Soils and Crops

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THIS EQUIPMENT MAY SAVE YOU EXPENSE.

I know from personal experience that a medicine chest equipped for first aid is necessary on a successful livestock farm. While it is a grave mistake for a farmer to attempt all of his stock doctoring, yet oftentimes he can prevent a lot of trouble if he knows how and what to do until the veterinarian comes. You can handle slight injuries or sicknesses, but call a competent veterinarian for major operations, severe injuries, and in all cases of infectious or contagious diseases.

I want to tell you in this article about the instruments and material you may find useful. What you need most depends upon the kind and number of stock you keep.

Keep all instruments and supplies in a convenient place where they will be safe from frost, direct sunlight, dampness, and dust.

I keep my surgical instruments in a chamois bag or in special cases, and I keep them as sharp as possible. You know, a dull edge causes a lot of pain. To sterilize an instrument, boil it for fifteen minutes or more and after using, clean, disinfect, and dry before putting away.

On large stock farms the medicine chest should hold the following supplies:

Bandages—These should be of sterilized gauze and unbleached muslin, two to three inches wide and three yards long, rolled ready for use. Derby and flannel bandages are used on horses' legs.

Bull Rings—These are made of gun metal, jointed, supplied with screws, and should be filed smooth before they are put in the animal's nose.

Cotton—Sterilized cotton comes in rolls in sealed cartons, and is needed as covering for wounds, compresses, and swabs.

Dehorning Shears, or a saw may be used for this purpose.

Dental Instruments—Rasps or "floats" for removal of sharp points from molar (grinding) teeth will be found useful.

Forceps—Artery forceps are necessary to stop serious bleeding, and obstetrical forceps for the delivery of pigs, etc.

Gloves—Rubber gloves should invariably be worn when removing a retained afterbirth, making a post-mortem examination, or doing work in which infection may occur.

Knives—A special knife for the castration of calves, lambs, and pigs is needed by every stockman. An emasculator will also be necessary if older animals are to be altered. A large scalpel and a bistoury having sharp-pointed and probe-pointed blades for opening abscesses, fistulas, etc., will also prove useful.

Milk-fever Outfit—If dairy cows are kept, an apparatus consisting of a sterilized milking tube, small rubber tube, and a special metal or rubber syringe for inflation of the udder with air is an absolute necessity.

Milking Tubes—These are used to extract milk from sore or obstructed teats and in cases of garget. They should be assorted sizes and must be most carefully sterilized by boiling before use.

Needles—A few curved and straight needles of assorted sizes, together with some braided or twisted silken cord for the stitching or suturing of wounds will be necessary for emergency use. Surgeons' tape will also prove useful.

Oakum, or teased tarry rope, is needed for the packing of abscess cavities, application after dehorning, and on other wounds.

Scissors—Curved scissors are needed for the removal of hair and in treating wounds. Horse clippers are also useful.

Syringe—A two-ounce metal dose syringe will be needed, also a large metal or hard rubber syringe and rectal syringe. A container, rubber hose, and funnel for douching the womb or vagina of cows, mares, etc., is necessary on every farm. A hypodermic syringe is also useful.

Teat Instruments—In addition to milking tubes, keep on hand some teat "plugs," dilators, and a test bistoury or slitter.

Thermometer—A clinical themometer for the taking of temperatures is absolutely necessary. It is best to keep at least two in stock.

Trocar and Canula—A large trocar (dagger) and canula (tube sheath) is used to "tap" a bloated cow, and is also useful when ringing a bull. A smaller instrument of the same sort is used for tapping a horse when affected with "wind colic."

—Dr. A. S. Alexander.

WINTER MANAGEMENT OF BROOD SOWS

The winter quarters for dry brood sows need not necessarily be warm. All they require is a dry, storm and wind protected place to live in. It is preferable to have it opening to the south. Dry brood sows do not appear to suffer from the cold so long as they have quarters well bedded with straw and are at liberty to roam about the barnyard for exercise. At the Ontario Agricultural College the dry brood sows are wintered in an open shed facing south with the front closed in to within four feet from the ground. The shed is sixteen feet deep, ten feet high in front, six feet high at the back and thirty-eight feet long, and comfortably accommodates twenty mature sows. They are given the freedom of a yard and so long as they have plenty of bedding are quite comfortable. The litters come strong and healthy, and the sows are in satisfactory breeding condition.

