tonight."

I' they are a certain indication of the formation of the walk, as they are a certain indication of the control of the walk, as they are a certain indication of the control of the walk, as they are a certain indication of the country house one evening last summers. It is a sign of tapeworm. Get my while the part of upper to dishoneaty in self-defence; then the gate and a farmer friend came in Voices were heard in the machine at the gate and he was invited to bring the good of the movies. We have a busy week a head of us, so I brought them along, I will wait about town and drive them back tonight."

I' will wait about town and drive them back tonight."

I' will wait about town and drive them back tonight."

I' while the surely was a most considerate farmer, and spoke of it afterward to my host.

"Yes," my host returned. "That is well and the part of the part of

bark at people and carriages, or to jump all over one's new overcoat with muddy naws: and at eight to twelve

that they will be on hand in the morning this farmer either waits for them or goes or sends after them. It is twelve miles from town to his farm.

Distemper is the great dreaded distance, can be considered and the dog considers a safe distance, can be considered with an air rifle. The dog soon learns that once out of your reach you have no power to punishment and teneral patronized by dogs who have had it. Never take your pup to town if you can as he needs them."

Surely this is proof that consideration on the part of employers goes a long way in solving the help question.

Growing Onions at Home

in Mid-Winter.

The time to act is immediately, for running line, such as a ring strung on the morning this farmer either waits for them or crude oil and half-and-half mixture of crude oil and the dog considers a safe distance, can be checked with an air rifle. The dog soon learns that once out of your reach you have no power to punish ment and the lesson is lost if it is not lictle one that right conclusions will cure that, and make him far to enter into the discussion or even of enter into the discussion or ev

ed to a kennel is surely a condign form of punishment.

Another and most serious fault in all dogs is the propensity to fight. No more senseless thing to do can be imagined than to encourage the fighting dog to attack other dogs. Head off this tendency in puppyhood, and keep your dogs out of fights—if you wish future peace of mind. Chasing chilckens is another bad habit not to be tolerated about a farm. In the fall the chickens should run free about the premises, and Mr. Dog is to let them severely alone. One two-day session

Labor Savers Are a Good Investment.

Labor Saver

Insurance on Farm Buildings. The treasure that modern salvage an impersonal point of view.

### TRAINING LITTLE CITIZENS

Many parents long for the time when their child shall "show reason," and then, the majority of them proceed to check the development of their little one's reasoning power by resorting to methods of punishment which tend to fill him with fear! Not infrequently they resort to slapping, spank. quently they resort to slapping, spank

she is saving much future trouble for him, for herself and for society,

in Mid-Winter.

It happened that one winter some onions which were beginning to grow were carelessly thrown upon an ash heap in the corner of the cellar. These took root, seeing which, we wastered them, and soon there were an abundance of delicious tender onions several inches in length stretching toward the light of the window above. Thus the table was furnished with fresh, young onions the rest of the winter, and proved so acceptable that since that time we have regularly planted onions each winter in ash boxes in the cellar, occasionally wat.

The time to act is immediately, for if it gets a four days' head start the pup is gone. Make a warm flanne! The time to act is immediately, for if it gets a four days' head start the pup is gone. Make a warm flanne! And the pup is gone. Make a warm flanne! coat for his chest and back, and keep the of the seems to work. He will always wind himself up around any always wind himself up around any wind himself up around any always wind himself up around wind particular view point of a fatthement, and if the family of the family. If he quarrels with his bear arounder, the fam

rest is hope and careful nursing, for lowed by the utmost care during convalescence lest he catch cold, for most dogs die of gangrene of the lungs after the distemper has gone.

The most well-raised farm dogs are not allowed to appeal to the father as I usually have my pups shot with a dose of the serum in April, and keep them close at home until June, when the danger is much less.

The training of your dog hinges on just two accomplishments—to stop and lie down at command, and to walk quietly by your side when ordered to. when they are angry but wait until they can see the child's misdeed from

To associate anger with physical blows is to plant the seeds of war in tiny children. Before we can replace war with arbitration among nations we must do so in the home

### Machinery Speeds Up Firewood Cutting.

Machinery is valuable in cutting firewood and especially valuable now, when in many localities there is need to save all the coal possible. Ma-chinery speeds up wood-cutting, and means more wood and therefore more coal saved coal saved.

A buzz-saw or a drag-saw will cut several times as much wood in a day as can be cut by hand and will do it auch more easily. Wood-sawing mamuch more easily, wood-sawing machines are comparatively inexpensive, and when well cared for will last a long time. On farms which already have gasoline engines or other sources of covers little avize outlaw is necess. of power, little extra outlay is neces-sary. Most of the outfits may be perated by a small number of men. Repairs and upkeep usually are mod-

The coat of cutting a cord of wood with a beca-saw is approximately twenty calls. All small trees and cord-wood can be cut readily with a buzz-saw and a circular saw, but logs above ten or twelve inches in diameter can best be cut with a drag-saw, although the latter will not cut so. although the latter will not cut so rapidly. A sawing cutfit may be apidly. A sawing cutfit may be wined co-operatively, or may be used

Water, says a philosopher, is one of Nature's most lavish and cheapest gifts to the human family and should be employed without stint, internally, externally and eternally.

