FARM·FIELD AND GARDEN

RATION FOR CALVES.

Calves do well on separator skim-milk, with the addition of oatmeal, cornmeal and a little oil meal. They should be fed warm, full milk for two weeks, then gradually change, increasing the proportion of skim milk daily, and at five or six weeks old they should be on skim milk entirely. When you begin to change to skim milk, scald a tablespoonful of oil meal into jelly and stir it in the milk. Increase the oil meal as you increase the skim milk. At six weeks old they should have about one-half pound per day. In the meantime teach them to eat oatmeal and cornmeal. Put some in their mouths; they will soon get to like it. Then put it in troughs where they can lick at it as they please. Clean out the troughs well every day and put in fresh meal. Teach them to eat clover hay the same way. When grass comes give them a lot to themselves. The first week, 10 pounds of full milk per day is enough; the second week, 12 pounds. The third week, 15 pounds of the full and skim milk, etc., until at the end of six weeks they should have 20 to 25 pounds per day, according to size and capacity of the calf. It is important not to overfeed, and to have the feeding vessels clean and sweet. When a calf weighs 150 pounds, it should have a nutritive ratio of about 1 to 4.38, if growing for dairy purposes. Separator skim milk has a nutritive ratio of 1 to 1.9. To widen this up to 1 to 4.38, use 1 pound of cornmeal to about 6½ pounds of skim milk; or 1 pound oatmeal to 2 or 2½ pounds skim milk. If you use all three—oatmeal, cornmeal and oil meal—mix them about as follows: Eleven lbs. oatmeal, 10 pounds cornmeal and 1 pound of oil meal, with 285 pounds skim milk. These are proportions simply. Feed 20 to 25 pounds of the mixture per day.

EFFECTS OF DRAINAGE.

In many sections of the country, says Prof. H. W. Stevenson of the Iowa Agricultural college, serious losses frequently occur owing to the heaving of grass and cereal crops. Proper drainage of the soil is perhaps the most effective remedy for this difficulty. When water freezes it expands about one-eighth in volume. Therefore when a saturated soil freezes, the surface is raised and the roots of the plants are torn from their places of growth. Shallow rooted plants are thus left on top of the ground after the surface has thawed and settled into position.

It is not an uncommon occurrence after a series of freezes and thaws in the latter part of the winter or early spring to find the roots of clover, wheat and some other crops partially or wholly exposed. The percentage of plants thus destroyed in many fields in a single winter is so great that the farmer is compelled to reseed the land.

Soil which has been drained and is free from surplus water is well supplied with interspaces filled with air. Therefore, when the soil moisture freezes abundant room is afforded for expansion and thus the roots are protected in largest measure from the injurious results which it has been shown follow the expansion and contraction of the surface of the soil.

Comparatively few owners of rolling farms appreciate how great are the actual losses in many years on rolling land which is not adequately drained. Many owners believe that land of this class would not be benefited by under drainage owing to the fact that they are rolling and therefore adequately drained by the means which nature provided. The number of those who hold this view regarding the draining of rolling land is so large that the subject is one of far-reaching economic importance that is well worth careful attention.

On many hillsides there are soft, spongy places which are frequently too wet for cultivation, and which render the lower land partially or wholly unproductive, by means of water which seeps from those spongy places and finds its way, usually underground, toward the drains. During the past few seasons thousands and thousands of acres of undrained hillside land have been a source of untold loss to their owners. Adequate drainage is the remedy for these heavy losses.

On hillsides, having a clay subsoil, the water which falls upon the surface will sink into the soil and be carried off underground, instead of over the surface, if an underdrain has been located in the subsoil at the depth of three or four feet.

When these hillsides are drained this surplus water will be readily carried off, with the result that the soil will not become so thoroughly saturated, and surface washing will, in a large measure, be prevented.

In a few years this well-drained land will be greatly improved by the accumulation of humus within the surface soil; by the circulation of air among the soil particles and by the action of the soil bacteria, which now for the first time find within its depths a suitable and congenial home. On hillsides not fully drained the surface soil permeable by water is very thin, and frequently underlaid by a stiff and almost impervious clay. The result is that when beating rains fall they carry more or less of this surface soil into the valleys below.