In the event of no shed being available an A-shaped hut or portable pen can be used to very good advantage. As with the open shed they should be well bedded and located where there is no danger of the floor becoming damp.

A brood sow must be allowed to take exercise; if she does not take it of her own accord, some method of inducing her to do so should be practiced. Exercise promotes good health in the pregnant sow and ensures strong litters where the sow has been properly fed.

Brood sows in winter should get a variety of feed, including some succulent feed which can be readily found in mangels or sugar beets. The mature brood sow will relish a small amount of roughage, such as alfalfa or red clover hay, or clean corn silage. The amount of her grain ration must be determined by her condition and size. Barley and oats, equal parts, makes a very suitable mixture to feed. Corn may be fed in a small proportion during the winter months when the sow is running outside. Owing to its heating nature and lowness in muscle and bone-building constituents, corn should be fed sparingly during the latter part of the gestation period. If dairy by-products, such as skim milk or buttermilk are available, they can be fed economically during the winter months. A brood sow should always have access to some mineral mixture while she is in winter quarters.

During the winters of 1921-22 and 1922-23 experiments were conducted at the Ontario Agricultural College to determine the cost of maintenance of brood sows. For the experiment 9 brood sows divided into three lots, were used each year, and were fed for 71 days in 1921-22 and 66 days in 1922-23. In each case one lot was put on a ration of concentrates, skim milk and roots and the other two lots were fed a smaller ration along with mangels and either alfalfa, hay or corn silage.

The following is a synopsis of the experiment of 1922-23 which, in results, duplicates that of 1921-22 quite closely:

	Average weight of sows	Average daily ration per sow		Average daily cost
Lot No. 1	425 lbs.	Mangels	7.43 lbs.	10.8 cents
		Mixed chop	5.72 lbs.	
		Whey	18.77 lbs.	
Lot No. 2	509 lbs.	Ensilage	2.54 lbs.	8.5 cents
		Mangels	6.30 lbs.	
		Mixed chop	3.80 lbs.	
		Whey	19.93 lbs.	
Lot No. 3	527 lbs	Alfalfa hay	1.72 lbs.	9.3 cents
		Mangels	7.46 lbs.	
		Mixed chop	4.24 lbs.	
		Whey	19.93 lbs.	

Owing to the fact that with the exception of one in Lot 3, the sows were all pregnant, gains in weight were not an accurate indication and the powers of observation had to be relied upon. In the case of the one sow pregnant, the ration given Lot 3 proved to be a little hetter than a maintenance ration, since she showed a slight gain in weight. However, while Lot 2 showed a cost of .8 cents less per day, indications were that Lot 3 were in by far the best breeding condition. Lot 1 were on the fleshy side for best results, although all eight sows farrowed good, strong, vigorous litters.

Late fall plowing, followed by an inter-tilled crop the following year, will get rid of wild onion, or garlic. Corn in checkrows is a good crop to plant. To get rid of the onions in pastures if the plants are not too numerous dig each plant and destroy it. Sheep eat the tops of the onion, and grazing for a few years often kills it out. Coal-tar creosote oil applied to each plant at the rate of about four thimblefuls is effective in killing both the plant and the ungerminated bulbs.

DAIRY.

As I go through herds and see the little attention given to the young stock I feel strongly the need of advice regarding the various methods of feeding the calves.

Many of us go to extra pains to feed the calves more grain than they require for best results. If we are trying to get them ready for the market, well and good; but if we figure on keeping them on the farm for dairy purposes then we had better cut down the amount of grain fed and see that the calves get plenty of roughage.

The eating of a large amount of coarse feed not only enables the farmer to bring the calf to maturity much cheaper, but it also produces a more efficient dairy animal. Grain fed in too liberal amounts hastens the time when the calves reach full growth.

There should be ample roughage. This tends to give capacity to the resulting cow. She, from the beginning, develops a digestive system that will take care of a large amount of roughage which is the cheapest source of material for the manufacture of milk. We feel, therefore, that this is the time of the year when the man who has some likely calves coming along should give them the attention which will bring out the full capabilities.

