

EFFICIENT FARMING

PICA.

During the winter period when the live stock is of necessity being maintained on the various feeds that were stored for winter maintenance, it is frequently noticed that some animals, either cattle, horses or pigs, are chewing at or eating substances that are quite unnatural from the animal food standpoint. The fence posts, rails, mangers, bits of leather, plaster, soil, and such like, for which healthy stock show no inclination, are attractive to those with depraved appetite, or Pica disease. Animals affected to a serious extent are restless, unthrifty, lose condition and become emaciated. Should spring and green grass come quickly enough, a recovery is made without any other treatment than access to good pasture.

The presence of the symptoms of depraved appetite indicates that there is something wrong with the feeding of the animals, that there is something lacking in the ration, and that that something can generally be expressed as being lime salts. Well nourished animals getting a reasonable amount of good, clean, well kept food rarely show any tendency to eat unnatural objects. In those farm yards where a salt trough is at the service of the animals, and where clovers and other legumes are fed liberally, depraved appetite is unknown.

Should animals become affected with a desire to eat unnatural foods, steps should be taken at once to remedy the trouble and get the animals back to a condition of health. Blocks of charcoal and rock salt should be placed where the animals can get them at will. When animals are confined to stalls or pens, powdered charcoal may be given—one-half handful three times per day along with the feed. Advanced cases will generally respond to the following:

Bone flour, 1 pound; powdered gentian, 4 ounces; common salt, 8 ounces; carbonate of iron, 4 ounces; mixed well and given at the rate of one tablespoonful three times each day on feed.

Good feed, such as roots, silage and clovers, well preserved and free from fungus and bacterial growths, should be supplied, and don't forget such common things as rock salt, charcoal and bone meal do much to supply the usual vitamin deficiency in animal feeds as compared to the green pasture of summer on which all animals thrive.

BLOATING OR HOVEN IN CATTLE.

Nearly every cattle stable is the scene of a few experiences with bloat-

ing cattle during the winter and spring seasons. Bloating is characterized by swelling at the left flank. In severe cases the distention may be such as to cause great discomfort, and when tapped with the fingers will emit a sound. The animal has a distressed expression and moves uncomfortably. Breathing becomes more difficult as the gas distention of the paunch progresses. If the gas is not liberated, or its formation checked in time, rupture of the stomach or death by suffocation may happen.

The causes of bloat, or hoven, can be attributed to any kind of food that will produce indigestion if given in unreasonable quantity. Hasty feeding by greedy animals frequently results in discomfort for the animals and trouble for the stableman. Frozen roots, mouldy feeds, overfeeding with middlings, barley or corn meal, cold, wet feeds, potatoes, cabbage, large quantities of green or frosted green feeds are common causes of this trouble. The digestion process being interfered with, fermentation quickly sets up in the paunch with serious gas distention.

In urgent cases speedy relief is very essential to the continued life of the animal. The quickest relief may be given by puncturing the rumen, using a trocar if such is at hand, or a clean, sharp knife blade will do. Select a point equally distant from hip bone to last rib, which is usually the point of greatest visible distention. In making the incision direct the knife or trocar point downward, inward and a little forward. The sheath of the trocar should remain in the opening to provide exit for the gas. When no trocar is at hand and a knife is used to puncture the paunch the opening may be kept open by a large wing feather from turkey or goose. The feather is prepared by making an opening at each end of the quill and then dipping in boiling water, apply carbolic ointment and insert. While the tube or cannula is in position it should be held by an attendant until sufficient gas has passed out to permit the flank to return to normal condition. It can then be removed.

When the bloating is not severe, as indicated by only moderate swelling at the flank, the trouble can best be relieved by the administration of internal medicines. Aromatic spirits of ammonia given every half hour, two ounces to one quart of water for an animal two years or over. After bloating is over give one pound of glauber salts in not less than 1½ quarts of water. Repeat the physic if necessary.

THE FARMERS' LIBRARY

BY R. E. BAUER.

Why do not farmers in general make more use of the free literature they can get from their provincial stations and the Canadian Dept. of Agriculture? Why don't more appreciate the value of a good farm library? It may be because they have never really thought of a library as an investment representing a cash return. A few, of course, are not interested in getting new ideas and more up-to-date farming methods, seemingly being satisfied to follow the well-beaten path.