This action annually removes a considerable portion of the most fertile soil, and is one of the most potent factors in keeping these rolling lands less productive than they would be under more rational management.

SHEEP NOTES.

Docking sheep adds to their cleanliness.

Breeding too much for wool tends to weaken the constitution.

The quality of mutton is not altogether in the breed, but to considerable extent in the feed.

To secure the best returns for feeding, make the lots of fat sheep as uniformly good as possible.

The more sheep you can keep and keep right, the less per sheep, will the cost of keeping be.

The principal of imitation is one that should be cultivated, provided, of course, we imitate that which is best.

Regular feeding, good hay and warm shelter, will save grain in feeding sheep in a good condition.

Under average conditions the manure from sheep will pay for the labor of caring for them.

There are three essentials for a successful foot-rot medicine; it must be slightly caustic, in liquid form, and cheap enough to use freely.

In determining what wool costs, the market price of what the sheep consume should be taken into account.

For scours in sheep, take of common mullien one handful of the leaves, steep strongly and give one pint of the tea. Repeat if not cured.

The growth of the unborn lamb is intimately interwoven with the condition of the mother.

Never allow a piece of land to lie idle because it is rough. Stock it with sheep and make it pay interest and taxes.

If you value the wool produced, even condition must be kept up. Sheep starved in winter will have weak spots in the wool.

Good wool is not produced by sheep that are starved and fed alternately. Evenness of wool depends upon eveness of conditions in the sheep.

Overfeeding or sudden changes from poor to very rich food combined with wants of exercise, if not actual causes, will contribute to the development of the loss of wool.

You Can Overcome The Tired Feeling.

Instil New Vigor and Energy Into the System and Add New Flesh and Tissue by Using

Dr. Chase's Nerve Food.

Why not join with nature and rejoice at the coming of spring? There is means at hand whereby you can overcome the feelings of languor and fatigue and make spring the time for renewing health and vigor, instead of giving way to weakness and despondency.

Everybody needs a spring restorative to enrich the blood and build up the system after the debilitating effects of artificial winter life.

Experience has proven that there is no preparation extant so well suited to these needs as Dr. Chase's Nerve Food.

It is only reasonable that this great food cure, which has been endorsed by tens of thousands of people on this continent, should be superior to the prescription of an ordinary doctor, hastily written and hastily filled at the drug store.

Headache, sleeplessness, irritability, stomach troubles, loss of energy, ambition and the ability to apply one's self to the task in hand are among the indications of an exhausted condition of the system.

A month's treatment with Dr. Chase's Nerve Food will do wonders for you.

Besides the benefit you feel, you can prove that new flesh and tissue is being added by noting your increase in weight.

Mrs. I. Edwards, 14 Winnett street, Woodstock, Ont., and whose husband is employed with the Canada Furniture Co., states:— "My daughter was very much run down in health, felt tired and languid, and was very nervous. She began the use of Dr. Chase's Nerve Food, and now I can say that she is very much better. She has gained in weight, her color has improved, and she seems real strong and well. We have also used Dr. Chase's Ointment in our family and I cannot speak too highly of its curative properties."

Dr. Chase's Nerve Food, 50 cents a box, six boxes for $2.50, at all dealers, or Edmanson, Bates & Co., Toronto. To protect you against imitations, the portrait and signature of Dr. A. W. Chase, the famous receipt book author, are on every box.

About the ....House

FOR THE FARMER'S WIFE.

Plan your work systematically. Don't arrange to do all of your hard jobs in one day, but on the days when you wash, iron and churn plan that the rest of the housework may be as light as possible. If you value the health of your family, serve as little fried food as possible, and don't waste your time and strength making rich pies, cakes and doughnuts. Cook a different vegetable each day to serve with the potatoes and meat. Have whole wheat biscuits or rolls at least once a day, and cereals well cooked and served with milk or cream and sugar may well take the place of more complicated food. Use plenty of fruits in their season and dried or canned fruits out of season. Make out a bill of fare for each day in the week You may have to make variations sometimes, but it will prove a help.