An Excellent Whitewash.

This whitewash formula is probably one of the best. It is much whiter than most mixtures and is almost as serviceable as paint for wood, brick and stone. A pint of this wash when applied properly will cover about ten square feet of surface. Here is the formula:

"Slake half a bushel of unslaked lime with boiling water, cover during process to keep in steam, strain the liquid through a fine sieve or strainer, and add to it seven pounds of salt, previously dissolved in warm water, three pounds of ground rice boiled to a thin paste and stirred in while hot, half a pound of Spanish whiting, and one pound of clear glue, previously dissolved by soaking in cold water and then hanging over a slow fire in a small pot hung in a larger one filled with water. Add five gallons of hot water to the mixture, stir well, and let it stand for a few days, covered from dirt. It should be applied hot, for which purpose it can be kept in a ketle over an oven or a portable furnace."

If color other than pure white is desired a number of very different shades can be had by making the following mixtures: For cream color add yellow ochre; a pearl or lead shade may be obtained by adding lamp black or four pounds of umber to one pound of Indian Red or one pound of common lamp black; common stone color calls for a proportionate four pounds of raw umber and two pounds of lamp black.

Keeps Money in a Safe Place.

A chequing account in a bank is a necessity to good business farming. It establishes your credit in the community as well as with your banker. It gives security in the way of its returned cheques which are the best of receipts, consequently settles any disputes or complications which may develop through careless dealing in which receipts are neglected.

It keeps your money in a safe place where fire or thieves do not trouble. It assists in the book-keeping accounts which every good farmer must keep. Large deposits are not necessary, but when sales are made put the money in the bank instead of in your pocket.

It also serves as a restraint to useless or unwise expenditure as it gives you opportunity to say to yourself, "Do I need this?"

Your account may be held jointly so the wife may use the cheque book, or she may have a separate account. It is the best method to teach children how to handle money.—G. H. Harper.

Seven years ago I tried the following mixture of painting iron posts: Equal parts of white lead and lampblack ground in oil, a little turpentine drier and raw linseed oil. Have it a little thicker than ordinary paint; apply two coats. After seven years my iron posts look fresh and no rust showing on them.

Is Beauty Only Skin Deep.

The fact of the matter is, that beauty that really is skin deep has a mighty good foundation. Our grandfathers and grandfathers did not know so much about the skin as we do. They did not know that it is as important as the urinary system; that, although working in a different way, it does as much work and is equally necessary.

Of late years girls and women have gone in for giving the skin a lot more attention. The result is that you find women in their forties and fifties, right at the ages where they used to talk of being "old," looking as fresh as their own daughters. They take a sponge or tub bath every day—many of these women. It is not such a terrible ordeal. They have a room of comfortable temperature and the water they use does not have to be cold, nor do they need to use very much of it. But they get action on the skin with a rough towel and make it glow pink all over as the blood rushes into it. They find it a better tonic than any medicine they can take. It puts elasticity into the skin and helps to take out the sagging wrinkles, to say nothing of the lift it gives to the complexion.

These women spend some time every day rubbing lotions and creams into the skin, too. They have a number of different creams and they use them on the exposed parts of the skin in such a way that it is quite out of the question for grime to become ground into hard lines, as was the case with their grandmothers. Some of them may add a little coloring matter, but my private opinion is that they are better off without it.

Does it make for real beauty? I think it does. It really makes them younger. The skin is a worker and it does better work for being well treated. Its improved action lightens the load of the kidneys and liver, and the heart and arteries feel better because of that. My opinion is that these women look better because they are better. The beauty that shows in their faces is the beauty of improved health. Let us have more of the beauty that is skin deep.—Dr. C. H. Terrigo.

The Winter Program.

One of the disadvantages of farming in this latitude is that it is to some degree a seasonal business. On very many farms there is not a great deal of opportunity for productive work during the winter season. On the dairy farm or the farm where stock feeding is made a specialty this emergency has been provided for, but on farms where cash crops are made the special line of production this is not the case, and productive winter work is the exception rather than the rule.

