

THE MAGAZINE GUARDIAN

Teachers, Parents, Pupils, Farmers, Dairymen, Horsemen

THE SCHOOL AND THE HOME

HARD SOAP

This is for hard soap: Fifteen quarts of rainwater, nine pounds of grease or cracklings, two cans of lye, one-fourth pound borax, and one half pound resin. It takes only about an hour or less to make it, after it starts to boil.

BOILED SOAP FOR LAUNDRY

Twenty-two quarts of water, ten pounds of grease, two cans lye. Put all in an iron kettle and boil one and one-half hours, then add one pound resin, one half pound borax and one half cupful turpentine. Then boil slowly for another hour. Let stand in kettle over night and cut in large pieces, for it will shrink one-half until thoroughly dried. This makes an excellent laundry soap.

COLD SOAP FOR DISWASHING

Dissolve one box lye in one quart cold water. Let cool and pour quickly into four pounds melted grease, stirring briskly and then add one half pound borax, stir until it begins to stiffen, then pour into paste-board boxes. When it sets, break the boxes away and cut into desired cakes. This does not shrink and is also a good laundry soap.

ABOUT BEANS

Beans are more susceptible to cold than peas, and should not be planted until danger of frost is past and the ground begins to warm up. They are, however, among the most desirable vegetables that the home gardener can raise.

Both string and lima beans are subdivided into four groups: mottled green, solid lima, bean, and runner. The solid lima bean should be planted from six to ten seeds in the hill, and after the plants become established, should be thinned to three or four.

Beans of any kind should not be planted any deeper than is necessary to secure good germination. This should never be over two inches, and on heavy soil it should not be as deep.

Girls! Use Lemons! Make a Bleaching, Beautifying Cream

The juice of two fresh lemons strained into a bottle containing three ounces of orchard white makes a whole quart pint of the most remarkable lemon skin beautifier at about the cost one must pay for a small jar of the ordinary cold cream. Care should be taken to strain the lemon juice through a fine cloth so no lemon pulp gets in, then this lotion will keep fresh for months.

Just try it! Get three ounces of orchard white at any pharmacy and two lemons from the grocery and mix up a pint of this sweetly fragrant lemon lotion and massage it daily into the face, neck, arms and hands. It naturally should help to soften, freshen, bleach and bring out the roses and beauty of any skin. It is simply marvelous to smoothen rough, red hands.

TO RELIEVE CATARRHAL DEAFNESS AND HEAD NOISES

If you have Catarrhal Deafness or head noises go to your druggist and get 1 ounce of Peppermint (double strength), and add to it hot water and just a little sugar as directed in each package. Take 1 tablespoonful four times a day.

This will often bring quick relief from the distressing head noises. Clogged nostrils should be open, breathing becomes easy and the mucus stop dropping into the throat. It is easy to prepare, costs little and is pleasant to take. Any one who has Catarrhal Deafness or head noises should give this prescription a trial.

DAIRY

A TRANSFORMATION

"Mr. A. C. in 1915 sold some poor cows, again in 1916 he sold his five poorest; he has fed better, has put in a silo, and has a good sire. From being one of the poorest dairymen in the section, he will now rank among the best."

How did he know which cows to keep, which cows to sell? The answer is very simple. He kept dairy records, weighing the milk of each cow night and morning every tenth day right through the lactation period, so that there was no mistake about it.

He also found that it pays to feed well and grade up. Consider that milk yield a moment: From three thousand up to over six thousand pounds, doubled in three years; what a transformation! That's real encouragement, better returns for labor, more cash, more home comforts, more real use to humanity.

Of course, his experience can be duplicated. Write to the Dairy Commissioner, Ottawa, for milk record forms, they are free, and get started weighing right away, as soon as the first cow freshens.

C. F. W.

INJURIES TO COWS' TEATS AND UDDERS

Prevention of injury to cows' teats and udder is most important, says M. H. Reynolds, veterinarian, University Farm, Injury may be caused by dragging over high door sills, by hurrying the cows from pasture when the udder is full and by allowing them to lie on cold, bare cement floors. The teats especially the hind teats of low-hanging udders, are sometimes injured between the cows' hocks and the floor when the cow rises.

If injury is slight, there may be only a bit of red blood on the end of the teat and the cow may be a little harder to milk than usual. Such cases usually heal promptly, but if the bruised end becomes infected the teat canal and the udder may become inflamed. Sometimes the end of the milk duct is permanently damaged. A severe bruise may result from a neighboring stall, while the cow is lying down, and if she jumps up suddenly actual tearing may result.