Have regular hours for work, rest and recreation. Don't say you have no time to rest. Unless you are stronger than the average woman you must find time to rest or you will suffer the consequences sooner or later. In the economy of life, health is of a thousand times more value than wealth. Take a bath every morning upon rising. If you have no bathroom and it is not always convenient to take a sponge bath, use a good flesh brush. Remove your garments and brush back and forth until the entire surface of the body glows red. Try this and see how much better you will feel. Twice a week at least take a warm bath with plenty of fine soap. Always have your sleeping room window up two or three inches at least. If you fear a draft, have a piece of oilcloth or heavy cloth the width of your window frame and reaching from the bottom half-way up the sash. Sew a small brass ring in each corner and have corresponding nails in the side of the window frame to slip the rings over.

Clothe yourself comfortably and neatly when about your work. Try a union suit, light weight in summer and heavy in winter, stockings drawn up over the knee and fastened with a safety pin, broad low heeled shoes, the corset discarded if possible, and the next garment a comfortable waist of white cotton made in the simplest fashion. It should come just to the waist line, where a row of eyes permits the attachment of the skirt, which should be of washable cotton goods and have a corresponding row of hooks on the under side of the band. A neat wrapper, such as can be purchased ready-made quite cheaply, excellent values being in dark pretty percale, should be the next garment and with an apron of bright percale, made to hang in straight folds from bands at the shoulders, and a pretty tie of wash silk at the throat one is neatly and comfortably dressed without a constricting band anywhere.

Now remember that housework is the best possible exercise if one goes about it as one should. Maintain a correct standing position always, even when at the sink washing dishes. You do this when you have your shoulders and hips back, chest up and chin in. Remember that while this adds more than elegant clothes to your personal appearance, it also adds to your health, for it is a well-established fact that improper standing and sitting crowds the internal organs, thereby causing disease.

If your sink and cooking table are too low, try placing a dry goods box under the cake board and dishpan when in use, to bring them high enough so that you can stand correctly. When you sit do not slouch down in your chair, but sit upright. If too tired to do this, lie down flat on your back without a pillow and rest, relaxing every muscle and thinking of nothing at all—just rest.

If possible, take a rest of this kind every forenoon if not for longer than five minutes. Have a longer nap in the afternoon. It will keep you bright and fresh.

When making dresses, aprons, etc., for the little ones, use a good quality of percale, it costs almost twice as much as print, but lasts twice as long and washes better than gingham. Lastly remember that the happiness and comfort of your family depend in a large measure upon yourself and the better care you take of yourself the better you can do your duty by your husband and children.

USEFUL HINTS.

A pretty way to trim a shirt waist with embroidered dots scattered over it is to take an occasional dot as the center for a daisy, and work the petals out from it. The daisies may be so embroidered as to form a band down the front and for cuffs, or employed at intervals all over the waist.

When making the loops so much used in place of steel eyes, draw the silk over a match. This makes the loop just right size and holds it firm while the buttonhole stitches are being worked.

It is not everyone who can have a closet lined with tar paper as a discourager to moths. But almost anyone can get a large packing box, have a lid with hinges and hasp put on it, and then line it with tar paper.

China silk waists, says some one who has experimented, should be starched in a thin starch and then ironed while damp. In this way they look as they did when new.

We heard the other day of a woman who cut up a tablecloth to make herself a shirt waist. Her feat is rivalled by the woman who was challenged to make herself a shirt waist out of a pair of her husband's trousers. This she actually did, using velvet for collar and cuffs, yoke and straps to hide the necessary piecing. Those not in the secret complimented her and inquired where she found her "beautiful suiting."

There is no better protection for the hands when sweeping than mittens made of extra heavy canton flannel, fleeced side in. The material is impervious to dust; the mittens are easily slipped on and off; the long wrists protect the dress sleeves and they are cheap and easily washed.

