

Saving Weak Stocks of Bees.

Correspondence Michigan Farmer:

In preparing the apiary for the winter colonies are often found that have not the requisite number of bees. The old plan was to destroy all such with brimstone and take the honey—a murderous operation. Though the combs in box-hives cannot be readily transferred from one hive to another, the bees may be saved and given to stocks that need strengthening. The same thing may be done with weak colonies in moveable comb hives, and with more certainty as to the result. The stocks to be united should either be moved a distance of a half a mile or more at night and placed by the side of each other, or they can be moved about four feet each day until they stand near together. In the case of the box-hive all that can then be done is to drive the bees from the weak hive into the hive which contains the colony designed for wintering. For performing this operation select the middle of some pleasant day. Smoke both stocks, and wait a few minutes for the bees to gorge themselves with honey, then turn the hive containing the stock to be drummed upward; set the other hive on this so the openings of the two come together, and then rap with a light stick on the lower hive until all the bees have gone into the upper hive; this can be told by the loud buzzing, and by occasionally lifting the upper hive and looking in. The bees will generally be so gorged with honey as to be peaceable, especially if they were well smoked, and were given time to fill their sacs with honey before the hives were lifted from their stands, yet it is well to have the face protected by a veil of some sort. The hive containing the bees is now placed on a stand so that its entrance will be midway between the points where the entrances to the two hives were, the two hives, of course, having been previously moved until they were side by side. Within a few hours one of the queens will be killed, and the remaining queen, together with her strong colony of bees will, with plenty of honey, stand a good chance of wintering.

When stocks in movable comb hives are to be united, first get them moved together, then, on the day they are to be combined, remove enough combs from the two hives so that the remainder will just fill one hive, or will constitute the proper number to contain the winter supply of honey for the colony; at the same time remove one of the queens—the older or poorer one if there be any difference—and place the other in a little wire-cloth cage. (This cage is made by simply folding together the edges of a piece of wire-cloth about three inches wide by four long; ten or twelve meshes to the inch is the right size; stop the ends with bits of sponge.) Just at dusk smoke the bees in both hives pretty thoroughly, and, after letting them become filled with honey, remove the combs one after another and shake the bees into a third (empty) hive, placed just between the two; when this is accomplished, set the combs selected for the purpose into the new hive, slip the cage containing the queen down between the centre combs, and place the cover on the hive. The next day at dusk smoke them again, and release the queen, taking care to dab her well with honey, as well as to drizzle honey over the tops of the frames and down between the combs. *No honey should be left outside the hives where the bees can have access to it, for there is great danger in thus tempting the bees to commence robbing.*

Thus the bee-keeper possesses the ability to save all weak stocks, instead of resorting to the old plan of "murdering" them for the sake of what little honey they may have stored in the dark, tough brood-combs. Surely the saving, as well as the humane bee-keeper will at once recognize the advantages of uniting weak colonies in the fall of the year.

Curing Pork

W. B. Sayre, an old pork packer, in Elmira, New York, gives the following method:

I have packed a good deal of pork, but my experience in recent years has been confined to preserving it for family use. In packing pork I can not too strongly urge you to use an abundance of salt. I think a half bushel of good, pure salt would preserve a barrel of pork, but I would never use less than a bushel. My rule has been a barrel of salt to four barrels of pork. There may be some lime in the salt, but if plenty of salt is used no harm will be done by the lime. If you use more salt than the pork requires it will not injure the meat or effect it in any way, so be sure to have enough.

Pork should not be permitted to freeze before it is packed. It will rust if it does. I have lost it when I could trace the trouble clearly to freezing. Hogs should not be left over night after killing if the weather is very cold. It will pay to take them in and split them open to permit the animal heat to escape freely.

For preserving hams and beef my recipe is six gallons of water, nine pounds of salt, three pounds of sugar, one gallon molasses, three ounces saltpetre and one ounce saleratus. I mix these ingredients and heat to a boiling point, skimming off all the impurities. When cold I pour it on the meat. I do not rate the amount of materials according to the amount of meat, but mix in the proportions given and use enough of the mixture to cover the meat I wish to preserve. I find that this method cures the hams and leaves them tender and juicy. They never get hard. I leave the hams in the pickle from four to six weeks, according to their size. It takes longer to cure large hams than it does small ones. I always move the hams after they have been in the pickle three days. Take them out and pack them over. This is necessary, for when they are closely packed together some parts of the hams do not have a chance to be penetrated by the pickle. I keep beef in the same way except that I would boil over the pickle before warm weather in the spring.

Pork and hams will gain in weight by salting, and the hams will lose again in smoking. One

hundred and eighty pounds of heavy fat pork packed will weigh out two hundred pounds after being cured.