The treatment varies greatly according to case. Conservative treatment will often save teats that are only slightly injured. Long continued bathing with hot water and gentle massage, if given early, will often open a closed canal. Much less damage may result from leaving milk in an injured quarter for twelve or even twenty-four hours than from an attempt to force open the end of an injured teat with a milk tube or probe. When teats are badly damaged, a competent veterinarian should be called.

Repeated chilling of cow's udders, especially by washing and then exposing them to the cold air often causes trouble, says Dr. Reynolds. The canal becomes partially blocked making milking difficult. Small masses of flaking material appear in the milk. In some cases the end of the canal is partly or wholly closed by a scablike formation. Considerable irritation of the skin, particularly around the base of the teats, will usually be noticed. The remedy is, of course, a different method of cleaning the udder, in cold weather.

In all cases of udder trouble, where the vessel is inflamed the best remedy is simply warm water applications supplemented with vigorous rubbing with camphorated oil. This liniment may be procured at any drug store. Extract of belladonna also is an excellent embrocation to apply for inflammation. But the udder in water as hot as the hand can bear. It will reduce the swelling if continuously applied.

FARM

Not a minute should be lost right now in looking up your seed supply for 1918 planting.

An official statement issued in England says that a world food shortage will continue until 1920 at least, and that shortage may be most acute after peace comes.

The present shortage of materials for the construction of farm machinery will make farm implements hard to get this spring. If your old machine can be repaired order the parts now.

Don't sell the cockerels in an un-fleshed condition. Put them into the crates and fatten them for from two to three weeks. This period will be the most profitable in the bird's existence.

Thrush is caused by standing in dirty places and lack of attention to the hoofs of horses. The feet should be well cleaned out occasionally and the stable should be kept as clean as practicable.

Dry pick. If the "stick" has been properly done, the feathers will come off very rapidly. Be sure you properly cool the birds before packing them, otherwise the results will be anything but satisfactory. Last, but not least, be sure the birds are properly starved before they are killed. Forty-eight hours is none too long to withhold food.

How to Disinfect Your Stables

Farmers are constantly advised to disinfect their stables, hen-houses, calf pens, etc., but do not know how

to proceed to it effectively in all cases. The following explicit directions will be found useful:

1. Sweep ceilings, side walls, stall partitions, floors and other surfaces until free from cobwebs and dust.

2. Remove all accumulations of filth by scraping, and, if woodwork has become decayed, porous or absorbent, it should be removed, burned and replaced with new material.

3. If floor is of earth, remove four inches from the surface, and in places where it shows staining with urine a sufficient depth should be removed to expose fresh earth. All earth removed should be replaced with earth from an uncontaminated source, or a new floor of concrete may be laid, which is very durable and easily cleaned.

4. The entire interior of the stable, especially the feeding troughs and drains, as well as milking stools and other implements, should be saturated with a disinfectant. After this has dried, the stalls, walls and ceilings may be covered with whitewash (lime wash), to each gallon of which should be added four ounces of chlorid of lime.

5. All refuse and material from stable and barnyard should be removed to place not accessible to cattle or hogs. The manure should be spread on fields and turned under. In addition, the yards should be disinfected by sprinkling liberally with a solution of copper sulphate, five ounces to a gallon of water.

The best method of applying the disinfectant and the lime wash is by means of a strong spray pump, such as used by orchardists.

This method is efficient in disinfection against most of the contagious and infectious diseases of animals, and should be applied immediately, following any outbreak, and as a matter of precaution, it may be used once or twice yearly.

SOME PRUNING POINTERS

Trees are sensating things and must be treated as such. A single branch cannot be removed without affecting every other branch of the tree. Should it become necessary to remove a large limb, first saw from the lower side, several inches out from where the final cut is to be made. This prevents the limb from splitting down. Now saw from the top, after which the final cut may be made with a danger, cutting close at the very base of the branch to be amputated, with a cut as nearly parallel to and even with the outline or branch as possible, leaving no portion of stub of amputated branch on trunk or larger limb.

Many older branches as well as younger, have at their base a swelling bulge sometimes called a shoulder. This must be cut into and removed to satisfy the requirements of close cutting, in spite of the fact that the wound is thereby somewhat enlarged. By so doing a healthy callus will form. Wounds of an inch in diameter and larger should be painted with white lead and oil. If preferred, it may be colored to conform with the color of the bark.

Winter and spring pruning will cause growth of wood while early summer pruning tends to production of fruit. Our aim should be to make young trees grow, and old trees produce fruit, and perfect fruit. If the top is heavy, cutting back and shaping will tend to fruit making.