Half a dress shield fastened to the under side of the baby's bib prevents the moisture from wetting his dress and underclothing.

A new style of apron and one that is recommended as very convenient is made as follows: Get a yard and an eighth of percale or any wide goods. Tear off eleven inches across the goods for the ruffle. Then from the rest of the length take from each side a string three inches wide. Take off a strip nine and a half inches wide to form the pockets, and a narrow strip for the binding. The piece that is left is the body of the apron. Hem the ruffle; gather and sew to the apron with the seam on the right side. Hem the strip for the pockets across the top, stitch this at the lower edge to cover the seam of the ruffle and hem in with the sides of the apron. Stitch through the strip and the apron twice, forming three pockets.

DOMESTIC RECIPES.

Cinnamon Bread.—Take a cupful of bread-sponge; add one-half cup of brown sugar, one-third cup melted lard; level tablespoonful ground cinnamon, a pinch of soda, knead once and put in a loaf; let rise, grease over with butter, bake slow.

Oatmeal Cookies.—One and one-third cups sugar; one cup shortening (half lard, half butter); two eggs; one teaspoon soda in one-half cup sweet milk; three cups oatmeal; one teaspoon cinnamon; one cup chopped raisins, and flour enough to roll. I make them a drop cookie. Splendid.

Graham Pudding.—One egg; one cup molasses; one teaspoon soda in one-half nutmeg; two cups Graham flour; one cup chopped raisins floured and a pinch of salt. Steam one and one-half or two hours. To be eaten with pudding sauce. Splendid.

Pocketbooks.—Warm 1 qt. new milk, add 1 cup yeast, 2 well-beaten eggs, 4 tablespoons melted butter, 3 teaspoons sugar, and flour sufficient for a moderately stiff batter; let rise over night. In the morning stir in all the flour you need, as for bread, and let rise again. Then roll in a sheet half an inch thick, cut in squares, butter one side and fold over like a pocketbook. They will rise in a very short time, then bake, and they will be pronounced delicious.

Garnishing for Boiled Fish.—Mix with 2 cups dried bread crumbs a little salt and essence of anchovy to taste, also a few drops of cochineal sufficient to color crumbs. Rub all well together between hands until crumbs are evenly dyed. Place on a dish and dry in oven until crisp, then bottle. These sprinkled over any boiled fish, such as cod, look very pretty. Add green parsley also around the fish.

ROSY, HEARTY CHILDREN.

If you want to keep your little ones rosy, hearty and full of life give them Baby's Own Tablets the moment they show signs of being out of order in any way. This medicine cures all forms of stomach and bowel troubles, breaks up colds, prevents croup, destroys worms, allays teething irritation, and gives the little ones sound, natural sleep. No child objects to taking the Tablets and the mother has a guarantee that they contain no opiate or harmful drug. No other medicine for little ones gives this guarantee. Mrs. Geo. Campbell, Killarney, Man., who has had much experience says:—"I find Baby's Own Tablets a fine medicine for children. They are prompt in relieving little ills and gentle in their action." All medicine dealers sell these Tablets or you can get them by mail at 25 cents a box by writing The Dr. Williams Medicine Co., Brockville, Ont.

WANTED A DEMONSTRATION.

"John," said Mrs. Makepeace, coming out on the back porch, where her husband sat tilted back in his chair, his feet on the railing, "didn't I hear you tell the minister when he was here that you were deeply interested in temperance movements?"

"Yes," Mr. Makepeace replied, rather stiffly. "I said so, and you know that I am."

"Well," said Mrs. Makepeace, "suppose you go and make a few of them on the pump-handle. I want a pail of water."

Piles To prove to you that Dr. Chase's Ointment is a certain and absolute cure for each and every form of itching, bleeding and protruding piles, the manufacturers have guaranteed it. See testimonials in the daily press and ask your neighbors what they think of it. You can use it and get your money back if not cured. 60c a box, at all dealers or Edmanson, Bates & Co., Toronto.