For smoking hams I use green hickory or green maple wood. I have it secured on purpose to smoke my hams. It makes a very strong smoke, and you cannot color the hams much with it. It is better to have the fire outside of the smoke-house and let the smoke in through a fine. The cooler it is when it reaches the meat the better. I hang the hams high and build the fire as low as possible, having a cellar-like basement in my smoke-house, as I failed in my plan for a fire outside. I make a fire over a cast-iron plate.

A Wash for Fruit Trees.

The following is recommended by a commission of fruit growers, presided over by Prof. C. Thomas, State entomologist of Illinois, and is part of a very full report, embodying advice as to the best means of fighting the insects that infest the orchards in that State: "Insects and mildews injurious to the leaves of seedlings and root grafts can be kept in subjection or destroyed by a free use of a combination of lime and sulphur. Take of quick or unslacked lime four parts, and of common flowers of sulphur one part (four pounds of sulphur to one peck of lime;) break up the lime in small bits, then mixing the sulphur with it in a tight vessel (iron best,) pour on them enough boiling water to slack the lime to a powder; cover in the vessel close as soon as the water is poured on. This makes also a most excellent whitewash for orchard trees, and is very useful as a preventive of blight on pear trees, to cover the wounds in the form of a paste when cutting away diseased parts; also for coating the trees in April. It may be considered as the one specific for many noxious insects and mildew in the orchard and nursery; its materials should always be ready at hand; it should be used quite fresh, as it would in time become sulphate of lime, and so lose its potency. Whatever dusting with lime is spoken of, this should be used. This preparation should be sprinkled over the young plant as soon as, or before, any trouble from aphides, thrips or mildew occurs, early in the morning, while the dew is on the trees. This lime and sulphur combination is destructive to these pests in this way: Firstly, by giving off sulphuric acid gas, which is deadly poison to minute life, both animal and fungoid; and the lime destroys by contact the same things; besides its presence is noxious to them; neither is it injurious to common vegetable life, except in excess, unless the lime to the foliage of evergreens."

Test your Cows.

C. C. A., in Mass. Plowman:—

An essay in a late agricultural report showed the importance of knowing what each cow in a herd was, by the illustration of a man having twenty cows, five of which paid a little beyond expenses, five a little less, and ten were profitable. He fed and cared for ten cows, with the loss of the value of his care of them, and he would have been much better off with only the ten good ones.

I am a person with enough land to keep two cows and a horse, and a disposition to take good care of them, and am equally disposed to have profitable cows. No. 1 is three years old, to calve in March, giving now, August 28, ten quarts of milk a day. No. 2 is five years old, to calve in January, giving now twelve quarts of milk a day. The butter from their mixed milk is of fair color and firm texture; and I have every reason to suppose each of them, independent of the other, good enough to suit an exacting person. Still, being of an inquiring turn of mind, I determined to test each cow. Last week I set three quarts of milk from each. No. 1 have five and one half ounces of butter, equal to eight pounds a week. It was very firm and of very light color. No. 2 gave four ounces, equal to seven pounds a week. It was not hard, of very fair but not satisfactory color. I found that the better milk cow was the poorest butter cow; and as it was my object to dispose of surplus butter, I find I must get rid of No. 2 and replace her with one that will meet my demands. So, knowing from a similar test at the time, that a neighbor's cow is giving eight and three-fourth pounds a week, of the best color and firm texture, which cow can be bought, I intend to buy her, and then I will have two yielding a good quantity (at this season) both very firm, and the color of one sufficient to color the other.

If every farmer would carefully test each cow he would have the satisfaction, which my experiment gave me, and would know what to do for his own interest, as I know.

Boys Heed This.

Many people seem to forget that character grows; that it is not something to put on, ready-made with womanhood or manhood, but day by day, here a little and there a little, it grows with the growth and strengthens with the strength, until, good or bad, it becomes almost like a coat of mail. Look at a man of business, prompt, reliable, conscientious, yet clear-headed and energetic. When do you suppose he developed these qualities? When he was a boy. Let us see the way in which a boy of ten years gets up in the morning, works, plays, studies, and we will tell you just what kind of a man he will likely make. The boy who is late at breakfast, and late at school, stands a poor chance to be a prompt man. The boy who neglects his duties, be they ever so small, and then excuses himself by saying, "I forgot! I didn't think!" will never be a reliable man, and the boy who finds pleasure in the suffering of weaker things, will never be a noble, generous, kindly man—a gentleman.

Hints to Farmers.

A bare pasture enriches not the soil, nor fattens the animals, nor increases the wealth of the owner.

One animal well fed, is of more value than two poorly kept.