When pruning, the variety must be taken into consideration as different varieties vary so much in growth. In pruning, the end of branches, leave the last bud on the side on which you wish the limb to grow, cutting within one-quarter of an inch of the bud. Prune for an open head.

We can only learn pruning by experience. The principles can be explained, but to acquire skill and accomplish results, we must do the work ourselves and watch for effects year after year. What is needed to produce fruit is fruit spurs. To get them and have them well distributed over the tree, clip, in June, the end of the small branches coming from main branches.

The sunlight has a great effect on the high color of apples. The system of pruning to make an open-headed tree, allowing the sunlight to enter all parts of the tree, is desirable. The weather also affects the color of the apple. When it is cold and wet, with very little sunshine, we do not, as a rule, have high-colored apples, but when the weather is warm, with plenty of sunshine, it colors the fruit, making it so attractive that it brings first-class prices on the market. The importance of having the tree pruned in the open-headed cannot be too strongly emphasized.

YOU'RE BILIOUS! LET "CASCARETS" LIVE IN LIVER AND BOWELS

Don't stay headachy, constipated, sick, with breath bad and stomach sour

Get a 10-cent box now.

You men and women who can't get feeding right—who have headache, coated tongue, bad taste and foul breath, dizziness, can't sleep, are bilious, nervous and upset, bothered with a sick, gassy, disordered stomach, or have a bad cold.

Are you keeping your bowels clean with Cascarets or merely forcing a passage every few days with salts, cathartic pills or castor oil?

Cascarets work while you sleep; cleanse the stomach, remove the sour undigested, fermenting food and foul gases; take the excess bile from the liver and carry out of the system all the constipated waste matter and poison in the bowels.

A Cascaret to-night will straighten you out by morning—a 10-cent box from any drug store will keep your stomach sweet, liver and bowels regular, and head clear for months. Don't forget the children. They love Cascarets because they taste good—never gripe or sicken.

PIGS

AT WHAT AGE SHOULD YOUNG SOWS BE BRED

No definite age can be named as being the proper time to breed a young sow. The question is much more one of maturity than one of age or size, and while the young animal need not necessarily be full grown, she at least, should have attained to that stage of life when all her powers are strong and well on toward development. In different breeds and in different individuals this will vary greatly.

A young sow being raised for breeding purposes should not be fed heavily enough to produce very rapid growth as it frequently does not make for the best results where animals are carried over from year to year, but in the pig intended for bacon, which has only a few months to live anyhow there is not much danger in so doing at a time of weakening their constitution.

If a sow is given proper food and plenty of exercise to keep her growing fast, without laying on too much flesh, she should be ready to breed at about ten months old; some perhaps younger, while others should be older, largely according to the way she has been managed and the individual characteristics of the sow. She will then be a little over a year old when she farrows which is soon enough, particularly if she shall be expected to raise two litters a year after she begins to breed. If only one litter is expected of her the first year, which is all that she should do, she could then be bred a little earlier if desired.

The effect of breeding a sow too young is to weaken her constitutionally and prevent her from getting a normal growth. To delay a month or so is a little moment as compared with putting a handicap on a sow for all the balance of her life and one should be careful not to err in that direction as mistakes made at that time are not easily atoned for and will be of life-long importance if made in connection with the first litter of pigs.

SHEEP

Linseed Meal for Sheep

In our issue of December 29, in an article entitled "Legume Hay for Sheep," it was recommended that some clover hay be fed to sheep rather than timothy hay, as clover hay contained more protein, and if it were fed no grain or meal will be required. If timothy hay, or some hay that is low in protein, were used, however, it was stated that from one-quarter to one-half pound of linseed meal should be fed in addition, says the Canadian Countryman.

A correspondent writes to us and takes us a task for recommending that linseed meal be fed to sheep. He is under the impression, apparently, that by linseed meal we meant ground flaxseed. This is not so. What was meant was the residue left after the oil had been extracted from the flax seed. This is usually referred to as oil cakes in this country, but in the States and in England it is called seed meal, or linseed cake. The article in question was an account of some experiments which had been carried on in the States, and that was why linseed meal was used instead of the more familiar term, oil cake. As a matter of fact, the term linseed cake is to be preferred to the term oil cake. Cotton seed meal might just as correctly be called oil meal or oil cake, as it is the meal or cake left after the oil has been extracted from one cotton seed, just as "oil cake" is the material left after the oil has been extracted from the flax seed. Some farmers in the Old Country, indeed use the term oil cake to mean either cotton cake, as they call it over there, or linseed cake.