This is a weakness in any system of farming. In these days of keen competition the factory which must be practically closed for four or five months in the year is greatly handicapped so far as profitable operation is concerned. This is no less true of the farm factory than of the commercial enterprise. How to employ the farm factory profitably during the winter season should be a profitable subject for thought at this time.

PLAINLY UNNECESSARY.

"Why do you think it unnecessary to take that memory training course?"

"Why, man, I can remember every promise made in their wonderful advertisement after reading it only once!"

It requires more intelligence to be a good farmer than any other occupation in the world. There must be a new conception of the farmers' place in the economic scheme.—Warren G. Harding.

"LISTEN TO THIS, JOE."

NEWS FROM THE WOMEN'S INSTITUTES

The Women's Institutes of Ontario are steadily and effectively working for the improvement of their schools. Some of the latest items reported are:

That Malden Institute has given prizes for regular attendance to the seven schools represented in the Institute. Delhi Institute has presented their school with a gramophone. Kinsale Institue holds one meeting during the year at the school, the children giving part of the program and the Institute serving refreshments. This Institute has made window curtains for the school, and gives a donation to the school fair prizes each year. Feronia, in Nipissing, has provided their school with an organ and is encouraging the planting of trees in the school grounds. Minening has put sanitary drinking fountains, wash basins and paper towels in the school. Muskoka Falls has presented their school with a piano, chair and flowers. Goderich Institute bought weighing scales for the school and assists in financing the school nurse. Wingham is another Institute contributing to the support of a school nurse. Bluevale was instrumental in securing medical inspection for their school. At Carpenter, in Rainy River District, the Institute has a committee which visits the school regularly to ask the teacher if there is any way in which the Institute can help to improve school conditions. This Institute finances the inspection of school plots in the district.

The Institutes seem to be equally enthusiastic along their lines of community and relief work. The Barwick Institute, in Rainy River, where doctors are few in rural sections, gives a bonus of $100 towards keeping a doctor in the settlement. Delhi has erected bathing houses at the swimming pool for the boys and girls. This Institute is opening a singing class for the community and starting a fund for a portable stage. They held a Decoration Day at the cemetery and arranged a Victoria Day celebration at which they cleared $234 for community work. Simcoe Institute has had a busy year with debates, contests, banquets and garden parties. They have contributed to the Northern Fire Relief and local Memorial Fund, the Horticultural Society, the Hospital for the Blind, and they are now agitating for a local hospital. Palmerston Institute built a new skating rink for the town. Woodalee spent $200 in furnishing a library and buying books. Blenheim Institute arranged Armistice Day services for the community on November 11th, and on Old Boys' and Girls' reunion at another time. Muirkirk Institute has purchased an oil stove and tables for the community hall, and a volley ball for the young people. The Institutes of Haliburton and Minden each have a moving picture machine of their own with which they give regular entertainments for the community. Bluevale Institute has improved the cemetery and repaired the town hall, and is taking a most active part in enriching the social life of the neighborhood. Thames River also provides an interesting social program for the community. Some of the features recorded this year are: a Valentine party, a Christmas dance and social, a "waist measure" party and a play by local talent.

The members of the Pine View Institute have improved their town hall by painting the woodwork themselves and paying for having the walls and ceiling redecorated. Wingham Institute gave $200 to the Agricultural Society and Christmas cheer baskets to several people in the community. Brussels provided for several people in need of fuel and wood last winter. This Institute also contributed to the decoration of the town hall, the improvement of the cemetery, the Children's Shelter, the Library, the Armenian Famine Fund, the Northern Ontario Fire Relief, and the Sick Children's Hospital in London. Goderich is contributing generously to local hospitals. Morpeth Institute has given donations to the rest room in Chatham, to Byron Sanitarium, Northern Fire Relief, the Children's Shelter.

THE CHILDREN'S HOUR

CATS AND HOW TO CARE FOR THEM.

Many years ago in other lands the cat was not only treated kindly and well, but she was actually worshipped. If we compare the lot of the cats of our own country to-day with that of those in former times we cannot help noticing the great contrast between them.

What we can do to improve their condition is a problem of great importance, for of all our domestic animals there is none who is so neglected and badly used as the poor, homeless, unwanted puss. By nature, dignified and independent, she has, through our indifference, become too often a miserable, gaunt shadow of her former self.