Just how much a farmer actually wastes during the long winter evenings and at odd times is open to conjecture, but we do know that there is much time on the average farm that could be used to do some constructive reading along the special line of farming in which a man is most interested. For instance, if you are principally a corn farmer, do you understand the value of testing seed corn? What is a good seed bed and how is it prepared? How deep should you cultivate and how close to the corn plant at different seasons of growth? Why treat seed oats for prevention of smut?

If you are interested principally in livestock breeding, you are familiar with the popular lines of breeding of your particular breed? Do you know the pedigrees of the famous animals of the breed and the blue-ribbon winners of recent livestock shows? Do you have a definite type of animal in mind that you endeavor to attain in animal form? If such questions as these pertaining to your business can not be answered by you, it seems that with the aid of the right bulletins, papers and books you could profitably spend some of your spare time in overcoming this handicap.

THE GOOD FARMER IS WELL-READ.

A farmer's business is so entirely different from other occupations, especially office work, that he easily gets the habit of neglecting reading for his work, feeling that what spare time he has should be used for leisure or rest. When this happens, he begins to develop one-sidedly; that is, being young and strong he thinks nothing of physical hardships and enters so heartily into his work that he hasn't very much time left for mental training.

He is able to turn out a greater volume of work by this method in the prime of his life, but it is usually done at the expense and deterioration of his mental faculties; and he impairs his ability to do mental work at a time when his physical powers are declining, and he needs a strong and active mind to offset this disadvantage.

The farmer who depends wholly upon his physical ability to enable him to bank enough money to carry him comfortably through old age, a great many times succeeds. But suppose through misfortune he should suddenly lose that ability. What then? Certainly if he has recognized the value of mental power and made an effort to acquire it, he has a much greater chance for success. He will be able to carry the responsibilities of a farm business long after the time he could fill the place of a young man in the harvest field.

If every farmer would get bulletins on subjects of special interest to him, and a few papers and good text books on agriculture, map out a reading course and follow it out systematically and faithfully, I am sure that in the end he would feel that it was time well spent.

"The future of a great nation depends upon a progressive agriculture and the majority of the rural leaders of the future must be men and women with a scientific training in the problems of the farm, and home."—New Zealand Dairy Farmer.

Hot Beds—Their Construction and Management.

A well managed hot bed is an asset to every home garden. It not only ensures a crop of early tender vegetables, but also makes possible the beautifying of the home surroundings with annual flowers.

Hot beds may be classed as underground or surface types. For general use in the Maritime Provinces, the surface type is preferable. The hot bed site is an important feature in hot bed construction. It should be well-drained, on a southerly slope, protected by buildings, evergreen hedges or a board fence from cold north or west winds, and where all the possible sunshine will be obtained.

The frame—Collapsible frames are recommended. They are easy to assemble and store, and with proper care will last indefinitely. Planned 2-inch spruce plank is generally used in their manufacture. The three-sash size is advocated. The sides for this size should be cut 9 feet, 6 inches long. This allows for a cleat 2 inches wide being fastened on the sides at each end to prevent the planks from splitting, and also for the end pieces to rest against for support. The back or north side should be 16 inches wide, while 10 inches is a good width for the front or south side. This gives a slope to the south which permits the water to run off and favors the passage of the sun's rays through the glass. The ends are 6 feet in length and taper from 16 to 10 inches in width to fit the side boards. Strips of 1-inch board, 6 feet long and 3 inches wide, are fastened 2 inches above the outside edge of these ends to prevent drafts of air going under the sashes. The ends are set in place against the cleats on the sides and fastened with 3½-inch screws. As supports for the sashes and to hold the sides in place, cross strips of board 3 inches wide are sunk into the sides 3 feet from each end and another strip of ¾-inch board 2 inches wide fastened on edge in the centre of the 3-inch supports. These strips prevent the loss of heat and drafts between the sashes. This frame is completed with three 3 feet by 6 feet hot bed sashes, which should be thoroughly painted before use.

The heating material—Horse manure makes the best heating material. It should be quite fresh, not fire fanged or rotten or already heated. A few days before starting the hot bed it should be hauled near to the site chosen and forked loosely into a pile. Within a few days it should be hot enough for use. It should be then built evenly into a rectangular pile 11 feet by 15 feet, ranging when thoroughly tramped from 24 inches to 12 inches in height according to whether it is started late in March or late in April. The frame is placed on top of this, levelled up and banked on the outside with manure and a thin layer tramped on the inside after the frame is in place. The sashes should be put on and the bed left until the temperature becomes constant at between 80 degrees and 90 degrees Fahrenheit, before planting.