DETERMINING THE AGE OF SHEEP

The age of sheep can be told largely by the appearance of the permanent incisors. The sheep, like human beings, have two sets of teeth: the first set known as "milk" (temporary) teeth, being replaced by permanent teeth. When a sheep has a full set of teeth we find eight of them on its lower jaw in front, but none on the upper jaw. The temporary incisors that are characteristic of lambs are quite different from the permanent ones, which begin to appear when the lamb is about one year old. The temporary incisors are uniform in size and shape, are long and narrow and constricted at the neck, and are white in color.

The first pair of central permanent incisors usually make their appearance when the lamb is from twelve to fifteen months old. The next pair, that is, one on each side of the central pair, make their appearance about one year later, so that the sheep has two pairs of permanent incisors when it is a little over two years old. The third pair appears the next year, making the sheep slightly over three years old when there are three pairs of permanent incisors. The last or fourth pair, that is the corner incisors, appear when the sheep is slightly past four years old. As a rule the sheep has a "full mouth" at five years of age. We often find that the clasp of teeth are somewhat irregular, varying with individuals and feed conditions. After four years of age the exact age of a sheep cannot be definitely told by its teeth. However, experienced shepherds can guess quite closely from general appearance. With advancing age, the teeth become wider apart and, when shed, handicap the sheep greatly in grazing and feeding. After five years of age, a ewe is likely to have a broken mouth and be less thrifty on that account. Two-year-olds with their first lambs are not as reliable as older ewes, hence

AMONG THE HORSES

WINTERING YOUNG HORSES

(Experimental Farms Note.)

With the prevailing cost of building material and labor, many farmers are deterred from going very extensively into live stock raising, under the impression that a heavy outlay for buildings is necessary.

Such is not the case. While work horses and milking cows require warm stabling, sheep and poultry, in order to be profitable, must be kept away from warm quarters, and sows do excellently in small individual cabins, young cattle thrive when running out side with only a shed for shelter. Even dry cows and idle work horses can be wintered under cheap shelter.

The reason these classes of live stock do so well wintered outside is that they get what is hard to obtain when kept inside, namely fresh air and exercise, and are, as a result, in good health and fit for profitable breeding operations.

Wintering Young Horses at Cap Rouge.—During five years, fifteen different young horses were wintered outside, at Cap Rouge Experimental station, with only single board sheds as shelters. Though the temperature went down as low as thirty-one degrees Fahrenheit below zero, not a single one has ever been known to shiver. Moreover, as a rule, they commence to shed their hair earlier in the spring than others kept in the barn. During an outbreak of influenza, all the animals inside were sick, whilst not one of those in the open was affected.

Shelters.—Any shed which is free of draughts, and with an opening to the south, will answer the purpose. If it is placed on a slight elevation, so that water may not run in, there is no need of a floor, ground floors are best. Shingles or paper may be used for the roof, which must be perfectly rain-proof, for metal will get the place too warm during the summer. As only one thickness of lumber forms the sides, it should be grooved and tongued.

Feed Requirements Outside.—The main objection to keeping stock in cold shelters during the winter has been that more feed is required. That the contention is correct cannot be disputed, if the conditions were always perfect in warm stables. But, as a matter of fact, there are very few well ventilated barns in the country and it is a question whether there is not as much loss of feed through bad digestion, due to the foul, air-breathed inside such buildings, as through the extra amount given outside.

SUNDAY SCHOOL LESSON

March 10.

(Mark 6:21-23, 25-43.)

JESUS RESTORING LIFE AND HEALTH

"Himself took our infirmities and bare our diseases"—Matthew 8:17.—Golden Text.

A little girl, the only child of Jairus, a ruler of the Synagogue, lay at the point of death. Jesus had returned in the boat from the eastern side of Lake Galilee, whither He had gone for rest as we learned in last Sunday's lesson, and was met by a large multitude anxious to hear more of His wonderful teaching. Jairus, head of His synagogue, and although He belonged to the party that opposed Jesus, He conquered His prejudices and besought Jesus to heal his daughter.

Jesus treated him courteously. The fact that he was a ruler of the Synagogue, and opposed to Him, had no influence upon the Master. He sympathized with all who needed His help, whatever their station in life or their attitude towards Himself. Despite the greatness of Jairus and the seeming need for haste in going to the ruler's home, Jesus made him wait while He attended to a more pressing need of a poor woman. But a messenger came to meet him saying, "The little girl had died. The sympathy of Jesus goes out to the father whose faith might waver at this news: 'Fear not, only believe.' He says, and hurries on.

