

Keep the Farm Well Stocked.

The Dirigo Rural says: the time is rapidly approaching when we farmers will have to decide what amount of stock we will winter. There is some danger, perhaps, on account of the scarcity of money in circulation, and general hardness of the times, that some may be induced to sell off more of their sheep and cattle than they really should for their permanent benefit. In the first place, in sympathy with everything else, farm stock is low now, and next year (unless there are a great many false prophets in the country) times will be better, and prices higher, and consequently the more stock we can keep through the winter, the better it will be for us.

Another important consideration is the advisability, and I might add, if we wish to keep up the fertility of our farms, the necessity of wintering all the stock we possibly can without being obliged to buy fodder. We ought to use up every forkfull of hay and straw, with as much meal and roots as may be thought advisable. Even wheat straw may be used with provender to advantage. Some use their straw up for bedding, or throw it out of doors in piles to rot. Such practices may do very well on farms that yield fifty, seventy-five or a hundred tons of good English hay. Such, however, are exceptions, far above the average; and the owners of such farms can winter a large stock, independent of straw. With farmers who cut only from ten to twenty tons of hay, the case is very different. Weeds cut for the purpose, or Orts have to suffice for bedding, everything eatable being called in requisition for the sustenance of life. Such a mode of husbandry cannot be termed very "high farming," and is anything but answering to our ideal of what farming should be; still, a great many have to grapple with undesirable realities, and have to take matters as they find them. Many have a large run of good pasture land, but do not cut much hay; who have to make their profits chiefly out of their stock's growth in summer. It is very desirable to keep stock growing as fast in the barn as in the pasture; but, to many who have not the material, it is pretty hard to do so. Every one has not the faith or courage to buy provender, and, perhaps, run in debt for it, although it may pay good interest. For such I think it is better to feed out all their straw, than to use it in any way. Straw eaten, makes better manure than if used for bedding, or thrown away to rot; and if cattle don't do so well on it as on hay, the farmer has a large herd in spring to turn off to grass in his ample pasture; from which source he will have to look chiefly for his stock profits. I say then, keep the farm stocked to its full capacity.

Foul Feeding of Swine.

If there is any one thing in rural practice which needs reforming more than another, it is the manner of raising and feeding swine. From the day they are large enough to eat, they are offered all manner of refuse about the place, such as rank weeds, filthy slops, spoiled vegetables, and meats, dead fowls, &c. They are allowed to rummage the dung yard, and glean the refuse of food in the faeces of cattle and horses, on the ground of economy. But we imagine that the quantity of food saved this way is very insignificant—not to exceed the value of a bushel of shelled corn a year among the whole stock on an ordinary sized farm. The objections to the practice of keeping swine in this way are so serious, however, that the reasons in favor of it have no force at all. The origin of Trichinosis in swine may always be traced to the consumption of vile stuffs in their food or to being housed and yarded amid filth and foul air. Every few months the press announces a case of Trichinosis in an individual or a whole family, with all the horrible details and sufferings which attend the parasitic attack. Only lately some new cases are reported here in the West which are alarming. We are quite sure that every farmer and every one who feeds and fattens a pig, will only need to have their attention called to so important and serious a matter, to secure a complete reform in the practice of feeding an animal which will take whatever is offered to it, and will live in the most filthy holes and yards. Interests as dear as health and life require a thorough reform in keeping and feeding swine. Let their food be as pure as that which other animals consume; let them be kept in clean quarters and have pure air; let diseased or unthrifty animals be separated from those in health, and we may have no fears of Trichinosis among either swine or human beings.

Give the Boys Something to Care for.