The better animals can be fed, and the more comfortable they can be kept, the more profitable they are—and all farmers work for profit.

Ground once well ploughed is better than thrice poorly.

Make the soil rich, pulverize it well, and keep it clean, and it will generally be productive.

Cows well fed in winter give more milk in summer. An ox that is in good condition in the spring will perform more labor, and stand the heat of summer much better than one that is poor.

When you see the fence down put it up—if it remains until to-morrow, the cattle may get over.

What ought to be done to-day, do it, for to-morrow it may rain.

A strong horse will work all day without food, but keep him at it, and he will not last long.

A rich soil will produce good crops without manure, but will soon tire.

How House Air is Spoiled.

The following facts will show how the air in houses becomes contaminated:—

1. An adult person consumes 34 grammes of oxygen per hour, a gramme being equal to 15 grains.

2. A stearin candle consumes about one-half as much.

3. An adult gives off 40 grammes per hour of carbonic acid. A child of 50 lbs. weight gives off as much as an adult of 100 lbs. weight.

4. A schoolroom filled with children will, if not well ventilated at the beginning of the hour, contain 25 parts in 1,000 of carbonic acid, at the end of the first hour 41, and end of second hour 81.

5. The air is also spoiled by the perspiration of the body, and by the volatile oils given out through the skin. An adult gives off through the skin in 24 hours, from 500 to 800 grammes of water mixed with various excrements, poisonous if breathed.

6. A stearin candle gives off per hour 0.4 cubic feet of carbonic acid, and 0.03 lb. of water.

7. Carbonic oxide is a much more dangerous gas than carbonic acid, and this obtains entrance to our rooms in many ways, through cracks in stoves and defective stove pipes, or when the carbonic acid of the air comes in contact with a very hot stove, and is converted into carbonic oxide. The dust of the air may, on a hot stove, be burnt to produce it; or it may flow out from our gas pipes when the gas is not perfectly consumed.

8. Another form of air injury is the dust of a fungus growth which fills the air in damp warm places. We call it miasm from a want of a true knowledge of its character.

9. Accidental vapors are the crowning source of air poisoning. These are tobacco smoke, kitchen vapors, wash-room vapors, and the like.

10. When we heat our houses and close them from outside air, the heat turns the mixture into a vile mess unfit for breathing. The only remedy is ventilation. Now, that it is cold weather and our rooms are closed from free currents of outside air, let us look after the matter thoroughly and do our best to prevent injury to ourselves from polluted air.

Treatment of Young Hedges.

Of late years a discovery has been in the treatment of hedges, of supreme importance. It was the universal advice, and the general practice, to cut the plants to the ground at planting, and this part is still right. But the practice went further. The following summer the growth was cut back to make the shoots sprout, and perhaps the succeeding winter they are cut again, and next summer and winter, and so on; and thus we know is all wrong. Not only is it wrong so far as the making of a good stout hedge is concerned, but it took a great deal of money and labour to attend to it; and it was very natural for the farmer to say that labour was his great bugaboo, and if he was to be continually bothered in this way, he would rather pay double or treble for a lumber fence, and be done with it.—*American Paper.*

Small Watches.

The smallest watches in the world are made at Besancon, a small city of France, in the department of Doubs. Two thousand persons are here engaged in the making of watches. A watch has lately been made by these watch-makers of Besancon and presented to Madame MacMahon, so small that it can only be read by a glass of very high magnifying power. The Duc d'Aumale, who was with the lady when she received her costly but tiny gift, related how his ancestor, the Duc d'Enthiebre, wore watches for his waistcoat buttons; and to keep up the good name of the family he, the Duc d'Aumale, bought sleeve links and shirt buttons, all of which were Liliputian watches. The smallest watch we have ever seen in this country was one of Tiffany's, in this city, fixed in the head of a gold pencil.

The Executive Committee of the Dominion Grange intend applying for an Act of Incorporation at the next Session of the Ontario Parliament.

"What a nuisance!" exclaimed a gentleman at a concert where a youth in front of him kept talking in a loud voice to a fair companion seated in the next stall. "Do you mean me, sir?" threateningly demanded the youth. "Oh, dear no," was the prompt reply; "I mean the musicians there who keep up such a noise with their instruments that I cannot hear your conversation."

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.

"Navicular Disease"—"Called by the Farriers of Old Chest Founder."