There was an inner circle within the circle of the Saviour and His twelve Apostles. It consisted of Jesus, Peter, James and John. These three apostles enjoyed a special intimacy with Jesus and seemed to live in closer relationship with Him than the other apostles. They shared His confidence and were permitted to be near Him in some of the great experiences of His life. They were with Him on the Mount of Transfiguration; on the night of His betrayal they were called to share His bitter sorrow in the garden and in our lesson today they alone were permitted to follow Him to the home of Jairus where He performed for the first time the miracle of raising the dead.

The hired mourners had already arrived at Jairus' home. It is still the custom in Palestine to hire mourners who, after the first violent grief of the relatives and friends, take up their cries, and with loud lamentations continue to bewail the dead until the burial. When Jesus said to the hired mourners, "Why make ye a tumult and weep? the child is not dead, but sleepeth," they thought He doubted the reality of her death, and laughed scornfully. But Jesus spoke these words knowing the miracle He was about to perform, and these words tell us something of His idea of death, that death is a sleep, a closing of the commercial book should be large, composed of ewes from three to five years old. However, in pure-bred flocks a good breeding ewe is usually kept as long as she will breed.

RENNIE'S SEEDS For Better Gardens

EVERY back yard should be used for the cultivation of fruits and vegetables—says the Food Controller's Bulletin. Market Gardens must be worked to capacity. But all this effort is wasted unless the seeds sown are capable of producing sturdy, vigorous plants. Plant Rennie's War Garden Seeds and insure a full crop!

Table listing various seeds and their prices, including Cabbage, Cauliflower, Celery, and others.

LOOK FOR THE STARS. Our 1918 Catalogue should be in your hand by now. It is your patriotic duty to consult it at every opportunity. Our Government insists we must produce more. Start right then and be sure and get good seed—RENNIE'S SEEDS. Look for the special star border bargains in our Catalogue—it will pay you to do so.

THE WILLIAM RENNIE COMPANY LIMITED, KING MARKET ST. TORONTO, WINNIPEG, VANCOUVER

It is the way to God because He is the truth about God, and and is the life from God.

THE DIFFERENCE THAT JESUS MAKES

Suppose you leave the figure of the Saviour out of this fifth chapter of Mark, suggests some one. What a lifeless chronicle it then becomes, a lifeless list of miseries, a chaos of catastrophes! Out of the tomb a man with a devil out of the house, a little maid in a coffin. But as the name of Jesus turns this dark page of human tragedy into a fair and lovely gospel, so is the difference which He has made everywhere in this troubled world, and to the shadowed lives of men.

In the midst of His higher ministry to men, Christ was ever busy healing their diseases and relieving their pains. The most successful mission work has been done in those places where the missionaries first ministered to the deceased conditions of the men whose souls they were seeking to save.

David Livingstone won his way through Africa with his medicine chest and a few well-chosen surgical instruments. Peter Parker opened China to the Gospel by the use of the lancet. Dr. Allen saved the life of a Korean prince after the native doctors had tried in vain to staunch the flow of blood with sealing wax. It was through this act that the Hermit Kingdom was thrown open to mission work. Evangelical missionaries tried in vain to enter Kashmir until Dr. Elmslie with his medical skill paved the way for the entrance of Christianity. Likewise Dr. Carr succeeded in establishing a mission station in Spanish Persia, when other methods tried by him had signally failed.—Elliott J. Osborn, in "Breaking Down Chinese Walls."

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Don't Sell Your Cows



THE increasing shortage of hired men is forcing many farmers to seriously consider selling their herds as they cannot get the time nor labor to milk them. To sell now is similar to "killing the goose that laid the golden egg"—for never in the history of farming have the prices of milk and cream been higher, nor the necessity of their production so vital to the Empire's needs. Your herd is a source of rapid growth in your yearly income—a source of rapid increase in productive value of your land itself. Why cut off that income and increased productivity, when you can save it and get better results from your cows?

EMPIRE MILKING MACHINES

Have solved the problem of saving time and labor in milking—and have freed the hired man for work in the fields. Mr. J. H. Grisdale, B. Agr., Director of Dominion Experimental Farm says: "The real drag of the dairy farm is eliminated by the use of the milking machine. ONE man with a milking machine can do the work of three hand milkers in the same length of time. They take the place of the extra hired men so hard to obtain at this time and are recognized as a good investment. The most exacting tests by Experimental Farms and Stations prove that Empire Machines milk without injury to the cow, with speed, ease, economy and thoroughness. Cows and heifers take them readily being milked by an Empire Milking Machine and benefit by it. An Empire will save money for you in labor and soon pays for itself. Space prohibits giving full information about this labor-saver; Our booklets, however, have the whole story and valuable testimonials from other dairymen just like yourself. Write us for them. Address Dept. W The Empire Cream Separator Co. of Canada, Limited TORONTO MONTREAL 79