Let the boy have a calf or a yoke of steers to call his own, and let them be his, and when the calf becomes a cow, or the steers oxen, if the boy wishes to sell, let him, and use your influence to persuade him to invest the money received in something that will be remunerative; do not, as some farmers do, put that money into your own pocket, and tell the boy that it is all the same as though he had it to spend, as the farm will be his by and by. Very few boys understand such talk, and if they do, would rather have one dollar now than the prospect of having ten dollars in ten or fifteen years' time. If the boy wishes to purchase young stock with the money received for his cow, let him, and if need be, set apart an acre or two for him on which he can raise some of the feed required to keep his cattle through the winter. If thought best, let the boy pay a little in the way of rent for the land; give him a day now and then to properly work it; encourage him to raise what you know to be the most profitable; furnish the manure, give a cheering word, an improving nod (such things go a great way); do not act as though you begrudged him the land and the time; do not give him "that corner over there," that you know will not grow white beans, but let the land be good. You will never lose anything by it; on the contrary, you will be the gainer by so doing, for the boys will see that you wish them to succeed in their undertakings.

Honey, Honeycomb and Wax.

It is a mystery to many why honeycomb is worth from \$2 to \$4 per pound; and yet it is true, when we take into account that it is made from honey, of which it requires twenty-five pounds for a swarm of bees to make a pound and a quarter of nice honeycomb.

The Cincinnati Gazette explains the matter as follows:—The bee fills itself with honey, and when combs are to be made, the larger part of the swarm will farm or cluster themselves into a festoon or bunch in the hive, and by so doing they get up a proper temperature of heat, which causes the honey already in the bees to secrete into wax, and pass through the little flaps, or pockets, on the under side of the abdomen, in the shape of small, white scales, which we can often see quite plentiful on the alighting board. These scales are taken off of each other by the bees themselves, and while it is in a soft, pliant consistency, they make their combs, first forming the very thin sheet which serves as a partition between the two sets of cells.

If we would take the proper calculation of the value of honey, and the amount that a good busy swarm can gather daily, we will find it takes about twenty days for bees to fill their hives with the necessary amount of comb, which if clean will weigh one and one-quarter pounds. We have found, in some instances, when the honey harvest was good, that bees will collect and bring into their hives five to twenty pounds per day. I have often known a good strong stock to gather fifty pounds in the long days of August, when the white and Alsike clover were in full bloom.

Now, dear readers, let us make a fair calculation in this matter, and we will find that if five pounds per day the bees will gather and store one hundred pounds in twenty days. This, at 25 cents per pound, would be 25 dollars. Suppose we had plenty of nice combs in good movable frames, to have exchanged with our bees, as they filled up, in place of forcing them to build new, and using up the precious nectar in making combs, which, to say the least of it, would not be less than fifty pounds of honey. At the price above named it amounts to \$12.50; and now reduces this one-half, and we see very clearly that honeycombs are far more valuable than the wax that might be made from it, which sell at twenty-five to thirty cents per pound. The best yield that can be made from an ordinary class of old comb is a single pound of wax to one and one-fourth pounds of comb, which makes a difference against the wax of 6.25.

I have given you the facts in the case; if you study the matter over, dear reader, and forsake the old-time system of bee-keeping, and try to reform in this, the most pleasant, if understood, of all kinds of business, that an invalid especially, and ladies with small capital, might engage in with profit?

Bots in Horses.

Bots do not injure horses, but are a benefit. It is not unfrequent that I am called upon to relieve some horse said to be troubled with bots, but during my practice, which has been nearly twenty years, I have not found a case where a horse has suffered any inconvenience from this harmless parasite.

The masses have become honest in the belief of their supposed destructive habits, for the want of better knowledge of those supposed habits and purposes.

Veterinary science unfolds to us that nature has made this provision, and the only provision whereby the gad-fly (*Astrus equi*) is germinated by and in the stomach of the horse and those of his species, the mule, zebra, quagga, etc. What nature has made she has made perfect. I find no time in the horse's life when he is so healthy as when he runs to pasture. All horses that run in pasture during autumn have bots; all colts have them, and colthood is the healthiest part of their lives. These questions are often asked me, and their answers may be of practical utility to many farmers and horse owners: Does not the bot bore or gnaw through the stomach of the horse, and thereby cause death? My answer is, they do not; as they have no organ by which they can bore, neither do they have teeth whereby they may gnaw. For the coatings or membranes of the stomach would require teeth of the carnivora to gnaw them.