Dr. Chase's Ointment

DESPONDENT WOMEN.

Find New Health in the Use of Dr. Williams' Pink Pills.

A few years ago Mrs. James R. Stuart, of Thorold, Ont., who is well known to most of the residents of that town, found her health severely shattered as the result of an attack of anaemia. As told practically in her own words, Mrs. Stuart says: "My blood was turned almost to water; I suffered from nerve racking headaches, and the least exertion would cause my heart to palpitate so violently as to render me almost breathless. I wasted away in flesh and often was so weak that I could not walk about. I was under the care of a good doctor, but as I was not getting better, I grew melancholy and despondent, and felt I was becoming a hopeless invalid. At this stage I was advised to use Dr. Williams' Pink Pills and I began taking them, thinking it would be a miracle if they ever helped me. To my great gratification when I had been using the pills less than a month I found my health improving. I used about a dozen boxes in all and found myself enjoying once more the blessing of good health. I had been reduced to almost a skelton in appearance, and while taking the pills gained over twenty pounds in weight. I gratefully recommend the pills to other ailing women."

Dr. Williams' Pink Pills are the greatest blood builder and nerve tonic known to medical science. Through their use pale cheeks are made rosy, dull eyes made bright, and thin wasted figures made plump. Every dose makes new, rich red blood that drives out disease and strengthens every organ in the body. You can get these pills from any dealer in medicine, or by mail post-paid, at 50 cents a box or six boxes for $2.50 by writing the Dr. Williams' Medicine Co., Brockville, Ont.

A SHARK OE BOARD.

Terrible Hand-to-Fin Struggle With a Monster.

Among the incidents of shark-fighting, narrated by J. F. Keane, is the following, which occurred in a small bark on the home voyage from India. A shark was sighted astern, and the second mate immediately lowered a hook for the big fish. In less than a minute he had secured the shark, and with the aid of the man at the wheel, had landed it, "a gyrating, floundering, somersaulting, slapping and banging creature on the monkey poop."

Gratings, coils of rope, man at the wheel, second mate, and everything not built into the ship were slashed round in a mad jumble. The captain came on deck filled with wrath.

"I'll soon run him for'ard!" cried the mate, jumping down from his perch on the poop. His first haul on the rope produced an ominous snapping of the shark's jaws. The next pull brought a writhe of the body that so jammed the shark into the narrow passage that the second mate's only prospect of moving the fish was to take hold of it bodily and attempt to turn it round.

Then ensued a hand-to-fin combat. The man's first attempt to carry his antagonist bodily across the ropes turned out abortive. In less than ten seconds the shark had dashed him into a mass of red paint just laid on, rubbed him across the vermilion, knocked him among the blues, and then wiped him all over about ten square yards of the white side of the house and bulwarks, also newly painted.

A scientific attempt to collar the shark by the tail was met with a sounding smack across the second mate's face. Then followed a heels-over-head splashing, dashing struggle which was sustained on both sides with fury. At one time both combatants appeared to be hooked by the jaws to the same hook.

How the man kept his leg or arm out of the shark's mouth no one can explain. Foot by foot, straining, spring up and down, and tying knots in themselves, they came toward the end of the passage; and when at last they reached the open deck the one had become almost indistinguishable from the other, so similarly and completely were they besmirched and besmeared with combinations and shades of the various colors among which they had wallowed and fought.

ONE FOR HIM.

The other day an old woman bounced into an office with a notification that had been sent to her to the effect that a quarter's rates on some property belonging to her were due.

She asserted she had paid them. A clerk got out the books to prove that she had not, and suggested that she had made a mistake. She still declared, however, that she had paid.

"Don't you ever make mistakes?" she inquired.

The clerk assured her that he did not, and jokingly added: "The only mistake I ever made was when I got married."

She looked at him for a moment, and then said: "No; your wife made that mistake."

"Why is it," asked the philosopher, "that misfortunes never come singly?" "Can't say," replied the other man, "unless it is that on account of the reception they get they are afraid to travel alone."