Too many cats in the world, you say, and that, of course, is quite true; but are we not partly responsible for this, and what are the facts? You find a family owning a cat, who is fairly well treated. Kittens arrive, and no one troubles about what will happen in the future—for the present they are "dear little things," and the children like them for pets. In a few months they are no longer pets, they are "too many cats about the place." They are turned adrift, and share the fate of thousands—ill-used, starvation, and death. How much the better way to have destroyed most of them painlessly soon after birth! That seems to be the first and most necessary fact to bring home to people who want to help with regard to this problem of too many cats. If you keep one of them in order not to distress the mother, make it your duty to find that kitten a good home.

When you move. This is a time when the cat often suffers greatly from want of consideration, but there is a "best way" which you may adopt in times of removal. Place her comfortably in a covered basket, and when the new house is reached shut her up, that she may have no chance of escaping. You may butter her feet, which will engage her attention, and you should spare a few moments to soothe and talk to her. When it is dusk carry her about the new place, and she will soon get reconciled as long as she has her "own people" about her.

Never pat a cat as you do a dog; she should be stroked with the palm of the hand. Their bodies are tender, so never snatch them up and squeeze and hug them, even if it is meant kindly.

Food. Your cat may like one kind of food, mine another, and it is useless to lay down any hard and fast rules. Cats will generally share with their masters the food they take themselves. Raw meat should be fed occasionally. Feed her at regular hours twice a day. Butter, cream, milk, oil, these are good and necessary for health.

Water to drink should always be within your cat's reach. You never know when she may feel the need of it—and she cannot ask.

Grass is good for them. Some people keep a little growing in a flower-pot on purpose for pussy.

Play. They need exercise, too, and this is not so easy to provide for them as it is for dogs, but if encouraged they will play for hours with a rubber ball, or a cotton reel attached to a string. It is not only kittens who enjoy a game; quite elderly cats are also fond of play.

At Night the best place for your cat is in the house in a basket or box of her own. Encourage her to come in for her supper at a certain itme.

The Strays. The lost and forsaken cats whom we constantly come across are the greatest difficulty. Our own cats we feel we can do our duty by, but what about these others?

All animal lovers hope that in time the matter will be made a public one, and that local authorities will erect shelters and lethal chambers to which stray cats can be taken.

Holiday Time. When leaving home in the summer do not forget to make some provision for pussy. Either take her with you, or find a neighbor or friend who will take care of her for you, and do not abandon her when you leave your country or sea-shore residence. It is cruel and unlawful, and for such an act you will be liable to prosecution.

Mailed Apples Sold Crop.

Early last tutumn we had 500 stickers printed, and posted them on 500 sample apples. The stickers read as follows:

A Sample Apple
EAT IT
If you desire more, write (Address)
The price is $.....per barrel

We also obtained from the printer several large sheets of cardboard, and from these sheets made little cardboard boxes, just the right size for the apples to fit in snugly. We polished each apple carefully, wrapped it neatly in tissue paper and placed it in a box to mail.

Friends of the family residing in Ontario cities were asked to send us names of persons who might be interested in purchasing apples for winter use in barrel or box lots. We secured 165 names in this way. From a Montreal telephone directory we picked names at random, especially business or profession men.

The apples were mailed. From an investment of less than $40, aside from the value of the samples, we received 83 orders and sold practically all the apples produced on the home farm. We are repeating the effort this year, going a bit more into detail on the sticker.—H. W. B.

In the Wake of the Threshers.

It seems such a little while ago
I tramped a furrow here
And scattered on a waiting field
A sower's gift of grain;
But now a golden mound of straw
Looms starkly by my barn—
Brown stubble which my harvest left
Is soaking in the rain.

How swift that glass, tight-clutched by Time,
Lets down its cup of sand!
How soon the sprout of strong-germed wheat
Is ripe and garnered in!
It was so brief a time ago
My plowshare lost its rust
But lo, the fruitage of my toil
Is smiling in my bin!

—Jay G. Sigmund.

To hull walnuts, just run them through the corn-sheller. This will save staining one's hands and clothes.