The soil—This should be prepared the previous autumn and left in a pile over winter. It should be rich and of a character that will not bake. Good thick pasture sods, composted the previous summer with one-third their bulk of rotten manure, thoroughly mixed and riddled in the spring, make an excellent soil for hot bed purposes. There are two methods of managing the soil in the hot bed. It may be put directly in the frame to a depth of 6 inches and the seed sown therein, or it may be put in flats or boxes 12 inches by 18 inches by 4 inches, the seed sown in these and the flats placed in the hot bed on the surface of the manure. If flats are used, the bottoms should permit of drainage. Small holes bored in the bottoms of the flats answer this purpose. In filling the flats with soil the coarser should be placed in the bottom, care being taken to press it gently into the corner and along the sides. The finer earth is placed on top and the seed sown therein. To the gardener who starts a number of vegetables and flowers in his hot bed, the latter method is advocated, owing to the plants being easier handled at pricking off time. The flats also permit of an easy rearrangement of the plants in the hot bed at any time.

Management—After the seeds are sown, the soil should be watered. When the young plants come up, the hot bed should be aired sufficiently on bright days to prevent the plants from getting spindly or weakly. This is accomplished by raising the back of the sash or by sliding it down, care being taken to prevent the plants being chilled. Later, when the days grow warmer, the sashes may be removed throughout the day. Water must be applied when necessary, preferably during the mornings of bright days. Too much water is injurious, causing "damping off" fungus to destroy the plants. After the young plants show their second leaves and have a good root development they should be transplanted into other flats

The Days Between

BY R. D. BAILEY.

"Well begun is half done." Show me the farmer who does not dislike to be bothered with repairs and "puttering," after field work with the team has begun; and, too, show me one for whom it is not too expensive to do odd jobs, though they are necessary, while the team stands idle.

Yet, there is a multitude of things that need to be done if the season's work is to progress smoothly. Many farmers, through lack of planning, foresight and timeliness, simply have to take valuable time to do it, in the midst of the season's work, that could have been done during the time less valuable.

During cold, raw days the farm shop is especially valuable. Here, comfortable with a fire made of cobs, bits of broken boards, trimmings from trees, and other rubbish, the farmer can sharpen his saws, planes, draw-shaves, bits, augers, axes, hatchets, and mowing machine knives, etc., so that they are ready for effective work at an instant's notice.

This is a good time to sharpen the butcher knives, paring knives, and shears for his wife. Repair, black and oil harness. Potato crates should now be mended, and cupboards and shelves for the house, and other household conveniences built in the shop.

With the house warmed with its stoves, this is the best time of the year to make household repairs and interior alterations before the spring housecleaning.

Test seed corn. It has been stated at the Agricultural College that, by testing his seed corn, a farmer can make fifty dollars a day, for the time consumed in testing, and thus put himself into the class with civil engineers, physicians and lawyers, as an earner. Where seed germination tests show a low per cent. of good seeds, better seeds should be purchased, if possible, to secure them; if not, then the amount of seed sown or planted should be increased to insure a better stand.

As the weather becomes warmer, and the farmers can work bare-handed, the hay track, fork and rope can be inspected, and stalls and stable floors repaired. There will usually be planks worn thin in floors; manger fronts or partitions gnawed by horses; feed and salt boxes coming to pieces, or gnawed; partitions partially kicked to pieces. That "a stitch in time saves nine" can be attested by thousands of farmers who failed to take that stitch.

where they remain until set out in the field or beds. Flowers, celery, lettuce, early cabbage, cauliflower and onions should be started by April 1st, while tomatoes should be started about April 10th.

Our Ice Ring.

It is a rare treat to work on a farm in the Fairbairn neighborhood during the hot summer months. When you go to the shade for water, you find a chunk of ice in the bucket. At meal-time iced drinks are served; the food is crisp and fresh; ice cream is to be had twice a week.

I wondered how these farmers did this. I learned from Mr. Stanton, my employer, that ice is not a luxury with them. Instead, with scarcely any expense, they were making money by using it in their farming business.

"Down on the Smith place, said Stanton, 'is an old barn which serves as our community icehouse. From it we farmers get what we need, each farmer weighing out his own ice, whenever he wants it, leaving a memorandum of what he gets. No money changes hands.'