They have a mouth shaped for suction, and sustain themselves by sucking the mucous of the stomach. The next question in order is, how came the holes in the stomach which we often find when performing autopsy? These holes are produced by the action of the gastric juice upon the coatings of the stomach after death.

The Business of Sheep Breeding.

Although the price of wool is lower all over the world than it has been for many years, there is no evidence anywhere of any depression in the business of sheep-breeding. On the contrary, the demand for breeding sheep, ewes as well as rams, is very brisk, and we have more inquiries as to choice of locations for sheep farms in the West, and the purchase of good stock animals, than at any previous time. The same is noticeable in other countries. In one issue of the Mark Lane Express (London, England) we counted recently the sale of no less than 11,176 choice breeding ewes and rams, of various breeds, but chiefly of the more popular Shropshire sheep, of which one sale of 2,500, one of over 3,000, and another of 1,500, are from some of the first premium flocks in the county of Shropshire. The growing demand for good mutton and lambs is evidently making the growth of wool a secondary interest, as it ought properly to be with sheep-breeders.

CAUTION.—We caution the public against adventurous humbugs who may solicit advertisements or subscriptions on our behalf. We employ no traveling agents. This is our third time of asking.

How to Oil a Harness.

Wash the harness thoroughly with warm soft water and Castile soap, and brush out every particle of dust before putting on the oil. This is the important point. Better not oil at all than to apply it on dirty leather. The harness should be taken apart, and the pieces washed and oiled separately. Rub on the oil while the leather is softened with the water. It can be applied at once if the leather is rubbed with a dry cloth; it should be soft, but not too wet. After applying the oil, hang up to dry for a few hours till the oil is absorbed. Old harness that has been neglected and is dry and hard had better not be oiled; it will do no good; the evil is already done. The fibres of the leather have lost more or less of their tenacity, and oil will not restore it; in fact, by softening the leather it only weakens it, just as a wet sheet of paper will tear more easily than a dry one. Oil does not add to the strength of leather; it merely softens it and keeps it from cracking; it is a preventive of decay, not a restorer. Harnesses are now so high that it is more than ever important to take care of them. Never let them suffer for the want of oil; keep in good repair and they will last as long again.

Veterinary.

Our Veterinary Department is under the charge of competent practitioners, who will answer all questions pertaining to diseases of horses and cattle. If you want any information write to the GRANGER.

Roaring or Whistling.

The definition of the above is an abnormal sound produced in respiration, and is one of the few other diseases which, though not exactly cutting life short, proves extremely distasteful to the horseman, and may justly be denominated the bane of good horseflesh. This unnatural sound may be either a temporary or permanent obstruction to the free passage of air into the lungs. A variety of affections operate in impeding the free current of air through the respiratory tract. For instance, thickening of the nasal membrane as a result of catarrh, fracture of some of the bones entering into the formation of the nasal chamber, tumors, mal-formation of the nasal bones. An animal suffering from an acute fit of laryngitis is generally a roarer; the tumefaction attendant on strangle will produce it; ulceration of the lining membrane of the larynx will produce it; constriction of the superior portion of the trachea brought about by straps to prevent crib biting will produce it.

There is a variety of roaring met with produced by the formation of tumours in the loose connective tissue at the root of the epiglottis, which by falling into the passage aggravate the symptoms almost to suffocation, but the animal quickly recovers. In some parts of England such horses are called "Bellones," and when put to draught work show the deficiency existing in the respiratory apparatus by sometimes falling down. "High-blown" results from thickening of the nasal membrane, whilst whistling generally proceeds from chronic disease of the larynx. The fact of a horse being a roarer does not pre-suppose that he is suffering from a disease which is likely to be permanent, neither does it imply that the obstruction exists in any particular part. All animals, even man himself, is liable to become affected from similar causes, which are of a local and accidental character.