It may be well to inform the readers of your valuable journal that this is the most peculiar as well as one of the most important joints in the animal economy, since it is formed by a tendon and a bone. The horse has seven flexor tendons for the flexion of each fore extremity, of which the flexor pedis perforans is the principal, and this is the one entering into the formation of this particular joint. The bone resembles in appearance a weaver's shuttle, and forms a point of leverage for the tendon to play over. The joint is, strictly speaking, situated within the hoof, and, consequently, in diagnosing lameness arising from this particular affection, we must rely principally on negative evidence. With these remarks we shall now proceed to consider the disease itself.

It has been adduced that navicular joint lameness is caused by rupture of some of the fibres of the perforans, afterwards extending to the bone cartilage and synovial membrane. With this theory we do not agree, and are of opinion that to commence with we get a congested state of the vessels of or supplying the bone, followed by inflammation. Of the many specimens we have examined we do not remember one instance where we could assert that the disease had its origin in any other structure than the bone. A horse may go dead lame, so to speak, and on post mortem examination we may find only slight discoloration of the bone, the cartilage being perfect. The disease generally comes on insidiously. It may run its course rapidly, especially when caused by a sudden jar when the hoof is in a hard, unyielding condition. Sometimes we have adhesion between the tendon and bone, and in some cases fracture of the bone. The affection is almost entirely confined to the fore feet. The class of horses most prone to become affected are those of the lighter breeds, with narrow chests, upright pasterns, and an inclination of the toe to turn outward, blocky upright walls and concave soles. Contraction or narrowing of the heels, with wasting of the muscles of the shoulder, is a result of the disease, and brought about by the animal not bearing upon the foot; for to insure the normal flow of blood through the foot it is necessary to have pressure. Again, it is supposed by some that we primarily get inflammation of the synovial membrane, and secondly, the joint itself; but this is negated by fact. If such was the case it would show itself in the form of a disc around the joint when the capsular ligament lies reflecting itself upon the structure of the cartilage, and looking at the post mortem appearances we think that it invariably commences in the bone, for cartilage is non-vascular.

Causes.—Exciting causes, concussion, such as trotting on hard roads. Predisposing causes, a hard unyielding sole and frog, hereditary taint, keeping horses tied up for a long time without exercise. We seldom find it confined to one foot, though the animal is generally lammer in one foot than the other.

Symptoms.—Low action, pottering gait, endeavors to throw the whole weight on the fore part of the foot, goes better up hill than down, knuckles over going down hill when he is compelled to bring the heels to the ground, goes much better on soft than hard ground, for by removing the concussion influence the lameness in some degree passes off. As in spavin, he performs the latter part of his work better than the commencement; in the stable he points first one then the other foot, sometimes he points both feet alike, similar to a horse affected with laminitis, and by this general pressure affords himself relief; variable temperature of the feet, after exercise they are warm, but when allowed to stand for some time they become cold as pump water, thus proving the congested state of the vessels. This disease is not wholly referable to one cause; there is a constitutional tendency to become affected, it at times assuming a rheumatismal type, flitting from joint to joint with no evidence of acute inflammatory action, but rather congestion of the part.

Treatment.—Pare out the sole so as to get it to yield to the thumb, and rasp round the crest so as to relieve the diseased joint from pressure without withdrawing blood in the early stage, for by so doing you relieve the congested vessels; tack the shoe loosely on; poultice, and give low diet with laxative and diuretic medicine. Blistering round the coronet is of no use. Frog sections are the best remedial measures to be adopted; they are inserted through the cleft of the frog, but they require an experienced hand, and one who knows the structure of the parts with which he is interfering; by this means suppurative action is set up and we have a drain from the affected parts. As a dernier resort, neurectomy, by which we divide the nerves of sensation, the nerves of motion being given off higher up to the muscles above the knee. This is a very nice operation, and when judiciously applied gives general satisfaction. As a rule, we never operate on aged horses, nor on young ones unless the condition of the foot warrants it. Every practitioner has got his own method of dividing the nerves, some preferring the low, while others prefer the high operation; however, we are more likely to do away with the lameness by the high. In a good many cases it proves a failure, but this is accounted for by the operator not keeping low enough on the outside, and, as a consequence, fails to divide the branch of nerve given off from the inner to the outer metacarpal pit nerve, which not being divided, the sensation remains all the same.

Results likely to follow.—Rupture of the perforans tendon, sloughing of the hoof, fracture of the pedal bone

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Coleridge was once out on a ride. The horse and the rider were alike open to criticism. A low wag, appreciating the general effect, asked the poet if he had met a tailor just like himself. Yes, was the reply; and he said he had just lost his goose. After this lowly triumph his road brought him within hail of a more distinguished party of horsemen, one of whom, a sporting M. P., known to have been bribed by the Ministry, stopped him to enquire the price of horse and rider. The horse, was the answer, is a hundred guineas; as for the rider, as he is not in Parliament yet, I have not fixed his price.