"When winter comes, and other work is slack, Smith goes out among the farmers of the neighborhood. Each one who wants ice agrees to give a few days of his time. When the time comes the men gather at the creek with ice saws and hooks, and the cutting begins. Afterwards they bring teams for hauling the ice and sawdust for the packing.

"There are about eight farmers in the ring. At the end of the season we estimate the number of tons put up. It often happens that one man will require more ice than others; that is remedied by his putting in extra time. We don't figure too closely, because one never knows just the amount he will need. If a man is unable to give his time, he hires a substitute.

"We have followed this practice for four years, and are so well pleased that we are building an extra storage house so that more farmers can join us. We have found that we can get a better price for our cream by keeping it sweet with ice, and our eggs keep better. From these two products alone, we make enough extra money to pay us for our labor. In vegetable season we can gather a day in advance, and keep them fresh for market. There are a great many ways in which ice is useful, aside from our family use."—F. R. C.

Take the hay rack and the wagon box into the shop and repair and paint them, or make new ones.

Put in window lights. Put a fender in the pen where the sow is to farrow, and save pigs and dollars. Make some gates in the shop if you do not buy them.

Take drags to blacksmith shop and have teeth sharpened. Take the cultivator teeth, too, if it is cheaper to have them sharpened than to buy new ones. Have the grub hoe sharpened, and a new point drawn on the crowbar. Make a load for the blacksmith shop, while you are at it, and throw in all chains that need repair. If it needs repairs, hitch the grain drill behind the same wagon.

Restore missing handles to tools. Buzz up the pole wood. Split and pile all wood, so it will dry out in these spring winds. It is a mark of an improvident man to have to cut driplets of wood morning and night, after field work has begun, and the feelings of the wife had better be imagined than expressed.

While fence posts are frozen in they can best be cut off neat and even. This improves the appearance of the field or farm like cutting a man's hair and giving him a shave.

Barbed wire and woven wire can be stretched while the ground is still frozen. Established fences, on which the wire has sagged, can be tightened. After the frost is out of the ground, but fields are too soft to be traveled, post holes can be dug and new fences built.

Build one or more portable hog-cots of the A-type. Build a stock-loading chute. Make some chicken coops. Repair the hen yard. Dig some shade trees in the woods. Clean chimneys and work soot in around rose bushes, the shrubs and perennials of the hardy border, and around the pieplant.

Bring home some brick to top out old chimneys, and to build new ones where a stove pipe has been used. Hundred of houses in this province have been burned, and their owners reduced to distress, through shiftlessly depending on a rusty stove pipe stuck through a roof. Don't go through another winter on a stove-pipe basis. "Do it now."

Sell surplus horses, for the demand is at its best at the approach of spring. Buy early if you have to buy. Engage your hired man.

Make a hotbed. Take an inventory.

Sheep Notes

Blindness from conjunctivitis is, as a rule, temporary when caused by strong winds blowing over snow into a sheep's eyes. That is also true of "snow blindness" which probably is associated with the cold wind as a cause of irritation. We have had many complaints of such blindness this season.

Affected sheep should at once be moved into a darkened pen. Bathe the eyes frequently with a saturated solution of boracic acid, and if there is a heavy discharge from the eyes, put a few drops of 15 per cent. solution of argyrol in the eyes two or three times daily. If there is no heavy discharge put a little bit of 1 per cent. yellow oxide of mercury ointment in the eyes each evening.

Demand for Bacon.

"Canada must produce bacon hogs or lose the export trade which makes profitable pork prices, and Ontario must continue to be the leader in bacon production in Canada. Lard hogs may be produced at less cost in the States to the south than in this country. Cheap corn makes fat hogs at low cost. Ontario is a barley and oats province and has the supplements necessary to make the highest quality of bacon. Great Britain pays a premium for the long, lean bacon hog and Britain is our market. Hog prices during the past few years have ranged anywhere from two to three dollars per hundredweight higher in Ontario than on the Chicago market. The demand for bacon on the British market makes for extra money in the pockets of the Ontario hog producers. Our slogan should be: 'Breed the Bacon Hog'."—Pamphlet "The Bacon Hog," of the Ontario Dept. of Agriculture.

Danish bacon in 1914 was 53 per cent. of the total English bacon imports.

To iron a round centrepiece, so that it will lay flat in the centre, always iron from the centre to the outside.

"The farmer needs all of the training in production that the college can give him, but the most urgent need now is the development of an entirely new realm of his organized knowledge of economic factors which will enable him to cheapen his production and improve his distribution."—U. S. Secretary of Agriculture.