Of late years this disease appears to be on the increase, and we are led to reflect that there must be other causes than those mentioned; there must be some special cause to account for its greater frequency in horses than in other animals. The equine species breathe through their nostrils, receiving no assistance from the mouth, hence their greater susceptibility to become afflicted. In ninety-nine cases out of a hundred it depends upon a loss of motor power in the dilator muscle of the larynx, consequent upon loss of nerve force from the nerve supplying it.

The root of the right and left recurrent nerves is the pneumogastric; the right is given off as the pneumogastric, enters the chest and winds round the root of the cervical and dorsal arteries directly backwards; the left arises lower down, and winds round the posterior aorta; before it takes a recurrent course it intimately connects itself with the sympathetic, sending fibres to the heart and lungs. The fact that the paralysis of the nerve and atrophy of the muscle lie on the left side show at once that the source of roaring is down in the chest in the region of the heart and lungs.

Horses are sometimes put to over exertion and compelled to continue their efforts long after they have shown symptoms of exhaustion—a bad maxim for their owners. The late Professor Spooner, of London, under whom we studied, was conversant with two cases which came under his own observation, when it occurred as the result of sudden alarm; one of these eventually recovered, but the other was ever after a confirmed roarer.

The class of horses most liable to this disease are thoroughbreds and hunters. This is accounted for by their being put to severe and long continued exertion. This is especially the case with thoroughbreds, which are run when very young. We are of opinion that the heart is involved in many cases of roaring, and in some instances the lungs. If you dissect the heart of a roarer you will find the opening of the left auricle of a pallid hue. Sometimes in a slight attack he whistles when put to very little exertion, but if continued the nervous influence becomes aroused and the whistling passes off. Test.—If compelled to cough, the cough is of a rough, roaring sound, but this is not to be relied upon, as sometimes you cannot make him cough, sudden alarm by striking him or feigning to do so, but this is only to be taken as collateral evidence.

The test to be relied upon is that of submitting him to severe exertion, when if no abnormal sound or premature distress is evinced, though he may cough on pressure, or grunt on sudden alarm, he is a sound animal.

If no acute symptoms are present, and on examination you find no inflammatory disease of recent origin, it may be set down as a chronic case.

Treatment.—Confining our remarks to disease caused by paralysis of the left recurrent nerve, if of long standing it would be idle to attempt treatment. As regards the treatment of recent cases: Give succulent food, green food if possible, turn-

ing them out to grass, not allowing the stomach to become overloaded, counter irritants to the left side of the larynx and all the way down to the chest. In a few instances we have known decided benefit afforded by the actual cautery excitability by any means upon the peripheral extremity of a paralysed nerve may rouse it to action, and in early cases operate in a beneficial manner, but if structural derangement of the muscles has taken place it is of no use whatever.

As a last resource the operation called "Tracheotomy" may be performed.

Modus operandi.—Make an incision through the common integument and panniculus, dissect away; now make an opening into the trachea, either with the scalpel or with a pair of cutting compasses, taking care not to cut through the two rings of cartilage lest they may afterward turn inwards, rendering "confusion worse confounded," and also that the piece does not drop down the trachea. To avoid the latter result, a needle and thread should be passed through the part intended for extraction. Nothing further remains to be done but insert the tube. That roaring is hereditary there can be no doubt.

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The Household.

Recipes.

CORN-STARCH PUDDING.

Four tablespoonfuls of corn-starch to one quart of milk; dissolve the corn-starch in some of the milk, heat the remainder of the milk to near boiling, after putting in a little salt; then add the corn-starch, boil three minutes, stirring it briskly; allow it to cool, and thoroughly mix with it two or three eggs, well beaten, with four tablespoonfuls of sugar; flavor to taste, and bake half an hour.

DOUGHNUT OR FRIED CAKES.

Two cups of sugar, three of milk, one large teaspoon of soda and the same of salt, three table-spoons of melted lard; mix stiff, roll about a quarter of an inch thick, cut in small cakes, cut in the inside another smaller, and you can fry both in hot lard.

CHILDREN'S PUDDING.

Cut up a loaf of stale bread the day before it is required, put to soak in a pan of cold water; when going to mix, squeeze the water through a colander; put the bread in a pan, with two ounces of suet chopped fine, two tablespoonfuls of flour, some grated ginger, a little mixed spice; beat well up with a fork; mix half a pound of treacle (not golden syrup) with a little warm milk, then stir all together, and boil three hours in cloth, basin or mold. This will make a large pudding, much liked by children; it is cheap and wholesome.

OATMEAL BREAKFAST CAKE.

Take one quart of Canada oatmeal, wet with cold water, and pour it into a baking-tin so that it will stand half an inch deep. Shake down level, and bake in a hot oven half an hour, or until it is crisp and brown on the surface. Cut quickly into two-inch squares and serve hot.

APPLE CUSTARD.

To one pint of good stewed apples add a quarter of a pound of butter, half a pint of sweet cream, three eggs beaten very light, sugar and flavoring to taste; mix these ingredients well together, and bake in an open crust.

HOW TO MAKE APPLE BUTTER.

If you have a barrel kettle, take thirty gallons of sweet cider—that just from the press is to be preferred; boil it down to one-third of the quantity then, add altogether about two bushels of pared, quartered and cored sweet apples, about one-third at a time, judging as to the quantity of apples; then stir the whole mass constantly with a long-handled wooden stirrer, reaching down to the bottom; this stirrer must be from four to five inches broad at the bottom, rounded a little to fit the bottom of the kettle, and have half-a-dozen or more half-inch holes bored through it. The mass must be kept boiling and stirred until the whole is reduced to say one-half the original quantity of cider, assumes a dark color, and is perfectly smooth and palatable. For this purpose samplers should be taken out and tasted. When done it should be put in jurs, well tied over with paper, and placed in a cool place. Otherwise it may "work" and lose a great deal of its value.

ON COOKING POTATOES.

Potatoes, and all vegetables, in place of boiling, should be cooked by steam, else they must be more or less water-soaked. The simplest and cheapest steamer is easily had by having a steamer made to fit the large iron kettle that every kitchen has. The steamer, of tin, made to fit the kettle, the sides fitting down, say one inch, a snug, perfect fit; one inch from this rim is a bottom with holes cut in it, half an inch in diameter and one inch apart. The steamer, like a basin with straight or perpendicular sides, nine inches deep, a tin cover to fit perfectly tight, the cover made to run up higher in the middle two or three inches. This steamer can be made for \$1.50 probably. When stewing fruit, put in an earthen dish; set dish and all in the steamer. The fruit then does not waste its flavor as when stewed with water. Steam puddings, instead of boiling, if you would retain the flavor. But few cooks put upon a table a plain boiled potato fit to be taken into the stomach. This rule, if followed, makes a potato not only palatable, but digestible.—Peel and put into cold water, say one dozen peachblow potatoes and let them stand an hour (longer will not hurt them); wash them out of the water and put them into boiling water enough to cover them in a saucepan with a close-fitting cover; throw in a tablespoonful of salt, and let them boil half an hour; turn off the water, and stand the saucepan on the back of the range or stove for five or ten minutes, keeping the cover tightly closed, as herein lies the secret of having a potato look like a snow-ball.

If you want to be miserable, think about yourself; about what you want, what you like, what respect people ought to pay you, what people think of you, and then to you nothing will be pure. You will spoil everything you touch; you will make sin and misery for yourself out of everything which god sends you; you will be as wretched as you choose on earth or in heaven either.—Kingsley.